



Social cohesion for mental well-being among adolescents



Tuscany Region, Italy



Health Behaviour in School-aged Children

A World Health Organization Cross-national Study



Health Promotion Programme
A. Meyer University Children's Hospital
WHO Collaborating Centre for Health Promotion
Capacity Building in Child and Adolescent Health



Viareggio Local Health Unit,
Health Service of the Tuscany Region



WHO Collaborating Centre
for Health Promotion and
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The WHO European Office for Investment for Health and Development was set up by the WHO Regional Office for Europe, with cooperation and support from the Ministry of Health and the Veneto Region of Italy. Its key responsibility is to provide evidence on, and support Member States in acting upon, the socioeconomic determinants of health. For more information regarding the contents of this report and the WHO/HBSC Forum series, please write to info@ihd.euro.who.int.

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WHO/HBSC FORUM 2007

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Abbreviations and acronyms

ACPP	Association of Child Psychiatrists and Psychologists (case study from Armenia)
ADHD	attention deficit hyperactivity disorder
ADHS	attention deficit hyperactivity syndrome
BELLA study	Befragung Seelisches Wohlbefinden und Verhalten (mental health module; case study from Germany)
BMBF	Bundesministerium für Bildung und Forschung (German Federal Ministry of Education and Research; case study from Germany)
BZgA	Bundeszentrale für gesundheitliche Aufklärung (Federal Centre for Health Education; case study from Germany)
CAHRU	Child & Adolescent Health Research Unit (University of Edinburgh)
CAJE	Colectivo de Acción para el Juego y la Educación (games and education action group; case study from Alcalá de Henares, Spain)
CAMHC	Child and Adolescent Mental Health Care (case study from Armenia)
CAMHEE	EU project “Child and Adolescent Mental Health in Enlarged European Union – development of effective policies and practices”
CASEL	Collaborative for Academic, Social and Emotional Learning (case study from England, United Kingdom)
CAWT	Cooperation and Working Together (case study from Ireland)
CBT	cognitive behavioural therapy
CCMH	Community centres for mental health (case study from the Republic of Moldova)
CDI	child depression inventory
CEMH	Centre for the Economics of Mental Health (from the background paper “Economic aspects of mental health in children and adolescents”)
CHEF	Canada–Hungary Educational Foundation (case study from Hungary)
CI	confidence interval
CoE	Council of Europe
COI	cost of illness
CPI	Consumer Price Index
CPLP	community of Portuguese language countries (case study from Portugal)
CSRI	Client Service Receipt Inventory (from the background paper “Economic aspects of mental health in children and adolescents”)
CT	Comunidad Terapéutica (therapeutic community; case study from Andalusia, Spain)
CUA	cost–utility analysis
d	Cohen’s d, measure for effect size

DADA	tobacco smoking, alcohol, drug, HIV prevention programme (case study from Hungary)
DfES	Department for Education and Skills (from the background paper “Mental well-being in school-aged children in Europe: associations with social cohesion and socioeconomic circumstances”)
DG	discussion group (case study from Alcalá de Henares, Spain)
DGIDC	Direcção-Geral de Inovação e de Desenvolvimento Curricular (Director-General of Innovation and Curricular Development; case study from Portugal)
DSM-III-R	Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision
EBAP	primary health care teams (case study from Andalusia, Spain)
EC	European Commission
ENCORE	Hungarian Conflict-pedagogy Foundation (case study from Hungary)
ENHPS	European Network of Health Promoting Schools
ESMD	Equipo de Salud Mental de Distrito (district mental health team; case study from Andalusia, Spain)
EU	European Union
F	F-probe, feature to determine the validity and significance of the statistical analysis
FAS	Family Affluence Scale
FMH	Faculdade de Motricidade Humana (Faculty of Human Motor Activity, case study from Portugal)
GDP	gross domestic product
GIASE	Gabinete de Informação e Avaliação do Sistema Educativo (Bureau for Information and Evaluation of the Education System; case study from Portugal)
GTES	Grupo de Trabalho para a Educação Sexual/Educação para a Saúde (Working Group on Sexual Education and Health Education; case study from Portugal)
HBSC	Health Behaviour in School-aged Children (study)
HD	Hospital de Día (day hospital; case study from Andalusia, Spain)
HLM coefficient	hierarchical linear model
HRQOL	health-related quality of life
IACAPAP	International Association for Child and Adolescent Psychiatry and Allied Professions (case study from Armenia)
IAP	Investigación - Acción – Participación (participative action research group; case study from Alcalá de Henares, Spain)
ICD–10	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

ICER	Incremental Cost-effectiveness
ISCED	International Standard Classification of Education
JAMPA	Jóvenes Agentes en Mediación y Prevención de la Agresión (Advanced Young Partners in Mediation and Prevention of Violence; case study from Alcalá de Henares, Spain)
KIDSCREEN	the European project “Screening for and promotion of health-related well-being in children and adolescents: a European public health perspective”
LOGO	local health organizations (case study from Flanders, Belgium)
m	mean
MPH	long-acting methylphenidate
MPH-IR	immediate-release methylphenidate
NATO	North Atlantic Treaty Organization
NGO	nongovernmental organization
NHS	National Health Service (case study from Scotland, United Kingdom)
NICHP	National Infant and Child Health Programme (case study from Hungary)
OCD	obsessive compulsive disorder
OECD	Organisation for Economic Co-operation and Development
OR	odds ratio
ORFK	Országos Rendőr Főkapitányság (National Police Department; case study from Hungary)
PACS	Parent Account of Child Symptom
PATHS	Promoting Alternative THinking Strategies (case study from England, United Kingdom)
PISA	Programme for International Student Assessment
QALY	quality-adjusted life-years
R ²	R-squared, standard notation for explained variance
SD	standard deviation
SDQ	Strengths and Difficulties Questionnaire
SEAL	Social and Emotional Aspects of Learning (case study from England, United Kingdom)
SENSOA	Flemish expert organization on sexual health and HIV (case study from Flanders, Belgium)
SES	socioeconomic status
SMD	standardized mean difference
SNASA	Salford Needs Assessment Schedule for Adolescents
SNHPS	Slovenian Network of Health Promoting Schools (case study from Slovenia)
SPHE	Social Personal and Health Education (case study from Ireland)
SSPA	Sistema Sanitario Público Andaluz (Andalusian public health system; case study from Andalusia, Spain)

STI	sexually transmitted infections
t	t-probe, feature to determine the validity and significance of the statistical analysis
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNICRI	United Nations Interregional Crime and Justice Research Institute
USAID	United States Agency for International Development
USM-HG	Unidad de Salud Mental de Hospital General (mental health unit of the general hospital; case study from Andalusia, Spain)
USMI	child and adolescent mental health unit of the general hospital (case study from Andalusia, Spain)
UTS	Unidad de Trabajo Social (social work unit; case study from Andalusia, Spain)
WPA	World Psychiatric Association

Foreword

At the WHO European Ministerial Conference on Mental Health (Helsinki, 2005), ministers of health endorsed the Mental Health Action Plan for Europe and Mental Health Declaration for Europe. “We believe that the primary aim of mental health activity is to enhance people’s well-being and functioning by focusing on their strengths and resources, reinforcing resilience and enhancing protective external factors”, confirmed the Declaration. To meet this aim, the Action Plan delineated activities that included, but were not limited to, promoting mental well-being for all, being sensitive to vulnerable life stages (including childhood and adolescence), ensuring access to good primary care, creating a sufficient and competent workforce, and establishing partnerships across sectors.

Central to delivery on the commitments outlined in the Mental Health Action Plan for Europe and Mental Health Declaration for Europe are strong health systems. In a region in which neuropsychiatric disorders are the second greatest cause of the burden of disease after cardiovascular diseases, health systems need to be particularly equipped to address these challenges. Curbing this burden of disease will require increased capacity in all health system functions – within service delivery, resource generation, financing and stewardship – in each Member State.

The WHO/Health Behaviour in School-aged Children (HBSC) Forum process contributes to follow-up to the Ministerial Conference, as well as the WHO European strategy for child and adolescent health and development, through its focus on social cohesion for mental well-being among adolescents. The rationale for selection of this topic for the 2007 process is perhaps best presented by the statistics: an estimated 10–20% of adolescents have one or more mental or behavioural problems, and suicide is the second leading cause of death among those aged 15–35 years in the WHO European Region.

In addition to engaging interdisciplinary teams from Member States in the drafting of case studies on policies and interventions responding to this challenge, the Forum process also included the preparation of background papers on: cross-national HBSC data on mental well-being in school-aged children in Europe; socioeconomic inequalities in mental health among adolescents in Europe; and economic aspects of mental health in children and adolescents.

In reading this final report, it is clear that countries have much to learn from each other on how health systems can be strengthened to promote the mental well-being of young people and prevent mental disorders among this age group. The case studies describe services delivered through schools and in communities, including through strengthened primary care. They convey how data on adolescent mental well-being, mental health and social capital can be used for the design of policies and interventions. They depict the integration of mental health promotion in other services to meet young people’s needs, and specific measures to overcome barriers to access. They define challenges in acquiring sufficient human resources for implementing programmes and explain how training of personnel within and beyond the health sector has helped overcome these. The studies underline the importance of sufficient financing for sustainability, and consistently emphasize the need for supportive legislation and governance mechanisms (including those of an intersectoral nature) that enable action on the wider determinants of child and adolescent mental health. The call for protecting the mental well-being of socially disadvantaged young people underpins all studies.

The purpose of this report is not to document best practice. Rather, it is to share Member States’ concrete experiences in addressing challenges and identifying opportunities for increased focus and action for safeguarding the mental health and well-being of young people. The emerging lessons synergize with work being advanced by partnering intergovernmental bodies such as the European Commission and by different parts of WHO (such as the WHO European Office for Investment for Health and Development and the units for Mental Health and Child and Adolescent Health and Development).

It is our hope that by providing a platform to bridge research and policy-making and to activate interdisciplinary and country-to-country exchange, the WHO/HBSC Forum 2007 process contributes to improving the capacity of European Member States to invest in what is possibly our Region’s most valuable resource for the future: the complete physical, mental and social well-being of our young people.

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About the WHO/HBSC Forum 2007 process

The WHO/Health Behaviour in School-aged Children (HBSC) Forum series is dedicated to increasing action on the socioeconomic determinants of adolescent health. It aims to support Member States in:

- translating research on young people's health into policies and action within and beyond the health sector;
- scaling up intersectoral policies and interventions to promote adolescent health;
- reducing health inequities among young people; and
- involving young people in the design, implementation and evaluation of policies and interventions.

The WHO/HBSC Forum 2007 process engaged policy-makers, researchers and practitioners from throughout the WHO European Region in an evidence-review process dedicated to "Social cohesion for mental well-being among adolescents", supporting follow-up to the European Ministerial Conference on Mental Health in 2005. The process entailed: analysis of data on adolescent mental well-being, mental health and social capital; review of policies and interventions to improve adolescent mental health and well-being; and identification of lessons learned through these initiatives.

At the core of the Forum 2007 process were case studies, whose production was undertaken by 93 co-authors representing diverse disciplines and sectors at national and subnational levels. A case study drafting workshop was held on 30–31 March 2007 in Las Palmas, Canary Islands, Spain to support co-authors in the elaboration of the studies. A European Forum was then held on 5–6 October 2007 in Viareggio, Tuscany Region, Italy to present and debate the final studies and accompanying background papers among interdisciplinary and intersectoral delegations from each country involved. Interview rounds at the Forum facilitated the examination of data, policies and interventions. Panel discussions and breakout groups synthesized emerging lessons and implications for policy and practice, which were later documented in an outcomes statement. The European Forum was preceded by a "Giornata Italiana" (Italian day), which was dedicated to the same topic, organized by national partners, and attended by more than 100 representatives.

Representatives from the following Member States prepared case studies: Armenia, Belgium (Flanders), Finland, Germany, Hungary, Iceland, Ireland, Lithuania, Republic of Moldova, Portugal, Romania, Slovenia, Spain (Andalusia and Alcalá de Henares), and United Kingdom (England and Scotland). Representatives from the following countries also participated in the 2007 process: Italy, Netherlands, Slovakia, and the former Yugoslav Republic of Macedonia.

It should be noted that many Member State case-study teams held drafting meetings during the production of their studies, and some subsequently presented the studies in national fora or used the analysis for informing national work. The important contribution of more than 70 young people at the Manuel Merino Health Centre in Alcalá de Henares (Madrid, Spain) to the Forum process should also be highlighted; their film "With and for youth" and their Forum Manifesto (page 224) provided valuable insights and knowledge.

The WHO/HBSC Forum 2007 process was coorganized by: the WHO Regional Office for Europe; the HBSC Network; the Tuscany Region (Italy), in partnership with the Local Health Unit ASL12 Viareggio; the WHO collaborating centre for health promotion capacity building in child and adolescent health (Health Promotion Programme, A. Meyer University Children's Hospital, Florence, Italy); the Directorate General of Public Health of the Government of the Canary Islands (Spain); the WHO collaborating centre for health promotion and public health development (National Health Service (NHS) Health Scotland); and the WHO collaborating centre for child and adolescent health promotion (School of Public Health, University of Bielefeld, Germany). The series is an activity within "The Framework Cooperation Programme between the World Health Organization Regional Office for Europe and the Tuscany Region".

The WHO European Office for Investment for Health and Development in Venice, Italy coordinated the 2007 Forum process in conjunction with a dedicated Task Force (see Annex 3). Additional technical input was provided by the WHO Regional Office for Europe units for mental health and child and adolescent health and development.

The 2007 process was the second in the series to promote adolescent health through action on the social determinants of health. The first process (in 2006) addressed the "Socioeconomic determinants of healthy eating habits and physical activity levels among adolescents", and contributed to the WHO European Ministerial Conference on Counteracting Obesity in 2006.



Summary of outcomes — WHO/HBSC Forum 2007

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1. Why address social cohesion for mental well-being among adolescents?

The WHO/HBSC Forum 2007 process, dedicated to “Social cohesion for mental well-being among adolescents”, engaged intersectoral policy-makers, researchers and programme managers from 18 Member States in considering the following core questions.

- **Translate research into policies and action.** Are the data and evidence being collected on adolescent mental health and well-being sufficient and relevant to policy action, and are they easily accessible to those in policy-making who need to use them?
- **Engage in intersectoral action.** Which conditions enable intersectoral action to address the social determinants of adolescent mental health and well-being? Given the importance of the school setting for most adolescents, how can school-based interventions safeguard mental well-being? What is the role of the health system in this regard?
- **Address health inequities.** Are interventions “missing” those young people who, due to low socioeconomic status, gender, migrant status, having a parent with a mental disorder, or family structure are at increased risk for mental disorders? What mechanisms can help reach disadvantaged young people?
- **Involve young people.** Are young people adequately involved in the design, implementation and evaluation of interventions? What can be done to further involve them?

2. What is the issue?

- As highlighted by the WHO European Ministerial Conference on Mental Health in Helsinki in January 2005, mental ill health is currently one of the biggest challenges facing every country in the European Region. Mental disorders affect at least one in four people at some time in their lives. Young people are at risk, with 4% of 12–17-year-olds and 9% of 18-year-olds suffering from depression, and suicide being the second leading cause of death among those aged 15–35 years (1). In addition to treating mental disorders, there is an increasingly recognized need for mental health promotion and the prevention of mental disorders, and this particularly concerns children and adolescents.
- Positive mental health and well-being are assets for growth and development at individual and Member State levels. The WHO collaborative cross-national HBSC study (2) shows that most adolescents are in fact satisfied with their lives, perceive their health to be good and do not regularly suffer from health complaints such as headaches, irritability or feeling low. Significant percentages, however, report their health to be either “fair” or “poor” and experience a number of recurring health complaints (3). HBSC also provides evidence of inequities in mental health and well-being in relation to socioeconomic status, gender, migrant status, geography and family structure.
- To safeguard child and adolescent mental well-being, it is important to create social environments that offer protective factors for mental health and limit exposure to risk factors for mental disorders. Good relationships in the home, school and neighbourhood play a part in ensuring that young people can develop social competence and contribute to cohesive societies. Social approaches are essential in promoting the mental well-being of young people and supporting the reduction of inequities in adolescence and adulthood (3). It is for this reason that the WHO/HBSC Forum 2007 focused on “Social cohesion for mental well-being among adolescents”.
- Strong health systems are required to curb the prevalence of neuropsychiatric disorders in the European Region, which are the second greatest cause of the burden of disease after cardiovascular diseases (1). As emerging lessons learned

* Rapporteurs for the WHO/HBSC Forum 2007 (see disclaimer on page 9)

through the Forum process indicate, there are opportunities for increased action to be taken by health systems – through their service delivery, resource generation, financing and stewardship functions – to promote adolescent mental health and prevent mental disorders among this age group.

3. How is the issue known about?

- *The Mental Health Action Plan for Europe (4)* underlined the urgent need to scale-up policies, interventions and investment for promoting mental health and preventing mental disorders, and to ensure the provision of adequate care for children and adolescents.
- The knowledge about adolescent mental health and well-being is supported by the WHO collaborative cross-national Health Behaviour in School-aged Children study (2), which involves 43 countries and regions and is conducted among 11-, 13- and 15-year-olds every four years. The study focuses on issues that affect and are affected by mental health and well-being. These include self-rated health status, life satisfaction, subjective health complaints, socioeconomic status and measures relevant to social cohesion, such as family support, bullying at school, peer support networks and the characteristics of local neighbourhoods.
- Additional resources include a range of studies examining related themes, such as the links between family income poverty and mental disorders in children and young people. The findings are reflected, for instance, in research by the United Nations Children’s Fund (UNICEF) Innocenti Research Centre and WHO research into the provision of mental health services for children and young people in the European Region (1). They are further illustrated by other national and subnational studies such as the Befragung Seelisches Wohlbefinden und Verhalten (BELLA study), conducted by the Federal Public Health Institute of Germany, which found that when several risk factors occur simultaneously (such as adverse family climate and low socioeconomic status), the prevalence of mental health problems increases markedly (see case study from Germany).

4. What factors influence child and adolescent mental health and well-being?

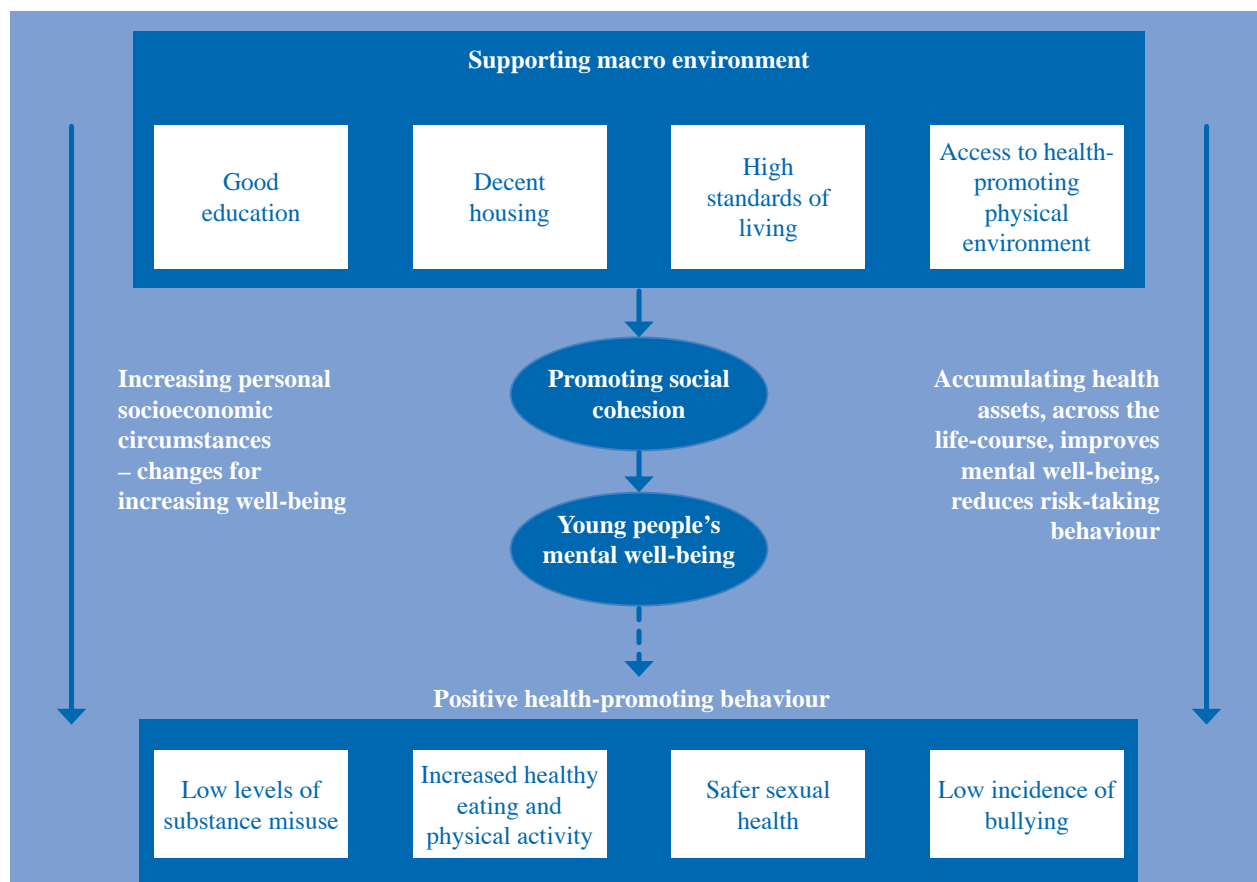
- Risk factors for mental disorders include, but are not limited to, poverty, social exclusion, violence, peer rejection, isolation and lack of family support. Protective factors for mental well-being are linked to cohesion at community level, family well-being and individual behaviours and skills, access to adolescent-friendly social services, including health services, and macro-policies (such as social transfers and minorities’ integration) (5).
- Children growing up in disadvantaged circumstances are most vulnerable to an imbalance between risk and protective factors. For instance, in 2006 in Belgium (Flanders), Slovenia, Spain, and Portugal, young people in less-wealthy families were more likely to report not feeling satisfied with their lives (3). In Iceland, psychosomatic health is generally less among adolescents with unemployed parents, those who do not live with both biological parents, those who report material deprivation, and where there is less intergenerational integration.
- The migration process in countries of destination and countries of origin contributes to the increased exposure to risk factors for mental disorders. The case studies from Germany, Portugal, and Spain describe how foreign-born children generally report significantly poorer psychosomatic health. In parallel, in the Republic of Moldova, a country with high rates of emigration and in which 42% of emigrants leave children at home, children whose parents have emigrated are exposed to risk factors for mental disorders. The specific needs of these children require further research.
- The Assets Model (see Fig. 1) (6) indicates the importance of positive social and community networks and environments and the relationships these have with positive mental well-being. The more opportunities young people have in childhood and adolescence to experience and accumulate the positive effects of protective factors that outweigh risk factors, the more likely they are to achieve and sustain mental health and well-being in later life. This can be considered an “assets” approach in which young people are supported to accumulate “assets” that predispose to good mental health and well-being.

5. Why does this matter?

- Everyone has a right to the enjoyment of the highest attainable standard of physical and mental health. This right is enshrined within: the United Nations International Covenant on Economic, Social and Cultural Rights, Article 12; the

Fig. 1

The Assets Model
Source: Morgan (6).



Human Rights Act; Article 152 of the European Community Treaty; and the United Nations Convention on the Rights of the Child. It is also reflected in the constitutions of WHO and Member States.

- Young people are the future. Young people with a positive sense of mental well-being possess problem-solving skills, social competence and a sense of purpose that can help them rebound from setbacks, thrive in the face of poor circumstances, avoid risk-taking behaviour and continue on to a productive life.

6. Why act now?

- The mental health and well-being of young people now will affect the economic stability and prosperity of the European Region over the coming decades. It is estimated that only 10–15% of young people with mental health problems now receive help from existing child mental health services (1).
- The costs of mental illness among children and adolescents fall to a very large extent on sectors outside the health care system. Evidence suggests that in child and adolescent mental health, productivity costs (such as the costs associated with parents who must stay home from work to look after children with mental disorders) seem to take the highest burden (see background paper *Economic aspects of mental health in children and adolescents*). Children and adolescents with mental disorders can be at increased risk of mental ill-health in adulthood. It is estimated that currently, there is a loss of 3–4% of the European Union's (EU) Gross Domestic Product (GDP) annually through the effects of mental ill-health on productivity losses through absenteeism and reduced work performance (7).

- Increased exposure to “the knowledge society” on the one hand and, on the other, the ageing of the population will together increase Europe’s dependence on good mental health in future years.
- There is evidence of intergenerational occurrence of mental disorders in families, and that children of parents with mental disorders are particularly at risk (8); actions to reduce mental disorders and promote well-being in young people now may serve to protect future generations.

7. What lessons did the WHO/HBSC Forum process identify for policy-makers?

Listed below are emerging lessons that focus on the four core themes of the Forum process: intersectoral action; addressing health inequities; involving young people; and translating research into policies and action.

Intersectoral action

- Health systems have an important role in addressing socially determined risk factors for mental disorders and fostering protective factors for mental well-being. Through their stewardship function, health systems can build coalitions across government ministries to act on key determinants of adolescent mental health (9). They can improve service delivery by making adolescent-friendly interventions for promoting mental health and preventing mental disorders available in schools and communities, including through strengthened primary care services.
- As education is potentially universal, the school environment plays a very important part in influencing the mental health and well-being of children and adolescents. Whole-school approaches are necessary, integrating mental health and well-being into the main function and ethos of schools and facilitating support for education objectives through health policy. In the United Kingdom (England), the whole-school Social and Emotional Aspects of Learning (SEAL) approach includes the explicit and planned learning of social and emotional skills within the school curriculum and creates the climate and conditions to promote the development of students’ social and emotional skills while facilitating continuing professional development for all school staff in this area. Studies highlighted the importance of cooperation with parent associations, health and other services in implementing this approach.
- The case study from Germany highlights the need to evaluate school-based life-skills programmes and the need to use evaluation results to improve the programmes and/or scale-up the programme reach (beyond regional level) if it is proven to be effective and efficient.
- High-level support for working across sectors, especially where it results in legislation, can significantly facilitate intersectoral work to promote mental health among children and adolescents. In Finland, the new National Core Curriculum (National Board of Education), Quality Recommendations for School Health Care (Ministry of Social Affairs and Health) and the strategy for school well-being (Ministry of Education) were the outcome of, and further enablers for, intersectoral cooperation. In countries where supportive legislation for child and adolescent mental health is lacking, its adoption is cited as an opportunity for sustainability, connectedness/unity and integration of effective interventions.
- In developing intersectoral strategies and activities, consensus-building events and multisectoral committees may be convened. It is important that no single sector dominates on these occasions and that equal opportunities for engagement and input are built into the process. The Belgium (Flanders) case study suggests a stepwise process would be helpful, starting from the initial step of developing a common vision of actions to be implemented.
- It is essential to allocate sufficient resources for mental health promotion and the prevention of mental disorders both within and beyond the health system. At policy level, this needs to be backed by a recognition of the overall multisectoral responsibility for health and appropriate budgeting. In an environment of budgetary constraints and limited coordinated action for adolescent mental health promotion by public authorities, collaboration with international and national nongovernmental organizations (NGOs) may help provide solutions, as suggested by the studies from Lithuania and Romania, albeit with concerns related to sustainability.
- Training can play an important role in developing the vision and skills needed for intersectoral work. This was conveyed in multiple case studies, including those from Armenia, Portugal, Romania, and United Kingdom (England and Scotland). The Armenian study recommended that relevant staff in education institutes be trained in adolescent mental health and rights issues. In addition, authors suggested that the health system can strengthen its own capacity through the training of family doctors, paediatricians and other relevant health service workers in mental health.

- Being the victim of bullying has a direct negative effect on mental health. Bullies and victims demonstrated significant problems with health, emotional adjustment and school adjustment (2). School-based interventions for mental health and well-being can offer options for preventing destructive and self-destructive patterns of behaviour. Activities could include training for school administrators and representatives of municipal education departments about modern principles of prevention of destructive and self-destructive behaviour in schools (10).

Addressing health inequities

- Policies to improve economic security for families with children are necessary, as available evidence suggests links between low socioeconomic status and increased exposure to risk factors for mental disorders in children and adolescents. Public transfers and social security payments can significantly affect child poverty; countries that spend 10% of GDP on public transfers have less than 15% child-poverty rates, while those that spend less than 10% have rates of 15% and above (11). As poverty is multidimensional, social programmes that improve housing, education opportunities, job market skills and other aspects of social inclusion for low-income households are also important for promoting mental well-being of children and adolescents.
- Further to the above point, the concept of “health and equity in all policies” is central to addressing the socioeconomic determinants of health, including those related to mental health. The rationale for this is expressed clearly in the case study from Belgium (Flanders), which states: “Equity is not only an issue in health; it is also an issue in education and in other sectors of society. Societal challenges are often intertwined. Sectoral policies can support each other or can counteract each other.”
- Equity issues should be addressed in policies and strategies for child and adolescent health and mental health. In Ireland, the policy document *A vision for change: the report of the Expert Group on Mental Health Policy* sets out a comprehensive model of mental health services provision in Ireland and proposes a framework for how positive mental health should be implemented. The framework focuses on child populations at higher risk (those from poorer socioeconomic backgrounds). In Hungary, one of the first countries to adopt a national child and adolescent health plan harmonized with the *WHO European strategy for child and adolescent health and development* (12), the national plan identifies issues represented by social risk conditions and inadequate provision of health care in underserved areas and for minority population groups.
- Positive relationships with parents are key protective factors for adolescent mental well-being. Parent training and comprehensive early childhood development programmes addressing socioeconomic determinants, health system access and social and emotional health (including effective parent–child relations) show evidence of enhancing possibilities for low-income young people to confront adverse circumstances (13; also see background paper, *Economic aspects of mental health in children and adolescents*). This becomes particularly important for children of a parent with mental illness, who often experience illness-related disturbances in the parent–child interaction that can lead to feelings of guilt, disorientation and loss of self-confidence and promote stigmatization and isolation.
- Policy-makers and programme managers should account for gender differences in the design of strategies and interventions. HBSC data suggest that adolescent boys typically have higher positive self-esteem, lower negative self-image and less unhappiness than girls. Conversely, boys may be more exposed to risk factors, including bullying.
- School settings can be used as non-stigmatizing “equalizers”, as there is evidence that positive experiences in school can buffer the negative effects of risk factors for mental disorders (including low family income and migrant status). In Belgium (Flanders), percentages of poor mental health in pupils of low socioeconomic status were higher when students did not get support from students and teachers and when they perceived the school as not being a nice place to be. The Portugal case study highlights the importance of promoting and assuring school success as a means to stop the dangerous chain of “poverty→social exclusion→school failure→health-compromising behaviours→school drop out→under or unemployment→social exclusion→poverty”.
- For young people who have dropped out of school, governments can consider supporting initiatives to enhance emotional health and social skills, while also increasing academic and job-related skills. In the Pomurje Region of Slovenia, for instance, a programme for such young people provides teaching on social and coping skills and finding supportive social contacts, training for positive self-image and healthy behaviour, and vocational development and career counselling workshops (see case study from Slovenia).
- It is important that service delivery networks include initiatives at the primary level in the communities with the greatest needs. In Andalusia, Spain, “Forma joven” – addressing mental health, sexual health, and addiction – targets young people

while involving them proactively in programme implementation. The establishment of “Forma joven” points is prioritized for areas requiring social transformation due to adverse socioeconomic conditions. The initiative is part of an integrated strategy to increase social cohesion and improve access to public services in socially disadvantaged areas.

Involving young people

- “Count on our contribution when making decisions that affect our lives”, expressed the WHO/HBSC Forum statement prepared through youth-run workshops involving 70 teenagers in Alcalá de Henares, Madrid, Spain. The statement was provided as the young people’s contribution to the case study on the Manuel Merino Health Centre, which provides participatory youth-friendly services at primary care level. It clearly conveys the notion that policies and initiatives to improve mental health and well-being status of children and young people should, as a fundamental principle, feature the involvement of children and young people, particularly as the process of finding one’s voice and having it listened to is mentally health-promoting in its own right (see case study from Scotland, United Kingdom).
- Student committees and/or peer facilitators are important in a whole-school approach to the promotion of mental well-being and effective school-based mental health programmes. The study from Lithuania reported that in school programmes, the presence of adolescent volunteers provided positive role models and allowed teenagers to gain self-confidence and to feel safe through peer group experiences, while also resulting in the most youth-appropriate solutions.
- Training on participatory methods can be incorporated into strategies and programmes. HeadsUpScotland (see case study from Scotland, United Kingdom), which supports implementation of recommendations in the Scottish Needs Assessment Programme report for child and adolescent mental health, established a participation partnership group. Actions included: a training programme for local staff, children and young people in participation methods; engaging children and young people in local community work; and a national consultation with 120 young people.
- Discussions at the Forum stressed the need for sufficient resources (human and financial) to be allocated to enable young people’s involvement in a sustained and meaningful way. Higher priority needs to be given to this participatory approach in funding decisions.

Translating research into policies and action

- Case studies underlined the need for a sound scientific evidence base to inform policy formulation and underpin activities promoting adolescent mental health and preventing mental disorders. The study from Armenia, a country that in 2007 was not regularly conducting the HBSC survey, highlighted the fundamental importance of such a study in measuring current issues and trends, particularly taking into account the rapid transitions in the country. Armenia has since joined the HBSC network to address this need. The case study from the Republic of Moldova recommended the improvement of information systems as a necessary part of developing better ways of addressing adolescent mental health and well-being, and called for a scaling-up of comprehensive monitoring and data collection.
- There are opportunities to increase the use of HBSC and other data sources at local levels to develop and evaluate new and existing projects. As suggested in the case study from Iceland, further work is needed to map the community and individual-level differences to support policy-makers at local levels and to deliver programmes to reduce health inequities.
- Forum discussions emphasized the need to strengthen the evidence base on effective interventions (for those addressing mental health directly and those incorporating social and emotional health into other programmes for young people’s health and welfare). The lack of solid evidence for the effectiveness of intersectoral mental health promotion hinders investment in intersectoral work (see case study from Flanders, Belgium). Developing a vision and a methodology to evaluate intersectoral interventions is a priority, and this should be addressed in efforts to strengthen the stewardship function of health systems.
- There are challenges in drawing generalized conclusions about the cost-effectiveness of interventions to promote child and adolescent mental health and prevent mental disorders among this age group, particularly in light of the limited number of economic evaluations conducted (especially in Europe, outside of the United Kingdom). More research is needed to understand the cost burden and the “return” on investment (see background paper, *Economic aspects of mental health in children and adolescents*).
- In relation to socioeconomic status and mental health, current data allow reliable conclusions to be drawn for some countries, while no or very limited data are available for other countries. Inconsistencies in measurements and methods impede the

making of accurate, valid comparisons between and within countries over time. Detailed, comparable, reliable and valid data on both socioeconomic status and mental health are required to enable political decision-making to be based on a strong scientific rationale (see background paper, *Socioeconomic inequalities in mental health among adolescents*).

- The Forum 2007 process has pointed to the importance of not defining mental well-being simply in relation to mental ill health. Promoting positive mental health and well-being is vitally important for children and young people, but the concept of positive mental health and well-being is subject to interpretation across different countries and cultures. The lack of a common understanding leads to problems in comparing research and survey data across countries and in collecting and using routine data within countries.
- An example of networking to meet the above-mentioned needs and enable the transfer of research into policies and action is the project *Child and Adolescent Mental Health in Enlarged European Union – development of effective policies and practices* (CAMHEE), funded by the EU Public Health programme. CAMHEE aims to provide recommendations and guidelines for policies and practices in the European Union, with special emphasis on new EU countries and in synergy with the *Mental Health Action Plan for Europe* (4).

8. What immediate steps can policy-makers take?

The lessons learned through the Forum process reinforce and provide further impetus for the commitments of governments to act on child and adolescent mental health and well-being, as outlined in the following policy papers and strategies: the *Mental Health Action Plan for Europe* (4), the EU Green Paper *Improving the mental health of the population: towards a strategy on mental health for the European Union* (7), the *WHO European strategy for child and adolescent health and development* (12) and European key competencies for lifelong learning. Policy-makers are encouraged to increase their efforts in implementing the recommendations outlined in these, with due recognition of the diverse circumstances in each country. Action areas include, but are not limited to, the following:

- developing mechanisms to scrutinize the mental health impact of public policy for all age groups and ensure the implementation of policies across government to address social determinants of mental health;
- ensuring the coordination of programmes and interventions to maximize resources, avoid duplication and identify gaps;
- developing and implementing capacity-building programmes, including training for professionals working with children and young people with mental disorders. Ongoing support to enable professionals to use this training within their practice is also needed;
- developing governmental information systems that are fit for purpose and provide intelligence to support action to promote the mental health and well-being of adolescents, and ensuring that these systems make data available to the policy-makers and practitioners who need them; and
- supporting a culture of evaluation and mutual learning within and between Member States.

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Disclaimer

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Mental well-being in school-aged children in Europe: associations with social cohesion and socioeconomic circumstances

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Introduction

Mental well-being is fundamental to good quality of life. Happy and confident children are most likely to grow into happy and confident adults, who in turn contribute to the health and well-being of nations (1). Emotional health and well-being in young people have implications for self-esteem, behaviour, attendance at school, educational achievement, social cohesion and future health and life chances (2).

Young people with a good sense of mental well-being possess problem-solving skills, social competence and a sense of purpose. These assets help them rebound from setbacks, thrive in the face of poor circumstances, avoid risk-taking behaviour and generally continue a productive life (3,4).

There are many new pressures and challenges for young people in early to mid adolescence. They need to deal with considerable change in their lives at this time: growing academic expectations, changing social relationships with family and peers and physical and emotional changes associated with maturation. Many factors have an impact on children's ability to deal with these changes: factors specific to the child, to their family, to their environment (particularly their school) and to life events (5).

The idea of risk and protective factors can help to understand the likelihood of young people being able to achieve and sustain a state of mental well-being. These factors can operate at the level of the individual, family, school or neighbourhood and at a broader societal level. The more opportunities young people have in childhood and adolescence to experience and accumulate the positive effects of protective factors that outweigh negative risk factors, the more likely they are to achieve and sustain mental health and well-being in later life.

Key protective factors for positive mental health include a sense of parent/family connectedness and school connectedness/identification. Social support (from at least one caring adult) is protective in relation to a wide range of adversities (6). With regards to the school environment, many research studies have demonstrated that warm, caring and supportive staff-pupil relationships are a crucial factor in producing high levels of emotional and social competence (7). The Search Institute (8), for example, has developed 40 essential protective factors ("development assets") which are crucial to young people's healthy development, supporting them to become healthy, caring, responsible adults.

These protective factors can, however, be offset by a range of risk factors, including poverty, child abuse, early parental loss and family conflict, parental substance misuse and living in high-crime neighbourhoods. The strength of evidence on risk and protective factors for mental health varies, but it shows that social and economic factors which support warm, affectionate parenting and strong child/carer attachment are particularly significant. Strengthening protective factors in schools, in the home and in local communities can make an important contribution to reducing risk for those who are vulnerable (9-11) and in so doing promote their chances of leading healthy and successful lives.

This background paper presents a map depicting the prevalence of mental well-being among nationally representative samples of school-aged children in participating countries and regions in the WHO cross-national HBSC study during the period 1998-2006. This description of mental well-being is based on three indicators: life satisfaction, self-rated health, and subjective health complaints.

The paper uses evidence generated by HBSC researchers to:

- examine the relationship between these indicators and a range of social indicators associated with the idea of social cohesion (within the context of family, peers, school and neighbourhood); and
- understand the relative influence of these social indicators after controlling for a range of other factors, including age, gender and socioeconomic circumstances.

Presentation of these findings is timely, given the current policy commitment at European level to promote the mental well-being of young people. Evidence from HBSC supports the effective implementation of the Mental Health Action Plan for Europe (12), the EU Green Paper *Improving the mental health of the population: towards a strategy on mental health for the European Union* (13), and the WHO European strategy for child and adolescent health and development (14). Common to all these policy documents is the need to:

- address the individual, family, community and social determinants of mental well-being by strengthening protective factors and reducing risk factors;
- take a life-course approach to intervention that particularly recognizes that investing in children and adolescents now will contribute to health and economic prosperity in the future; and
- encourage participation so that young people are seen as being active in the construction and determination of their own lives.

These are all principles associated with an assets-based approach to health and development that accentuates positive capability to identify problems and activate solutions. Evidence from HBSC has the potential to support assets-based policies which promote the self-esteem and coping abilities of individuals and communities, eventually leading to less dependency on professional services.

Defining and measuring mental well-being

WHO's definition of mental health further elaborates a state of well-being as "one in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (15).

In their work on establishing a set of mental health indicators for Europe, Korkeila et al. (16) conceptualize two dimensions of mental health: the positive (well-being and coping in the face of adversities), and the negative (symptoms and disorders). Positive mental health is therefore not merely an absence of negative symptoms such as depression or anxiety, but also includes aspects of control of self and events, happiness, social involvement, self-esteem and sociability (17).

Children who are mentally healthy have the ability to:

- develop psychologically, emotionally, creatively, intellectually and spiritually
- initiate, develop and sustain mutually satisfying interpersonal relationships
- use and enjoy solitude
- become aware of others and empathize with them
- play and learn
- develop a sense of right and wrong
- resolve problems and setbacks and learn from them (18).

While policy-makers and researchers continue to debate the precise nature of positive mental well-being (19), subjective notions of life satisfaction, happiness and confidence are increasingly used in surveys as predictors of mental health (15).

Mental well-being in Europe

It is important to note from the outset that the mental well-being of children in general is good. Most are satisfied with their

lives, perceive their health to be good and do not regularly suffer from health complaints such as headaches, irritability or feeling low (20). Data from the 2002 HBSC survey, however, show that a sizeable minority reported either fair or poor health and experienced a number of recurring health complaints.

These negative health indicators are more common among older than younger respondents and among girls than boys; 15-year-old girls appear to be particularly vulnerable, with over 25% reporting either fair or poor health and 44% reporting one or more health complaints more than once a week. These patterns are consistent across most of the HBSC countries and regions, although in general, eastern countries in the WHO European Region tend to have higher rates of poorer health and lower rates of life satisfaction. Southern European countries tend to have higher rates of health complaints across all age groups.

Self-rated health

There is general agreement that asking young people to rate their own health in surveys is a reliable and valid method of assessing overall health. This measure also has strong correlation with ratings of mental health (16). Self-reported health is assessed in HBSC by asking students to rate their health as “excellent”, “good”, “fair” or “poor”.

In 2002, the proportions of young people rating their health as “fair” or “poor” differed considerably by gender and age across HBSC countries and regions. The rating of poorer health was higher among girls and rose significantly with age. For example, in 2002, levels of poorer health reported by girls ranged from 4% to 44% in 11-year-olds, from 10% to 54% in 13-year-olds, and from 13% to 63% in 15-year-olds (21).

While the general gender and age patterns remained the same in 2006, data from country case studies showed some interesting changing patterns. In the United Kingdom (Scotland), for example, young people’s overall levels of happiness and confidence have increased since 1998. In Belgium (Flanders), the percentage of girls reporting poorer levels of health was higher in 2006 than in 2002 in all age groups.

Fig. 1 and 2 show the percentage of 15-year-old boys and girls who reported their health as “fair” or “poor” in countries and regions participating in the 2005/2006 HBSC survey.

Life satisfaction

The HBSC study uses a measurement technique known as the “Cantril ladder” to measure young people’s global assessment of their lives. It provides a direct assessment of the extent to which young people can fulfil their developmental tasks related to peers, parents and education. The study asks young people to indicate the step on the ladder which best reflects their life at the moment: “*Here is a picture of a ladder (‘the Cantril ladder’). The top of the ladder, 10, is the best possible life for you and the bottom, 0, is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?*” A score of six or above is defined as a positive level of life satisfaction.

In 2002, although most young people were satisfied with their lives in all countries and regions, the geographical differences were substantial and consistent across age groups (21). Scores were consistently high in Finland and the Netherlands and low by comparison in Latvia, Lithuania and Ukraine. There was a small trend towards decreasing life satisfaction across age groups, particularly for girls. Case studies from Belgium (Flanders), Finland and Slovenia confirm that these general patterns remained consistent in 2006.

Fig. 3 and 4 show the percentage of boys and girls who scored above the middle ranking in the life-satisfaction scale.

Subjective health complaints

Subjective health complaints, as defined by Torsheim et al. (21), focus on those young people who experience multiple recurrent health complaints, as this is more likely to represent a significantly heavier burden on daily functional ability and well-being than single symptoms. The HBSC study uses a standard symptom checklist to measure subjective health complaints and asks young people: “*In the last six months, how often have you had the following: headache, backache,*

Fig. 1

15-year-old boys who rate their health as fair or poor.
 Source: Currie et al. (22)

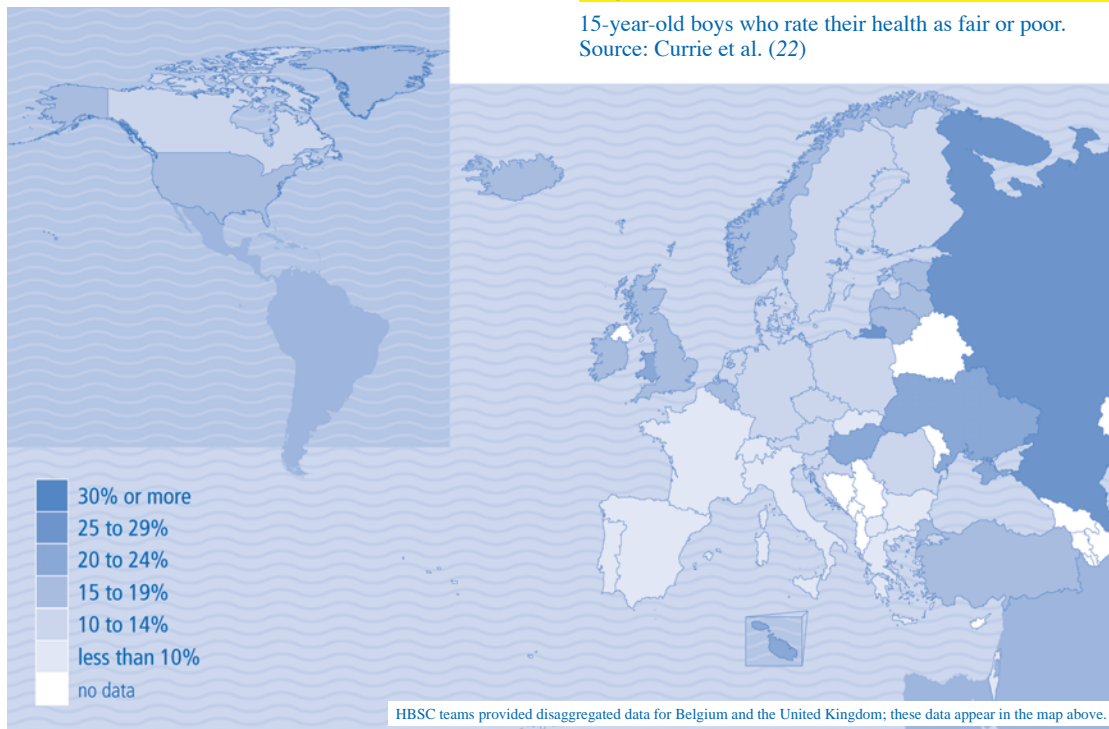


Fig. 2

15-year-old girls who rate their health as fair or poor.
 Source: Currie et al. (22)

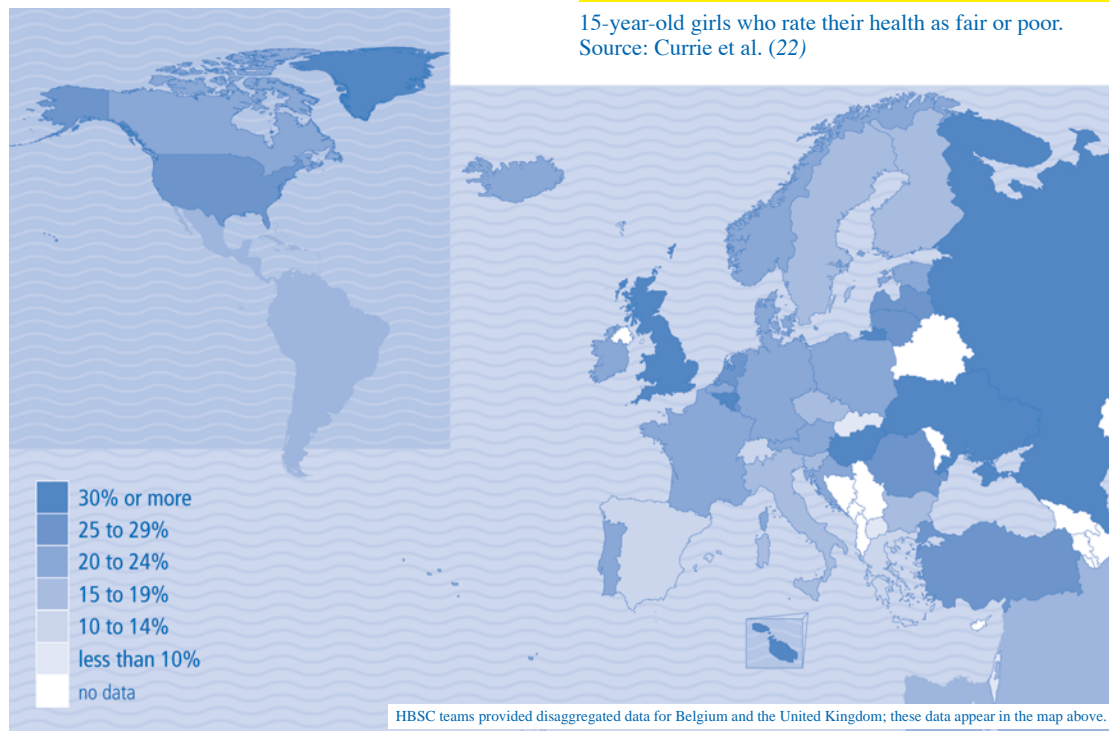


Fig. 3

15-year-old boys who report high life satisfaction.
Source: Currie et al. (22)

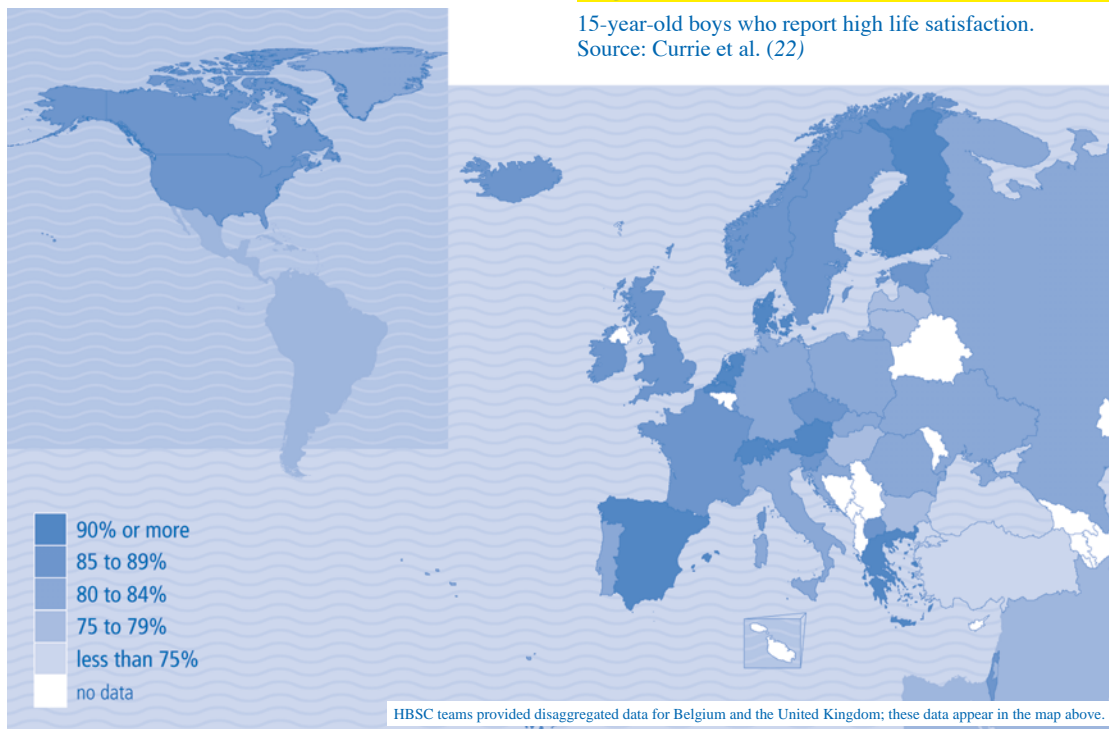
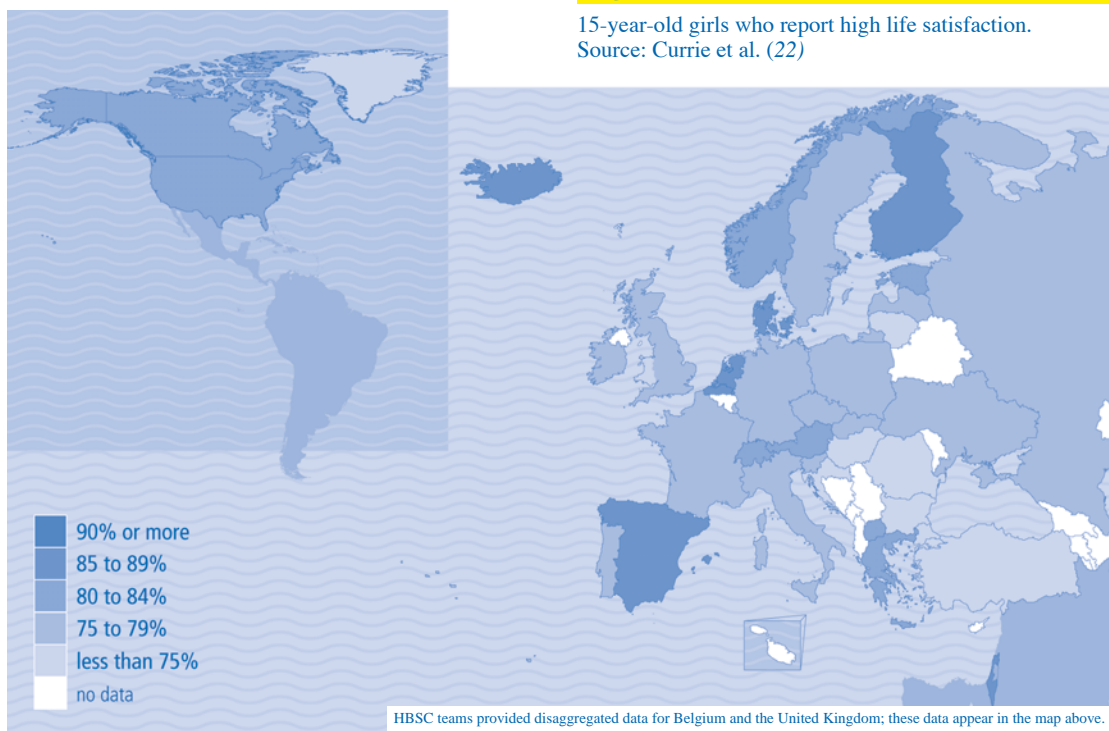


Fig. 4

15-year-old girls who report high life satisfaction.
Source: Currie et al. (22)



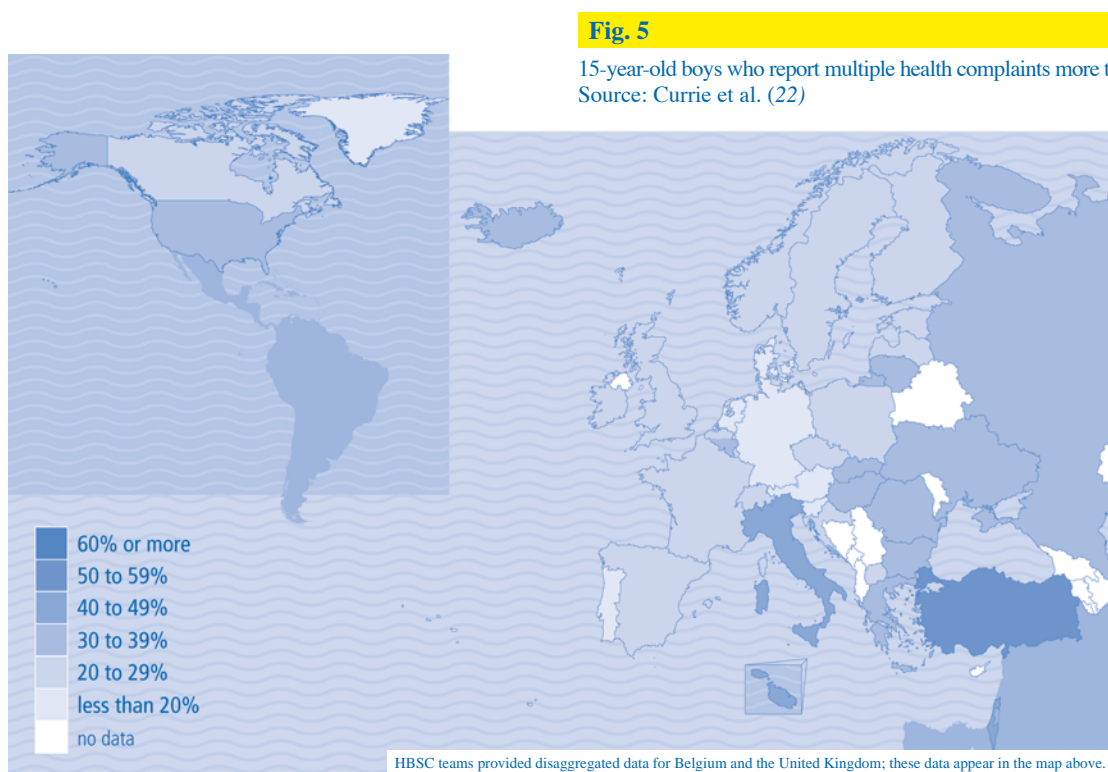
feeling low, irritability, bad temper, feeling nervous, difficulties in getting to sleep, feeling dizzy?”

Levels of multiple subjective health complaints differed across countries and regions. For example, in 2002 this ranged from 15% in Germany to 43% in Italy among 11-year-old boys. They were consistently higher among young people in Greece, Italy and Israel and consistently lower in Austria, Germany and Switzerland (23).

Analysis of HBSC data in 1998 and 2002 show consistent gender inequalities relating to subjective health complaints. Girls and older students were more likely to report multiple subjective health complaints and gender differences increased with age (21,24,25), but the magnitude of gender difference varied across countries and regions. In 2002, gender differences among 15-year-olds were notably high in the Baltic states and in some southern countries in the European Region, including Croatia, Greece, Italy, Portugal and Spain (21).

Several country case studies (Belgium (Flanders), Slovenia and Finland) highlight that these general patterns have not changed in 2006.

Fig. 5 and 6 show the percentages of 15-year-old boys and girls reporting two or more subjective health complaints more than once a week in countries and regions that participated in the 2005/2006 HBSC survey.

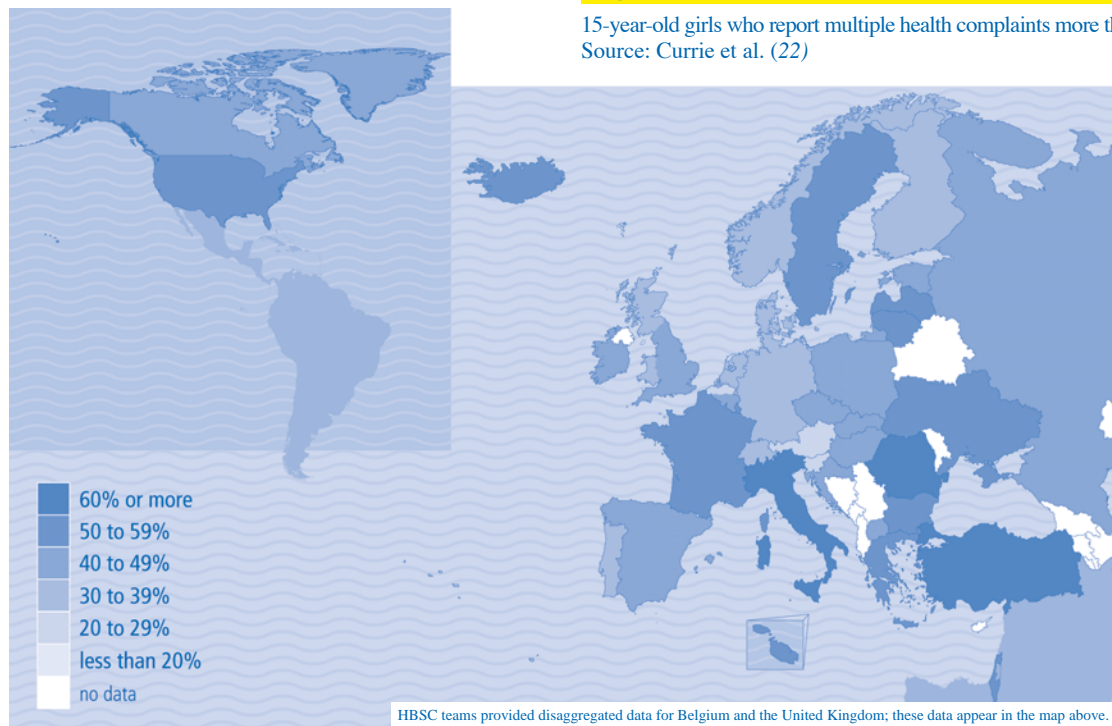


Socioeconomic differences in mental well-being

Children growing up in disadvantaged circumstances are most at risk of an imbalance between risk and protective factors. These children face a range of stressors and challenges, both material and social, that children from more-affluent backgrounds can avoid (26). These stressors and challenges can take a toll on their emotional well-being; children from poorer families often have elevated rates of emotional and behavioural problems, including finding it harder to concentrate, to be self-confident and to contain anxiety and aggression (27).

Fig. 6

15-year-old girls who report multiple health complaints more than once a week.
Source: Currie et al. (22)



The HBSC study provides data on how differences in the experience of mental well-being as described by self-reported health, life satisfaction and subjective health complaints are patterned in different country contexts. It uses a number of measures that focus on objective and subjective family socioeconomic status. They range from asking young people to state the occupation of their parents to how often they go to bed hungry. The success of these measures in defining socioeconomic status varies across countries and regions.

The most well-used and tested measure is the Family Affluence Scale (FAS) (28). It is conceptually related to common indices of deprivation and acts as a proxy for family income by overcoming the difficulty of obtaining clear information from young people on parent and family income levels (29).

The FAS score is derived from the answers to the following questions.

- Does your family own a van or a truck?
- Do you have your own bedroom for yourself?
- During the last 12 months, how many times did you travel away on holiday with your family?
- How many computers does your family own?

Evidence accumulated over the last 10 years from HBSC data demonstrates that lower socioeconomic status (SES) is associated with lower levels of mental well-being.

Currie (30) used the 1997/1998 survey to examine the relationship between an indicator of perceived family wealth (FAS) and levels of happiness, feelings of confidence and feelings of helplessness. She found consistent evidence across participating countries and regions to demonstrate that where countries and regions have higher proportions of adolescents living in conditions of low family affluence, they also have higher proportions reporting poor subjective health and well-being. The patterns across countries and regions were far more consistent than those looking at the relationship between family affluence and health behaviours.

An analysis of the 2002 data (31) found consistent gradients for self-rated health in association with FAS across most countries and regions. Torsheim et al. (32) found an eight-fold difference between the most-deprived and least-deprived 11-year-olds in self-rated health.

The evidence is less clear for subjective health complaints. The prevalence of daily health complaints was associated with FAS among boys and girls in many, but not all, of the countries and regions participating in 2002. This association was significant in most countries for girls, but in only half for boys. In Austria, Malta, the Russian Federation and the former Yugoslav Republic of Macedonia, there was no clear gradient of a reduction in daily health complaints as family affluence increased for either boys or girls.

In an analysis of life satisfaction scores, Zambon et al. (33) found in almost all participating countries and regions in 2002 a significant relationship between FAS and measures of life satisfaction. Overall, young people living in high socioeconomic circumstances were over twice as likely to report feeling good about their life. Zambon et al. concluded that these differences were further characterized by particular welfare systems. Those systems with higher redistributive characteristics were found to be more effective in reducing the association between socioeconomic status and health, and consequently had the potential to reduce health inequalities.

Inequalities in mental well-being could still be found in some participating countries and regions in 2006. For example, in Slovenia, Belgium (Flanders), Spain, Portugal and the former Yugoslav Republic of Macedonia, young people in less-wealthy families were more likely to report not feeling satisfied with their lives. In the former Yugoslav Republic of Macedonia and Spain, these relationships were consistent irrespective of ethnic background.

Associations between mental well-being and social cohesion

Identifying effective ways of addressing the social determinants of health is an aim of the WHO/HBSC Forum process. Forum 2007 has identified social cohesion as a key concept to help to understand how best to further develop an evidence base to explain how different aspects of the social environment affect mental well-being and how best to take effective action to address them.

The Council of Europe (CoE) (34) defines social cohesion as: “the capacity of a society to ensure the welfare of all its members, minimizing disparities and avoiding polarization. A cohesive society is a mainly supportive community of free individuals pursuing these common goals by democratic means”.

Evidence increasingly shows that social cohesion is critical for societies to prosper economically and for development to be sustainable (35). Over recent years, attempts have been made to demonstrate the links between cohesive, economically thriving communities and health, and authors have used the concept of social capital as a means of measuring these associations (36,37).

Communities where social capital is abundant are often characterized by high levels of trust and shared norms and values between friends and neighbours. They are communities in which local people are actively engaged in civic and community life (38). Social capital is a multicomponent concept consisting of indicators that attempt to measure the range of social relationships and networks (both formal and informal) that individuals and communities might possess and which are health promoting.

While there are different perspectives on the definition of social capital (39–41), they all share a common thread. Social capital is seen as a resource for societies which facilitates coordination and cooperation by shaping the quality and quantity of social networks of different types, shapes and sizes (42).

Morrow (43) translated the concept of social capital for young people by exploring the importance of their social networks (at school, at home and in the neighbourhood), their ability to be involved in decision-making and their sense of belonging and safety in different situations. While the usefulness of the concept of social capital in researching and promoting health is hotly disputed (44,45), the importance of its underlying constructs, as outlined by Morrow (43), are not denied.

Data available within the HBSC study allow us to study the importance of these constructs independent of their relative merits for measuring concepts such as social capital. These indicators have been used to further understand the relationship between social context and the mental well-being of young people and are reported here to illustrate their links with social cohesion. Many of the social factors relate to the developmental assets identified by Scales (3) as protective factors for young people's health and development.

It is not possible within the context of this background paper to provide comprehensive analysis of the full range of indicators available, but it is drawn on the HBSC evidence base to illustrate the importance of factors relating to social cohesion in the context of the family, school, peers and neighbourhood. Where possible, it is reported on the independent effects of these factors over and above socioeconomic circumstances.

Family support

Positive parenting can act as a buffer against adversity, such as poverty or peer pressure, and as a mediator of damage in child abuse (19). Evidence from analyses of the 2002 HBSC data set suggests a number of family factors are important in promoting the mental well-being of young people.

For example, Pederson et al. (46) found that young people who live with both parents are more likely to perceive their health as good or excellent than those who live with a single parent or step family. There is, however, wide variation in family structures among countries and regions participating in HBSC. Less than 70% of young people live with both parents in the United Kingdom and some Scandinavian countries, but in countries such as Italy, Greece and Malta, the figure is over 90%. Different cultural and societal norms and economic factors account for many of these differences.

Maggi (47) argues that the definition of family is less critical than defining the characteristics of optimal early childhood environments that support child development and transcend any particular definition of the family.

Good communication at home is also important for promoting the mental well-being of children. In general, young people in all age groups and across all countries and regions find it easier to talk to their mothers than to their fathers. In 2002, perceived ease of communication with either parent among the participating countries and regions was higher in the Netherlands, Slovenia and the former Yugoslav Republic of Macedonia.

Better communication with both mothers and fathers is associated with higher self-rated health for boys and girls, and this pattern is consistent across many countries and regions (46). In Italy, Zambon et al. (33) found this association declines with age as young people begin to rely more on friends for social support. They also found some evidence to suggest that young people from wealthier families are more likely to find it easy to talk to their fathers, although there was no difference in relation to mothers.

Data from Ireland confirm the associations with good parental communication and high levels of life satisfaction, happiness and infrequent subjective complaints. Molcho et al. (48) found that the accumulation of support from parents, siblings and peers leads to an even stronger predictor of positive health: the higher the number of sources of support, the more likely it is that the children experience positive health.

The importance of family support is further demonstrated by 2006 analyses. In Iceland, social support was associated with better psychosocial health independent of other factors. In Slovenia, adolescents from wealthier families found it easier to communicate with their mothers about their interests, and parents were more willing to help with school problems and homework and were more encouraging regarding school work.

At school

There is evidence from HBSC to demonstrate that young people who have a positive experience at school (in terms of how they get on with their classmates, whether they feel pressured by school work and their perceptions of performing well in relation to others) are more likely to report good health and life satisfaction and suffer fewer health complaints. More positive

experiences of school related to fewer subjective health complaints and self-rated health and life satisfaction for all, with especially strong gradients for girls (49).

In a study of Italian adolescents, Vieno et al. (50) found that social support from teachers, parents and peers within the school setting were important factors in improving student motivation and school satisfaction, which in turn are linked to positive mental well-being outcomes, although there were some gender differences.

Due et al. (51) found in a sample of Danish adolescents that poorer relations with parents, peers and teachers in the context of school were all associated with more subjective health complaints. Patterns of parent–child relations with the school were the greatest contributors to socioeconomic differences in physical and psychological symptoms.

Within the school environment, one of the most direct and easily identifiable negative effects on a child’s mental health is being the victim of bullying. In a survey of children’s and young people’s views on improving behaviour in schools, bullying was identified as a key issue in causing disaffection, poor attainment and unhappiness for “quite considerable numbers of young people at some time” (52). Children who are victims of bullying tend to be more anxious and insecure, have lower self-esteem and feel more lonely and depressed than children who are not victimized.

Previous HBSC surveys (53) have shown that, while there is great variation in prevalence of bullying across Europe, there is a consistent, strong and graded association with subjective health complaints.

Nansel et al. (54) carried out a cross-national study to determine whether the relationship between bullying and psychosocial adjustment is consistent across countries. They found evidence that despite the substantial variation in prevalence across countries (for instance, 9% of young people reported being involved in bullying in Sweden, compared to 54% in Lithuania), there was a consistent relationship between bullying and psychosocial adjustment. Bullies and victims demonstrated significant problems with health, emotional adjustment and school adjustment: being bullied and being a victim of bullying were both negatively associated with school adjustment; being a victim was associated with poorer relationships with classmates; and school factors were associated with bullying both in relation to adjustment to school and relationships with classmates.

Fig. 7

15-year-old boys who have been bullied at school at least twice in the past couple of months.

Source: Currie et al. (22)

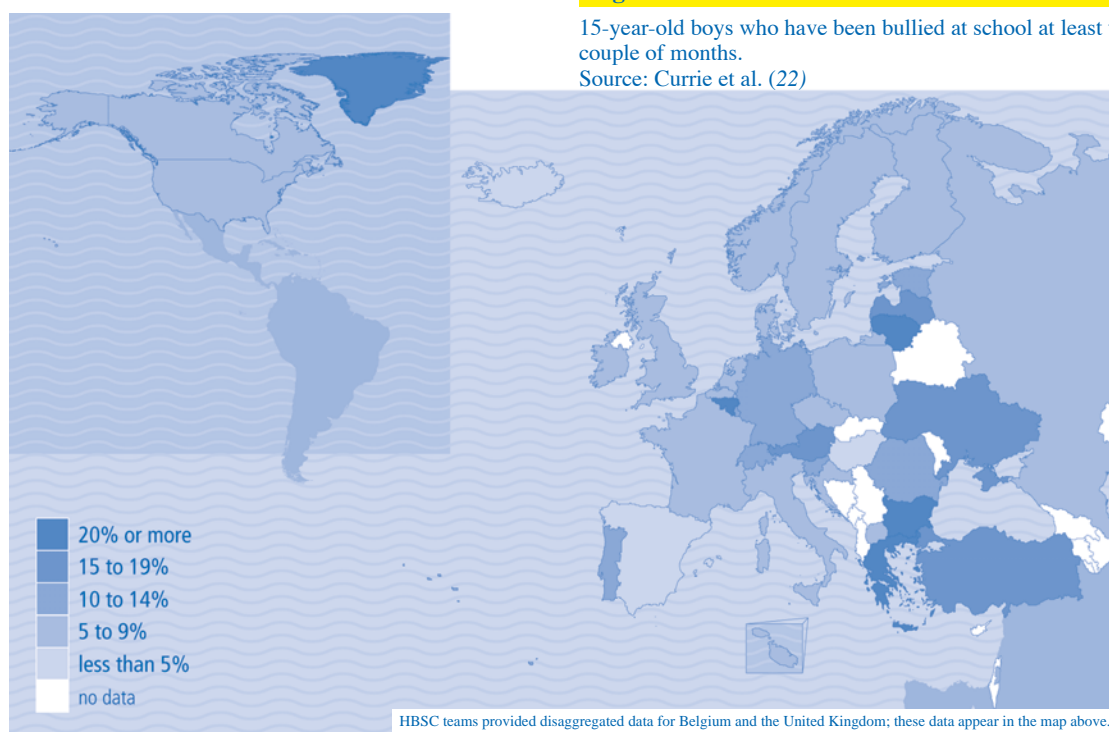
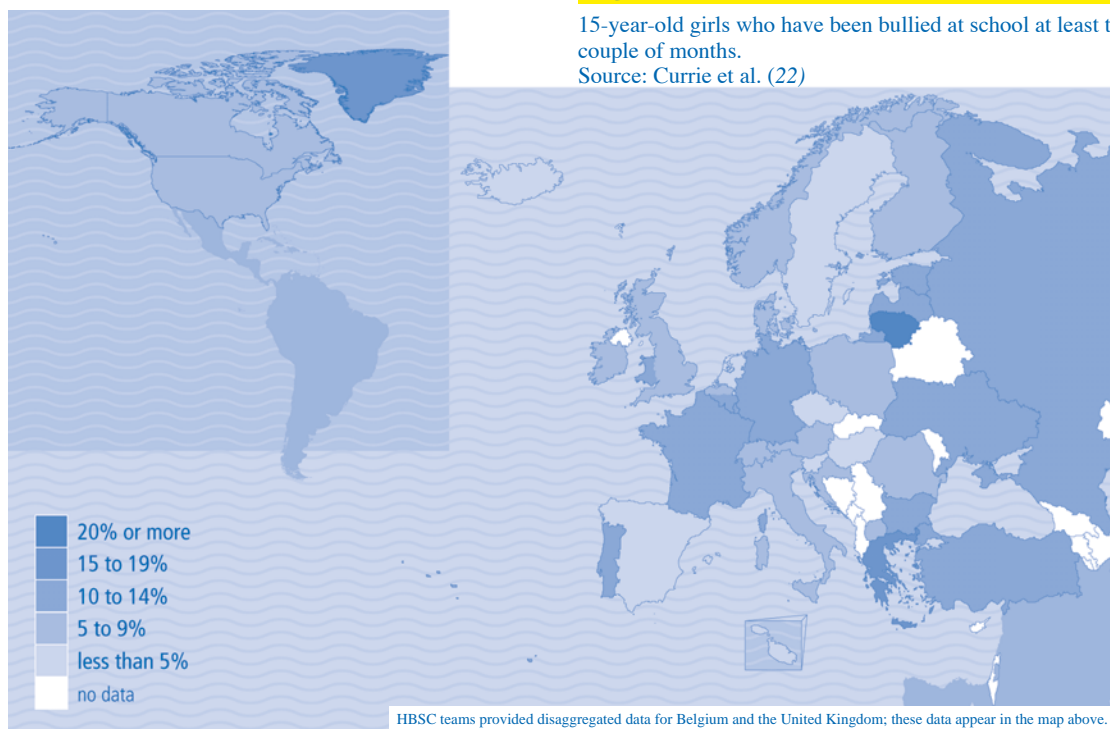


Fig. 8

15-year-old girls who have been bullied at school at least twice in the past couple of months.

Source: Currie et al. (22)



Results from the United Kingdom (England) 2001/2002 HBSC survey lend further evidence to the theory that levels of support from parents and teachers at school and a sense of belonging at school have an important impact on young people's well-being. School factors such as being involved in decision-making, getting help from other classmates and feeling safe were all significantly related to being bullied in the English survey. Young people with a low sense of "belonging" in school were over 2.5 times more likely to have been bullied than classmates with high perceptions of belonging, independent of age, sex and socioeconomic circumstances (55).

Fig. 7 and 8 show the percentage of 15-year-old boys and girls reporting being bullied 2–3 times in the last couple of months in countries and regions participating in the HBSC survey in 2005/2006.

Data from Belgium (Flanders) in 2006 confirm that a positive school climate (measured in terms of support from teachers and friends and thinking that school is a nice place to be) can improve the chances for positive mental well-being, even after controlling for gender and age.

Peer and friendship networks

Being liked and accepted by peers is crucial to young people's health development and those who are not socially integrated are far more likely to exhibit difficulties with their emotional health (56). Interactions with friends tend to improve social skills and strengthen the ability to cope with stressful events. Gaspar et al. (57), for example, used HBSC data from Portugal to study the effects of peer social support on levels of anxiety and depression. They found that levels augmented with increasing age, but those with better-quality peer relationships were less likely to suffer from anxiety and depression across all ages.

Having a number of close friends marks the ability to engage in close relations with others. Although peer contact is strongly associated with a number of risk-taking behaviours, it also has the potential to improve interpersonal communication, problem-solving abilities and emotional awareness and can be important for the development of protective factors.

Neighbourhood safety and belonging

Runyan et al. (58) found that the presence of neighbourhood social capital acted as a buffer against the negative effects of unfavourable (abusive and/or neglectful) environments. Their longitudinal analysis of deprived children found that those with support from their neighbourhoods were more likely to “do well” and thrive developmentally.

Some data from HBSC allow the investigation of the links between supportive and inclusive neighbourhoods and young people’s mental well-being. Specifically, data explore young people’s sense of local identity, belonging and safety and how much they are allowed to participate in local decision-making. Most of the evidence to date comes from national analyses.

An analysis of the United Kingdom (England) 2001/2002 HBSC survey (55) found factors associated with neighbourhood social capital to be highly predictive of mental well-being, even after controlling for age, sex and family affluence. For example, young people who had no involvement in the local community were twice as likely to report poorer health; those who rarely felt safe in the neighbourhood were almost four times as likely to report being unhappy and twice as likely to feel low at least once a week.

Maes et al. (59) found that perceived neighbourhood social capital had a significant effect on self-rated health independent of the socioeconomic status of parents, family affluence and health-related behaviours.

More recently, an analysis of the 2006 HBSC survey in Romania found neighbourhood social capital to be a protective factor against poor socioeconomic background and supportive of improving mental well-being for young people. Higher socioeconomic status and high social capital represented predictors of superior mental health, with perceived family affluence accounting for 8% of the variance and social capital explaining 20% of mental health variance.

Conclusion

This background paper has used evidence accumulated by HBSC researchers to demonstrate that social approaches are not only important in promoting the mental well-being of young people and supporting the reduction of inequalities in adolescence and adulthood, but are essential.

The many gender differences in mental well-being identified in the HBSC survey reflect the findings of previous research which suggested that adolescent boys have higher positive self-esteem, lower negative self-image and less unhappiness than girls (60).

The HBSC study also tells that:

- living with both parents is still commonplace for most young people across countries and regions, although single-parent families in general are more common in northern and north-western European countries and North America;
- mothers are considered a more accessible source of social support than fathers across most countries and regions;
- although peer contact increases with age across all countries and regions, gender inequalities exist in peer socializing, according to culture; and
- as young people grow older, they tend to like school less, perceive their performance to be poorer and feel more pressured by schoolwork; overall proportions vary widely across countries and regions, however.

Findings from HBSC research over the past 10 years confirm that the social environment within which young people live is important for their health and well-being now and in the future. Good relationships in the home, school and neighbourhood play a part in ensuring that young people can develop social competence and an ability to make the sort of relationships required for cohesive societies. The research presented here goes some way to confirming that the more protective factors or assets that can be accumulated, particularly through the adolescent years, the more likely young people are to be able to cope with adverse situations and, in some circumstances, thrive on them, even when they live in poorer circumstances.

Further work needs to be carried out to help to understand which protective factors are most important in different contexts.

Given the policy commitment at European level, an assets-based approach is nevertheless both possible and timely to ensure that the potential is maximized to:

- raise the self-esteem and resourcefulness of young people to improve and sustain their own health and well-being;
- create the health-generating environments that are supportive to the development of young people; and
- take account of the positive attributes already existing in young people and actively involve them in the process of health development through the promotion of mental well-being.

Data from the following national case studies were used to inform this paper: Belgium (Flanders), Iceland, Ireland, Romania, United Kingdom (Scotland), Slovenia.

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Socioeconomic inequalities in mental health among adolescents in Europe

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Introduction

Mental health in children and adolescents is a topic of increasing importance. Results from several research studies indicate an association between mental health problems and socioeconomic status in young people.

This paper attempts to provide a comprehensive overview of current knowledge on socioeconomic inequalities in mental health among adolescents in European countries that are members of the EU plus Norway and Switzerland. Problems associated with previous studies are discussed and needs for further research highlighted.

The first part of the paper describes the current research and presents background information on mental health in children and adolescents, which has been termed the “new morbidity”. It introduces the most common disorders and summarizes previous research in the field. Against the backdrop of this summary, a variety of problems associated with research into mental health in young people is discussed. A short summary of previous European studies on mental health in children and adolescents and socioeconomic status is offered before the importance of considering positive mental health, in addition to the presence of mental ill health, is emphasized.

After extensive discussion of the results and shortcomings of previous research and different mental health concepts in the first part of the paper, the second part deals with the European project Screening for and Promotion of Health-related Well-being in Children and Adolescents: a European public health perspective (KIDSCREEN), which is a representative survey of mental well-being carried out in 13 European countries. The administration of the survey is described and results on mental health of children and adolescents for each of the 13 participating countries are presented. An overview of socioeconomic inequalities in positive mental well-being and in mental ill health within each country is then offered before the paper turns to the macro dimension of the topic, describing the connection between socioeconomic data and mental health data based on aggregated country means.

In the third and last part of the paper, findings are summarized and several discussion points on socioeconomic inequalities in mental health among adolescents in Europe are raised.

Background and summary of the current state of research

The rising importance of mental health problems and socioeconomic inequalities: the “new morbidity”

The configuration of childhood health and illness has changed considerably over the past century. The main problems of the first half of the 20th century, such as acute infections and high infant mortality, have diminished in importance (1), although the causes of paediatric morbidity differ across European countries. For instance, infant mortality rates in European countries are inversely associated with national income (2), and in eastern Europe, health problems such as diphtheria and tuberculosis are again prevalent (3). In general, however, the incidence of most communicable diseases has fallen radically throughout Europe (3). In place of the old problems, new challenges have emerged that need to be addressed by health professionals.

The so-called “new morbidity”, characterized by emotional problems, conduct problems, learning disabilities and similar issues, came to the fore in the middle of the last century. Now, within the frame of the so-called “millennial morbidity” (1), mental health and socioeconomic influences on health have risen to achieve significant importance within child and adolescent health.

Facing the magnitude of the burden of disease related to child and adolescent mental disorders, WHO declared in its publication *Caring for children and adolescents with mental disorders. Setting WHO directions* (4) that child mental health was “a key area of concern” to which professionals and policy-makers must direct their attention. WHO publications on the topic have

focused on barriers to care and analysis of available child and adolescent mental health resources, as can be seen in the *Atlas: child and adolescent mental health resources: global concerns* publication (5).

WHO publications offer comprehensive introductions to the topics, focusing on the needs of affected children and adolescents. In publications such as the *Mental health policy and service guidance package: child and adolescent mental health policies and plans* (6), WHO also considers risk and protective factors.

The prevalence rate of mental disorders in childhood and adolescence was estimated in 2001 as being between 10% and 20%, based on selected studies from all over the world (7). The final report of the WHO European Ministerial Conference on Mental Health (8) concurs with this estimate, stressing that disorders seem to be on the increase and are often recurrent or chronic in nature. Higher prevalence is found among socially deprived groups, with low SES having a deleterious effect on existing mental ill health, although these trends are not specific to children and adolescents (7). The effect of SES in relation to access to treatment has also been considered (8).

The definition of mental health problems in childhood and adolescence is mediated by context. In clinical practice, decisions on presence or absence of mental disorder are based on definitions set out in one of the two diagnostic manuals – the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) (9) or the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) (10) classification system. Mental disorders can be categorized into internalizing disorders, such as anxiety or depression, and externalizing disorders, including conduct disorders and attention deficit hyperactivity syndrome (ADHS).

It is nevertheless difficult to define a diagnosis according to one of the two classification systems in large epidemiological surveys. Screening instruments that allow a reliable estimate of whether a mental health problem is present or not are being used: some target specific mental disorders, while others enable a prediction of overall mental health problems without differentiating between specific disorders.

Literature on prevalence rates

WHO states that the “development of a child and adolescent mental health policy requires an understanding of the prevalence of mental health problems among children and adolescents” (6). Quantifying the burden of mental disorders in children and adolescents in Europe is, however, a difficult task.

A PubMed database literature search of epidemiological studies on overall prevalence rates of mental disorders in children and adolescents in Europe from 1990 until 2007 identified many diverse studies. Some, however, do not include nationally representative data, and only studies published in English could be considered. Nine European studies from the United Kingdom (11), Germany (12), Switzerland (13), the Netherlands (14), Spain (15), Norway (16), France (17), Finland (18), and Ireland (19) will be described in the following summary of single studies focusing on mental health in different countries.

A United Kingdom population-based sample of more than 10 000 children (11) found that at least one DSM-IV-TR disorder was present in approximately one in ten subjects. A representative German survey that screened approximately 3000 children and adolescents found signs of mental health problems in 22% of respondents (12). Similarly, a study of approximately 2000 pupils from Zürich, Switzerland estimated a total prevalence figure for any Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R) diagnosis of 22.5% (13). Corresponding to the German and the Swiss results, a study of adolescents in the Netherlands found a prevalence of any DSM-III-R disorder in around 22% in the self-report and parent-report elements (14); however, there was overlap between the self report and the parent report in only 4% of cases.

These four studies present a picture of heterogeneous results in different countries. Although all studies refer to a time frame of six months, the overall prevalence estimates range from 9.5% in the United Kingdom to around 22% in Germany, Switzerland and the Netherlands, according to different case definitions.

A study from Spain that estimated mental disorders according to the DSM-III-R criteria in 8-, 11- and 15-year-olds in Valencia found a point estimate of 21.7% (15), which is in the same range as the estimates from Germany, Switzerland and the Netherlands cited above. This is significant because the Spanish estimate is a point prevalence, whereas the rates from Germany, Switzerland and the Netherlands refer to a time frame of half a year.

A survey in Norway of around 30 000 children and adolescents aged from 10 to 19 found self-reported mental health problems in 12.5% of respondents (symptoms and associated burden in the previous six months were considered) (16). Other countries such as France (17) and Finland (18) report prevalence rates in the same range but refer to a time frame of three months. A French study conducted in 2441 children aged from 8 to 11 years found an overall prevalence figure of 12.4%. In Finland, around 3400 8 and 9-year-olds from the south of the country were screened in a two-stage procedure, and approximately 15% were identified as being affected by a psychiatric disturbance. Another study from Ireland found a quite similar overall prevalence of current psychiatric disorder in 15.6% of pupils aged 12 to 15 years, but as a point estimate (19).

The same variation becomes apparent in relation to prevalence rates of specific mental disorders. For example, prevalence of anxiety disorders ranges from approximately 4% in the United Kingdom (11) and Ireland (19) to approximately 19% in Germany (20). The prevalence estimates of depression are between less-than 1% in France (21) and Switzerland (13) and 18% in Germany (20). Smaller ranges have been found in relation to conduct disorders and hyperactivity, but considerable variation exists.

This small selection of studies illustrates that overall prevalence estimates vary widely. The many possible reasons for these differences will be discussed after the next section, which summarizes the conclusions of previous (and more extensive) reviews of the topic.

There are several comprehensive reviews of mental health in children and adolescents that focus on a range of aspects (17,22–24). Two of these reviews (23,24) focus on prevalence estimates of mental disorders in different studies conducted in children and adolescents. The review of Ihle & Esser (24) included 19 studies from all over the world published between 1970 and 2000, six of which were longitudinal studies. All reported prevalence rates of several mental disorders in children and adolescents within large and representative samples based on structured interviews and categorical case definitions. The studies found a median rate of prevalence estimates of around 18%, with a range between 6.8% and 37.4%. Seventy-five per cent of the prevalence estimates ranged between 15% and 22%. Another review (23) included 52 studies from more than 20 countries carried out over four decades. All included studies gave prevalence estimates of overall psychiatric disorders by means of employing clinically meaningful definitions. This review found a mean prevalence estimate of 15.8% and a median rate of 18%. The spectrum of overall prevalence was strikingly wide, however, ranging from 1% to 51%.

In relation to specific mental disorders in children and adolescents, Ihle & Esser (24) found in their review that anxiety disorders were the most frequently found conditions, with an average frequency of 10.4%. The average frequency of conduct disorders was 7.5%, while depressive disorders and hyperactivity/attention-deficit disorders were found in 4.4% of the children (mean of studies). The rates of persistence were consistently high in all six longitudinal studies (more than 50%).

The two reviews discussed above (23,24) arrived at different results in relation to potential increases in mental disorders with age. Roberts et al. (23) found higher prevalence in studies including older children, but Ihle & Esser (24) did not observe an increase in mental disorders with age in their review of six cohort studies.

Regarding the assumption of increasing rates of mental health problems in young people over time, several studies provide supporting evidence. Rutter & Smith (25) conclude from their review that there has been a substantial rise in the prevalence of psychosocial disorders in many western nations over the past 50 years. Reviews by Fombonne (17) and Prosser & McArdle (22) arrive at the same conclusion, particularly in relation to suicide, delinquency/offending behaviour, substance misuse/addictive behaviours and depression.

Roberts et al. (23) compared studies from four time frames: 1970 and earlier, 1971 to 1980, 1981 to 1990 and after 1990. No evidence for an increase was found in the first three time frames. The studies conducted after 1990 reported a higher prevalence of mental disorders, but they cannot be compared with studies carried out before 1990 because of different methodological approaches. There are, however, some longitudinal studies providing comparable data that indicate a rise in conduct problems and emotional problems over time (26).

These findings paint a complex picture of trends in child and adolescent mental health (27). Evidence described above indicates a substantial rise in prevalence rates, but the fact that data sources are limited has to be taken into account. There are also results which suggest that increased media attention and professional awareness contribute to the rising number of referrals and diagnoses (27,28).

Despite high variability of prevalence rates, it can be deduced that rates for children and adolescents are not substantially different than those for adults, indicating that mental health issues appear early in life and require early intervention.

Shortcomings of available epidemiological research

As the discussions above show, epidemiological studies targeting children's and adolescents' mental health are prone to methodological problems and challenges. A general problem, which will be addressed in detail later, is the predominant understanding of mental *health* as the absence of mental *disorder*. This leads to a lack of data regarding positive mental health in children and adolescents.

An overview of the burden of mental health problems on children and adolescents in Europe has been difficult to complete, as some countries do not have published data available in English. Studies currently apply very different methods of data collection, data analysis and data presentation. In data collection, for example, some use questionnaires, while others opt for diagnostic interviews. There are also differences in assessment tools applied to questionnaires and methods of interviewing. While some studies use structured interviews, others employ semistructured interviews which lead to systematically different results (29). Furthermore, cross-cultural comparability of applied instruments is mostly not assured. Some studies use two-stage procedures, while others do not. Another important aspect is the source of information. Some prevalence rates are based on the child's self report, while others focus only on the parents, or perhaps also include teachers as sources of information. Studies relying on multiple informants integrate their data in different – and often not explicit – ways.

Similar problems are found when it comes to the definition of a case. What criteria need to be fulfilled to justify the attribution of a mental disorder to a given child or adolescent? Some studies apply diagnostic criteria (such as DSM or Rutter), while others require the presence of an identified impairment or an explicit need for mental health services. It is not surprising that studies including the factor severity in their case definitions find lower prevalence rates than those describing the number of subjects in the examined population who fulfil the diagnostic criteria. But even studies that consider impairment associated with symptoms of mental disorder do so by using a variety of methods. An additional methodological challenge regarding prevalence estimates of specific mental disorders is the high rate of co-morbidities.

It has to be recognized that there are very few studies in Europe with large and representative samples. Population-based samples are few in number because much research concentrates on specific subgroups, such as adolescents with particular risk factors and other very specific groups. Those population-based samples that do exist are not necessarily nationally representative and commonly concentrate on the populations of defined geographic areas. Furthermore, they often include children of narrow and different age ranges and are therefore not comparable. Small sample sizes often reduce the precision of estimates.

In relation to data analyses and presentation, there is no standard governing the presentation of information and reporting of results with reference to different time frames, such as point-, period- or life-time prevalence rates.

In summary, there is a lack of comparable prevalence data on mental health of children and adolescents in Europe. It can be assumed that the evident variety in mental health prevalence is not only due to real underlying differences, but also because of the wide variety of methodological problems encountered. It must be emphasized, however, that despite being based on different informants, different time frames and different classification systems, high-quality international studies display comparable prevalence rates (24).

Review of studies on mental health and socioeconomic status in Europe

The focus now turns from one review exclusively concentrating on mental health to one which looks at studies in Europe that considered mental health alongside an assessment of socioeconomic status. Similar problems on comparing data from different European countries can be anticipated, and a similarly diverse methodological picture is to be found. Indeed, an even more complex picture emerges, as socioeconomic status is defined in very different ways. It is sometimes considered in terms of neighbourhood deprivation or neighbourhood inequality, while other studies look at parental occupation or family affluence (Table 1). Regardless of these challenges, there is much evidence pointing to the existence of social inequalities in mental health.

Table 1

Examples of different definitions of SES and mental health in European studies

Definition of SES	Definition of mental health	Publication
Household income	Emotional and behavioural problems	Prescott-Clarke & Primatesta (30)
Household recipient of benefits, household is rented, social class of head of household	Mental health problems (SDQ) ¹	McMunn et al. (31)
Parents' labour market participation	Children's well-being	Pedersen et al. (32)
Parental occupation and family affluence	Psychological health	Richter (33)
Neighbourhood socioeconomic deprivation	Health-related quality of life (HRQOL)	Drukker et al. (34)
Neighbourhood socioeconomic deprivation	Behavioural problems	Schneiders et al. (35)

The following nine selected studies provide an illustration of the diversity of research approaches adopted and describe the general direction of results.

Data from the *Health survey for England 1997* showed a graded association between household income and the frequency of children's emotional and behavioural problems (30). Socioeconomic indicators such as living in a household that receives benefits or living in rented accommodation (and not in a self-owned house) as well as the social class of the head of household also proved to be significant influences on children's mental health (31).

A study covering Denmark, Finland, Norway and Sweden (32) defined socioeconomic status according to parental occupation, with the higher-ranking parent determining the family's social class. Comparing data from 1984 and 1996, the researchers found increasing social inequality in children's well-being in Scandinavian countries, with the exception of Denmark. A higher percentage of children from families without paid work reported low well-being in the data from 1996.

It was found in the German sample of the HBSC study that while family affluence was significantly associated with mental health, parental occupational status was not (33). Drukker et al. (34) found that neighbourhood income inequality in Maastricht, the Netherlands, was not associated with (mental) health-related quality of life outcomes in families, but that neighbourhood socioeconomic deprivation had a negative impact. Their results demonstrated the influence of absolute neighbourhood deprivation and lack of influence of neighbourhood inequality, leading them to conclude that the relative income hypothesis does not work at neighbourhood level.

Schneiders et al. (35) found similar results in Rotterdam, the Netherlands, where growing up in a disadvantaged neighbourhood (in terms of unemployment, instability, average income and high numbers of recipients of welfare benefits) was associated with increased behavioural and emotional problems, even after adjustment for individual variables. Parents' education and occupation were also found to be connected to children's behavioural and emotional outcomes.

A Slovak study (36) showed that adolescents with lower socioeconomic status determined on the basis of parental occupational group and type of school attended achieved significantly lower scores in mental health; however, socioeconomic differences in psychological health were not found.

It becomes apparent in some studies that detection of the presence of socioeconomic inequalities is dependent on the indicator. A study from the United Kingdom, for instance, was unable to find an influence of socioeconomic status on adolescents' mental health when based on parental characteristics such as occupation, education and residential neighbourhood, but provided some evidence for mental health inequalities when respondents' social position in terms of economic activity status was considered (37).

¹ Strengths and Difficulties Questionnaire.

Evidence supporting the association between socioeconomic status and mental health in children and adolescents comes not only from European studies; there is also a large body of evidence from the United States. The US National Longitudinal Study of Youth, for instance, reported that a lower prevalence of depression and emotional disorders was associated with higher socioeconomic status, independent of the definition of socioeconomic status as education or income of the family (38–40).

An extensive review of socioeconomic status and child development (41) states that there is “substantial evidence that low-SES children more often manifest symptoms of psychiatric disturbance”. Although there is little research on this association among very young children, there is evidence that socioeconomic inequalities in early childhood become more pronounced in middle childhood and adolescence (41).

Evidence exists not only to support the association between socioeconomic status and mental disorders in children and adolescents, but also to emphasize positive mental health and observed socioeconomic inequalities. A study in seven European countries of 1896 children and adolescents showed that higher parental education level and greater family affluence were associated with more positive perceptions and emotions (42).

Mental ill health versus positive mental health

Only research focusing on mental ill health has been considered to this point. A crucial disadvantage of research adopting this approach to children’s and adolescents’ mental health is that it provides limited information. Despite the reported high prevalence rates, a majority of adolescents do not meet diagnostic criteria for mental ill health. By focusing exclusively on mental ill health, researchers do not acquire information about the positive psychological well-being and mental health of the majority of adolescents. The application of screening instruments focusing on mental disorders results in a separation of adolescents into two groups: those with signs of a disorder, and those without. Further differentiation is not possible because no information on the subjects’ position on a mental health continuum is available. The application of a mental health index, in addition to a measure of mental disorders, can give us valuable information on mental health.

Collecting data on positive mental health not only provides valuable information; it also complements the idea behind WHO’s definition of health, which states that health is more than the absence of disease and is a “state of complete physical, mental and social well-being” (43). WHO specifically defines mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (44). A new approach to data collection that goes beyond the administration of screening instruments for mental disorders is needed.

Two instruments that meet this criterion are used in the HBSC study. The tool used for collecting data on positive mental health is the KIDSCREEN-10 Mental Health Index, developed within the KIDSCREEN project which will be described in the next section. It is included in the “positive health” optional package in HBSC and was applied in 14 countries in the 2005/2006 survey. The SDQ, also part of the “positive health” package, is used to collect information on mental ill health and was administered in seven countries.

Results on mental health and socioeconomic status from the European KIDSCREEN survey

The European KIDSCREEN mental well-being survey

The KIDSCREEN European project took place between 2001 and 2004 in 13 European countries (Austria, the Czech Republic, France, Germany, Greece, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands and the United Kingdom). The project was part of the Quality of life and Management of Living Resources programme and was funded by the European Commission (EC) within the Fifth Framework Programme (EC Grant Number: QL6-CT-2000- 00751) (45).

The aim of the project was to develop a new indicator and to measure well-being and mental health problems in children and adolescents. The KIDSCREEN-10 Mental Health Index was developed simultaneously in the participating countries. It assesses the child’s perspective on his or her physical, mental and social well-being, identifies children at risk and suggests suitable early interventions. The survey collected comparable data on physical health, mental health and socioeconomic status in children and adolescents in Europe, estimating the distribution of mental ill health and poor mental well-being.

KIDSCREEN survey data were collected from large population-based samples in each country, including children from the same age range (8–18 years). Distributions within the national samples by age and gender were fairly good and were comparable across countries. The survey used the same sources of information (parents and children), applied the same kind of data collection tool (questionnaires) and administered the same assessment tools in all participating countries (46).

Three different approaches to sample selection were followed. In six countries (Austria, Germany, Switzerland, Spain, France and the Netherlands), address sampling was conducted via computer-assisted telephone interviews. Questionnaires were sent by post to families who agreed by phone to participate. These were completed at home and sent back to the national centres in a prepaid envelope.

In five countries (Greece, Hungary, Ireland, Poland and Sweden), samples were obtained from schools that were representative of the country as a whole in terms of school type (private or public, rural or urban). Pupils completed the questionnaires during class time and took questionnaires home for their parents. Parents were asked to return their completed questionnaire to the appropriate national centre in a prepaid envelope.

The United Kingdom combined telephone and school administration, and the Czech Republic carried out multistage random sampling of communities and households.

The national KIDSCREEN samples have proven to be representative in each country (47,48).

The SDQ (49–51) was used to assess mental ill health. Although it was not developed to facilitate a cross-cultural approach, there are currently 62 language versions available (52) and many published international studies have used the instrument (53–57).

The SDQ is a short behavioural screening instrument focusing on emotional and behavioural problems as well as positive behavioural attributes. It includes 25 items which refer to different emotions and behaviours. The SDQ targets mental health problems in four specific problem areas: emotional symptoms, conduct problems, hyperactivity–inattention, and peer problems. It also covers prosocial behaviour of the child.

The “total difficulties” score is based on the 20 items of the first four scales mentioned (the prosocial behaviour scale is not included as it focuses on positive attributes, not problems). The calculated total difficulties score could predict the probability of a psychiatric problem. It is recoded into three categories, assigning each child to one of the following groups:

- “normal”
- “borderline”
- “noticeable mental health problems”.

The overall score indicates whether the child is likely to have a significant problem, while the subscales contain an indication of the type of problem.

In contrast to the SDQ, the KIDSCREEN-10 Mental Health Index is a non-clinical measure of mental health status and psychological well-being/quality of life. It does not separate the children into groups according to their burden of mental health problems, but allows measurement along the psychological well-being continuum. It is quite short, consisting of the following 10 items.

- “Have you felt fit and well?”
- “Have you felt full of energy?”
- “Have you felt sad?”
- “Have you felt lonely?”
- “Have you had enough time for yourself?”

- “Have you been able to do the things that you want to do in your free time?”
- “Have your parent(s) treated you fairly?”
- “Have you had fun with your friends?”
- “Have you got on well at school?”
- “Have you been able to pay attention?”

It consequently requires only a few minutes to complete.

The KIDSCREEN-10 Mental Health Index was developed by means of a Rasch analysis which ensured that only those items which represented a global, unidimensional latent trait were included. A better differentiation between the children is made possible by the distribution of the Rasch scores that resemble the expected theoretical normal distribution. The index provides a good discriminatory power and shows only few ceiling or floor effects. The strong internal consistency reliability (Cronbach’s Alpha = .82) and test-retest reliability ($r = .73$) allow precise and stable measurements (58).

The KIDSCREEN survey addressed socioeconomic status by means of the FAS (59–62), an instrument used in the HBSC study since the 1993/1994 survey. The FAS has the advantage of achieving higher response rates than measures of socioeconomic status based on parental occupation, which present several difficulties concerning the reliability of information. The response rate reached 98% in FAS pilot studies.

FAS originally consisted of three items representing indicators of material wealth or deprivation, respectively. As explained by in the preceding background paper by Morgan et al., the questions addressed family car ownership, bedroom sharing and holiday travel. An item on computer ownership was added to increase the scale’s discrimination among families with higher socioeconomic status. A composite score is calculated by collapsing scores from these items into a three-point ordinal scale, indicating low, medium and high family affluence.

The FAS has proved to be a valid indicator of children’s and adolescents’ material circumstances in pilot studies. It is easily understood and has good face validity.

Instruments used in the KIDSCREEN survey overlap with assessment tools from the HBSC study. It will therefore be interesting to compare the following results with data from the HBSC study.

Results on positive and mental ill health in the participating European countries

The mean scores of each country on the KIDSCREEN-10, ordered by the extent of positive mental health of adolescents (analysis adjusted for age), are presented in Fig. 1. The analysis was conducted only for adolescents who had generally lower scores than children in countries that had an overall mean score of 48 with a standard deviation (SD) of 10 (children and adolescents: mean score = 50, SD = 10).

Countries such as the Netherlands, Switzerland and Austria showed high mean scores of positive mental health in children and adolescents, while Greece, Hungary and Poland fell below the European mean. Regarding the variation of positive mental health scores within each country, a look at the standard deviations shows that the smallest variation was found in Poland (SD = 7.7) and the largest in Sweden (SD = 10.1). In general, countries with lower positive mental health mean scores tended to show less variation in mental health scores than those with better positive mental health. The cross-country range of mean KIDSCREEN score equalled a standardized mean difference (SMD) of 0.5 (Netherlands vs. Poland) which can be classified as a clinically meaningful difference.

Fig. 1

Positive mental health according to the KIDSCREEN-10 index mean scores (European overall mean score of adolescents = 48)

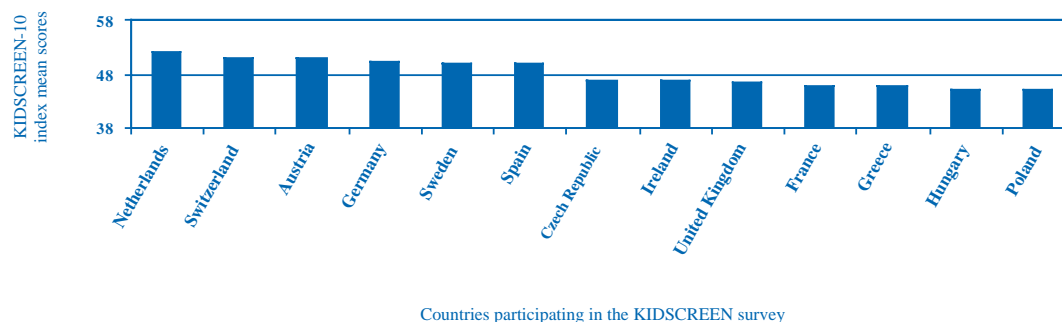


Fig. 2 shows the percentage of respondents with noticeable poor mental health (scoring more than one standard deviation below the European average of children and adolescents aged 8–18 which defines the $m = 50$ on the KIDSCREEN-10). While the order of countries is similar to that determined by the mean level, these values could be more informative to estimate the magnitude of mental health problems in individual societies.

A comparison of positive mental health in girls and boys for each country shows that in all countries (except France), male adolescents reported statistically significantly better mental health than adolescent girls. A similar trend was found in France, but the result was only close to statistical significance ($p = 0.084$). The effect sizes of these gender differences remained small in all countries and did not exceed the value of 0.5 (Table 2).

In relation to mental ill health according to the SDQ for each country, Fig. 3 shows that the percentage of adolescents with borderline or noticeable scores varied considerably between the countries, ranging from 10% in Germany to 24% in the United Kingdom.

A less clear picture emerges in relation to gender differences for self-reported mental health problems. Table 3 shows the percentage of girls and boys with signs of mental health problems (adolescents with either a “borderline” or “noticeable” score in the SDQ). Girls report more problems than boys in 10 out of 12 countries, but statistical significance was achieved in only three countries. The “w” effect – sizes between 0.06 and 0.12 – could be classified as a small effect.

Gender differences in relation to self-reported mental health problems did not correspond to those in positive mental health. France, for instance, which was the only country without significant gender differences in positive mental health, was among the three countries with significant gender differences in mental health problems. The fact that gender differences are not easy to detect in mental health problems but are consistently apparent in relation to positive mental health emphasizes the importance of this additional indicator.

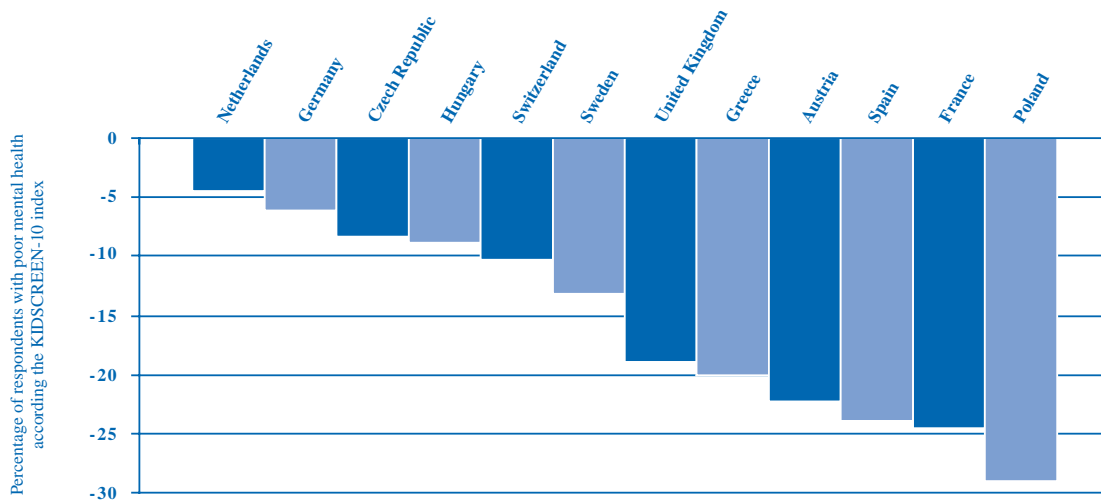
Association of adolescents’ positive and mental ill health and socioeconomic status in 11 European countries

To test for socioeconomic inequalities in adolescents’ mental health in different countries, adolescents were divided into the three categories of low, medium, and high FAS. Then the percentage of adolescents with signs of mental health problems according to the SDQ (adolescents with either a “borderline” or “noticeable” score) was calculated in each FAS category.

A significant graded association with higher percentages of young people with mental health problems was found in the lower FAS categories in Spain, the Netherlands, the United Kingdom, Hungary and the Czech Republic. In the United Kingdom, for example, 16% of adolescents with high family affluence showed signs of mental health problems, but the figure rose to 38% in those with low family affluence. In Spain, 9% of students with high family affluence were affected by mental health problems, 15% in the middle FAS category and 23% in low FAS.

Fig. 2

Percentage of respondents with poor mental health according to the KIDSCREEN-10 index



Countries participating in the KIDSCREEN survey

Table 2

Positive mental health (KIDSCREEN-10) in different countries according to gender

Country	Girls m(SD)	Boys m(SD)	Effect (d)
Austria** (n=878)	49.6 (8.9)	52.6 (9.4)	0.3
Czech Republic** (n=1 016)	45.0 (7.1)	47.3 (7.8)	0.3
France (n=622)	45.0 (8.4)	46.1 (8.0)	Ns
Germany** (n=1 079)	49.3 (8.4)	51.0 (8.4)	0.2
Greece** (n=1 146)	44.2 (7.6)	47.2 (8.0)	0.4
Hungary** (n=1 839)	43.6 (7.6)	46.2 (8.9)	0.3
Ireland** (n=894)	45.5 (7.9)	48.1 (7.6)	0.3
Netherlands** (n=1 168)	50.2 (8.2)	53.6 (10.0)	0.4
Poland* (n=1 120)	43.9 (7.9)	45.3 (7.3)	0.2
Spain* (n=522)	48.4 (9.6)	50.9 (8.7)	0.3
Sweden** (n=3 097)	49.2 (10.0)	52.4 (10.0)	0.3
Switzerland** (n=1 078)	49.6 (8.0)	52.6 (8.5)	0.4
United Kingdom** (n=883)	45.5 (8.3)	47.8 (8.5)	0.3

* p<.01

** p<.001

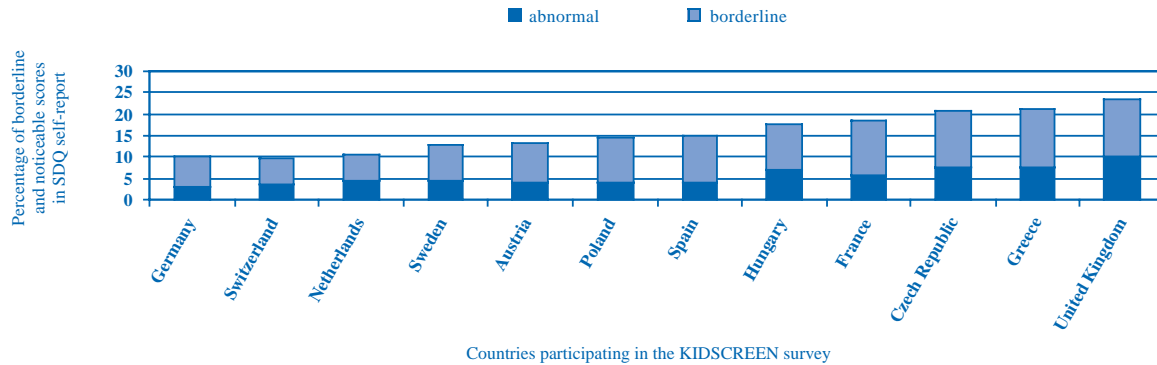
m = mean

d = Cohen's d, measure for effect size. Effects size was calculated by dividing the mean difference by the overall SD

Ns = not significant

Fig. 3

Mental ill health: percentage of borderline and noticeable scores in SDQ self-report

**Table 3**

Mental health problems in different countries according to gender

Country	Girls	Boys	Effect (w) ^a
Austria (n=942)	13.9%	12.5%	Ns
Czech Republic (n=1 026)	22.9%	18.7%	Ns
France* (n=320)	22.7%	13.2%	0.12
Germany* (n=1 077)	11.7%	8.2%	0.06
Greece (n=1 147)	21.9%	20.1%	Ns
Hungary* (n=1 841)	19.6%	15.1%	0.06
Netherlands (n=1 216)	11.7%	9.1%	Ns
Poland (n=1 034)	14.3%	15.2%	Ns
Spain (n=542)	14.4%	15.8%	Ns
Sweden (n=3 264)	13.9%	12.1%	Ns
Switzerland (n=543)	11.0%	8.7%	Ns
United Kingdom (n=626)	24.9%	22.4%	Ns

^a effects size "w"

* p<.05

Ns not significant

n number of subjects in the sample

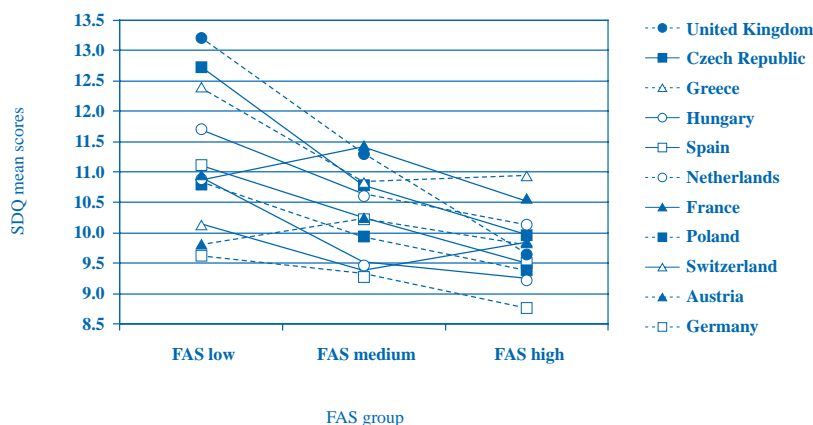
In Germany, Greece and Poland, a χ^2 square test over the three FAS categories did not reach statistical significance. Small but significant correlations (r s around .12) were found between the FAS total score and the total difficulties score of the SDQ, with lower family affluence being associated with a higher mental health problem score. In three countries (Austria, France and Switzerland), no association between socioeconomic status and mental health problems was found.

Fig. 4 illustrates the association between socioeconomic status according to the FAS category and mental health problems according to the self-reported total difficulties score in the SDQ.

In summary, lower family affluence was significantly associated with more child and adolescent mental health problems in 8 of the 11 countries, while no association was detected in 3 countries. It must be recognized, however, that the different countries included in the analysis had different standards of living. Consequently, the percentage of adolescents in the three FAS categories varied widely.

Fig. 4

Association between family affluence and adolescent mental health problems (SDQ score)



For example in the Czech Republic, Poland and Greece, between 38% and 49% of the respondents were assigned to the low FAS category, while in France, the Netherlands and Switzerland, the equivalent figures ranged between 8% and 11%. Against this background, the question arises as to how far living in low family affluence in a poorer country might feel differently from doing so in a better-off country. On the one hand, having low family affluence might be especially hard in a rich country where only few peers are living in similar deprivation. On the other hand, however, it has to be taken into account that families in the low FAS category from poorer countries also enjoy considerably less material wealth than families in the low FAS category from richer countries.

As was mentioned above, the low FAS category collapses FAS scores from 0 to 3 points. While, for example, 6% of the children in the low FAS category in the Czech Republic receive the lowest possible score of 0 points, and only 47% of these children receive the highest possible low FAS score (3 points), not one child in the sample obtained in Switzerland had the lowest possible score (0 points), and 82% of the children with low FAS received the highest possible score (3 points) within the low FAS category.

These differences in the degree of deprivation within the low FAS category might account to some extent for the finding that the countries without an association between mental health problems and SES were all quite well-off countries, where low family affluence on average indicates a less-severe degree of deprivation.

The same expected association exists in relation to adolescent positive mental health. Fig. 5 shows the positive mental health index mean scores of adolescents with low, medium and high affluence of each country. A statistically significant association between the FAS and positive mental health for almost all countries is apparent.

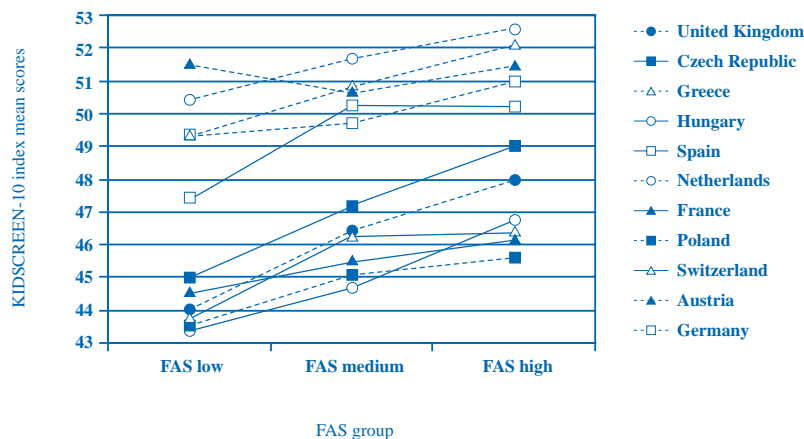
If the mean scores on the KIDSCREEN-10 index for the three groups are compared according to their family affluence, the result is that lower FAS groups report lower positive mental health in 8 out of 11 countries (Germany, Spain, the United Kingdom, Switzerland, Hungary, Greece, the Czech Republic and Poland). If the correlations between the FAS score and the mental health index are calculated, higher family affluence was significantly correlated with better mental health in 9 out of 11 countries (an additional correlation appears in the Netherlands). No association between family affluence and positive mental health can be observed only in France and Austria.

Macro dimension: mental health data and socioeconomic data

FAS scores varied considerably across different countries. The association between the percentage of adolescents reporting low family affluence in a country and the mean mental health index of adolescents in each country is now considered.

Fig. 5

Adolescent positive mental health (KIDSCREEN-10) and FAS in the participating countries



The ordinate axis in Fig. 6 shows the percentage of adolescents reporting low affluence, while the mean positive mental health score of the country is given on the axis of abscissa. It can be seen that in countries such as the United Kingdom, France and Ireland, the reported deprivation is not high, but the mental health index is nevertheless below the average of the 13 European countries.

At the same time, however, a group of countries can be seen on the right side of the figure that have higher country mean scores for positive mental health than the average of the included European countries ($m = 48.2$; $SD = 9.2$). Interestingly, none of these countries with higher mental health score means (Sweden, Germany, Switzerland, Austria, Spain and the Netherlands) has more than 25% of children reporting low family affluence. The countries with greater proportions of children with low FAS (Poland, Hungary, Greece and the Czech Republic) are all found in the group of countries with lower mental health scores.

It is not only the level of deprivation – as presented above – that is of interest in relation to the macro dimension of the association between mental health and socioeconomic indicators. Another interesting indicator that is considered in diverse studies on the topic is the extent of socioeconomic inequality.

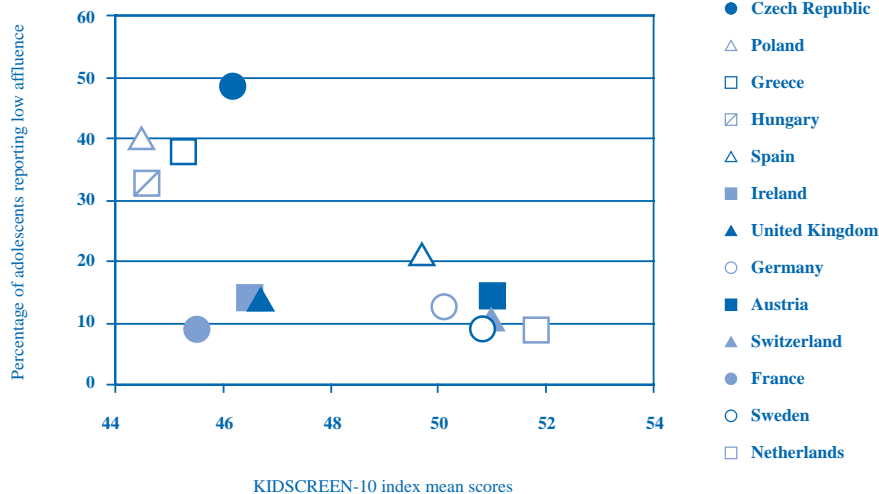
The Gini Index was used as a measure of socioeconomic inequality. This coefficient is a measure of income inequality as described in the United Nations Development Programme *Human development report 2006* (63). A Gini Index of “0” represents perfect economic equality and “100” perfect inequality. In Fig. 7, the ordinate axis indicates the Gini coefficient and positive mental health scores are again given on the axis of abscissa. At first glance, two groups of countries (those with lower positive mental health scores on the left side and those with higher scores on the right) can be observed. The range of Gini coefficients in both groups is similar, but a closer look reveals that in countries with lower mental health mean scores, more countries (the United Kingdom, Poland, Greece, Ireland and France) have higher Gini coefficients, indicating higher income inequality. Only in two countries (Hungary and the Czech Republic) is higher income equality and lower mental health observed. Most of the countries with higher positive mental health (on the right side) have Gini coefficients lower than 32, indicating higher income equality.

Summary, conclusions and ongoing issues

Child and adolescent mental health problems are highly prevalent throughout Europe, with epidemiological studies from different European countries demonstrating high prevalence rates. Mental health in terms of positive well-being has been considered a less-important focus for research for some time but is capable of generating important additional information which facilitates further discrimination between respondents.

Fig. 6

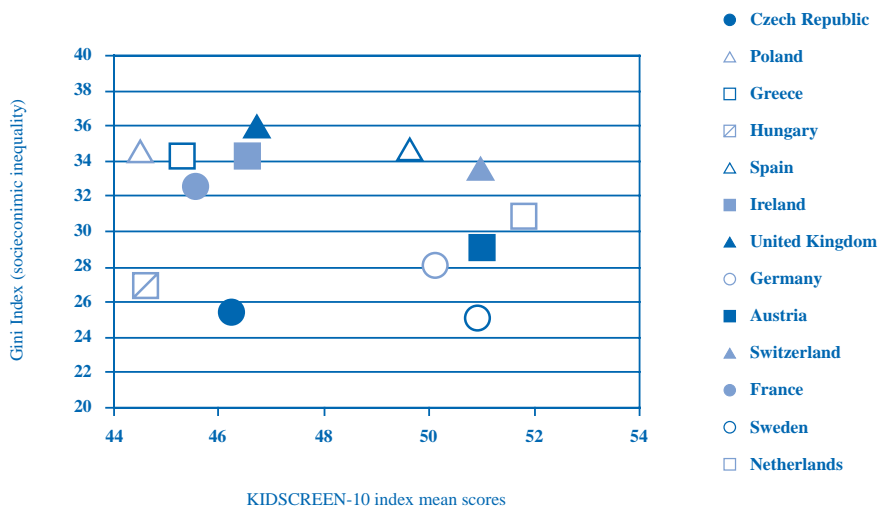
Percentage of young people aged 12–18 years reporting low FAS and their mental health status



(As no FAS data were available from Sweden, data from UNICEF 2007 were used to determine the level of deprivation.)

Fig. 7

Income inequality (Gini coefficient) and positive mental health of 12–18-year-olds



Research on socioeconomic inequalities in mental health has shown associations between lower socioeconomic status and impaired mental health. The analysis of the KIDSCREEN data confirmed these findings for child and adolescent mental ill health and for positive mental health.

Different prevalence of mental health problems was found at country level and there were also country differences in the dispersal of mental health problems. The lower the average mental health level, the smaller the dispersal. In-depth research is required to investigate and, if possible, to confirm this trend.

These analyses, based on the categorized FAS, should be interpreted with caution. The different standards of living in European countries mean that a low score in a rich country has a quite different meaning than a low score in a poor country. The relative-income hypothesis states that it is not the absolute level of deprivation but the gap between rich and poor that influences health, and analyses that consider the intracountry distribution of family affluence have to be conducted. This methodological challenge may also explain why only weak associations were found for Germany when the German National Health Survey has confirmed strong connections between mental health and SES, once again emphasizing the importance of taking diverse indicators of SES and mental health into account.

Current data allow reliable conclusions to be drawn for some countries, while no or very limited data are available from other countries. The body of evidence contains very limited information due to problems related to inconsistencies in methods leading to the inability to accurately compare countries. SES is also measured in different ways and is not always considered or reported. Conclusions on socioeconomic status as a special risk factor for mental health are therefore subject (at least) to the same restrictions as conclusions on child and adolescent mental health in general.

Analyses of the KIDSCREEN data show the advantages and potential of comparable survey data. Analysis of international data on mental health and socioeconomic status is highly desirable, and the HBSC survey methodology is well suited to facilitating the task.

There is a need for detailed, comparable, reliable and valid data on both SES and mental health to enable political decision-making to be based on a strong scientific rationale. Such data could form the basis of measures to identify groups with an increased risk of mental health problems, enabling prevention and early intervention mechanisms to be developed. Further research could be also targeted on identifying aspects of social, health and education policy that account for any relationship between SES and child and adolescent mental health on a macro level as well as differences at the micro level.

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Economic aspects of mental health in children and adolescents

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Introduction

Mental illness¹ is increasingly being recognized as the most significant health concern for children and adolescents in developed countries, with an estimated prevalence of 8% to 23% of the child and adolescent population in European countries (4,5). Prevalence rates seem to be rising, particularly in psychosocial disorders among young people (6).² While prevalence and, partly, trend data are well documented and understood, there is also a need to document the associated economic burden of mental illness, as well as the economic return (or “cost–effectiveness”³) of interventions aiming to address the problem. The purpose of this background paper is to explore these two issues.

Highlighting the non-health effects of a given health challenge may provide an additional lever for attracting the attention of policy-makers, particularly those outside the health sector. Since the economic burden by itself serves as an incomplete input for priority setting in the allocation of public and private resources, this paper also examines the evidence on economic evaluations of interventions to reduce the child and adolescent mental health burden. Cost–effectiveness offers a straightforward and (in principle) transparent way of making the most of a limited amount of resources to achieve better health outcomes.

In mental health, as in all other areas of health, social and economic policy decisions have to be made under existing resource constraints. Consequently, there is a need for transparent decision criteria on choosing between alternative uses of public money (8). The pressure to prove “value for money” may even be increasing as rising health expenditures strain public coffers. An increase in the quantity and quality of available evidence on “cost–effectiveness” of interventions addressing child and adolescent mental health problems will increase the willingness of decision-makers to devote resources and/or efforts to this cause and to develop informed priorities.⁴

The paper consists of two sections: (i) the economic consequences of child and adolescent mental illness; and (ii) evidence on the economic evaluation of interventions. Both sections include the main findings from a systematic review of the European evidence over the last five years. In each section, the information extracted from the systematic reviews is complemented by additional relevant evidence. The last section concludes, discusses policy implications and lists other important issues that are not discussed in the paper.

Economic consequences of child and adolescent mental illness

This section reviews the economic consequences of child and adolescent mental illness. Relevant conceptual and methodological considerations are discussed, followed by a presentation of the key findings of the systematic review. The section closes with additional findings on the transmission of child to adult mental illness, the implications for cost estimates and the need for early interventions.

¹ Mental illness “implies the existence of a clinically recognisable set of symptoms or behaviours associated in most cases with distress and with interference with personal functions” (1). To date, no single definition has been universally accepted as one which adequately specifies precise boundaries for the concept of “mental illness” (2) since the phrasing used depends on the social, cultural, economic and legal context in different societies or contexts (3).

² Child and adolescent mental health trend assessments should be evaluated with caution since they are subject to errors due to problems of limited data, differing case definitions and methodological approaches employed in the various studies, and also because generalizations across different mental disorders should be avoided (7).

³ Unless otherwise stated, the term “cost–effectiveness” is used in the very general meaning of “value for money”. As discussed elsewhere in the paper, cost–effectiveness, in the narrow sense, is just one of several economic evaluation methods that measure “value for money” in different ways.

⁴ This is not to imply that cost–effectiveness is the only relevant or actual criteria for priority setting. For a discussion of other criteria, see Musgrove (9) and Hauck, Smith & Goddard (10).

Conceptual and methodological considerations

Mental illness accounts for a large and growing share of ill health among children and adolescents in Europe. It is not only a significant health issue, but also affects many other spheres of life, including the individual directly concerned, his or her family and friends and society at large (see Table 1 for an attempt to organize those different potential impacts from an economic perspective).

Table 1

Potential economic consequences of mental illness in children and adolescents
Source: modified from Chisholm (11) and Byford & Knapp (12).

Perspective	Care costs	Productivity costs	Other costs
Individual with mental disorders/problems	Treatment and service fees and payments	Reduced learning capacity (Future) work disability (Future) lost earnings	Suffering Treatment side-effects Suicide Stigma Social exclusion
Family and friends	Informal care-giving	Time off work Reduced productivity	Psychological hardship/carer burden
Society		Reduced productivity	Loss of lives
Health system	Provision of mental health care and general care (taxation and insurance)		
Social services	Local authority care and accommodation, social work		
Education services	Educational psychologists, special education costs, education welfare officers, indirect costs incurred from worse educational attainment		
Youth justice system	Youth offending team, youth custody		

In the following subsection, the existing evidence on the non-health effects of mental disorders is synthesized. The main focus is on the economic consequences, but with a broad interpretation of what “economic” means. Documenting the economic consequences of a health problem (or of any social problem) is often considered necessary to attract the attention of policy-makers outside the health sector, which is necessary if mental disorders are to be tackled more effectively in the future.⁵

When evaluating the impact of an economic evaluation on the burden of an illness or an intervention, it is important to clarify the meaning of “costs” from an economic perspective.

To non-economists (and to accountants), cost is typically what is paid for a good or service – a tangible transaction commonly confirmed by a receipt. This concept is sometimes, but not always, compatible with the cost concept used by economists, which is that of “opportunity costs”. To economists, “cost refers to the sacrifice of benefits by using resources for a particular use rather than for some other (best) use. By using a resource for a particular use one is foregoing the opportunity of using that resource elsewhere” (13).

⁵ It should be noted that the alleged dichotomy between health effects on the one hand and economic effects on the other is misleading, in that it implies that economists ignore any health effects. In fact, as discussed in the economic evaluation section below, it is the improvement of health as the result of an intervention that is seen as what is providing the “value” for the money invested in such interventions.

There may be monetary transactions that do not represent true economic (opportunity) costs – transfer payments, such as sales tax payments to the government, for example. There are also many cases in which opportunity costs exist but no money changes hands, for instance when industries pollute nearby water resources free of charge. In the present context of children with mental disorders, the time spent by relatives, friends or volunteers in caring for the child represents an economic cost, even though it is not directly billed. In many health care interventions, the opportunity cost of time spent in caring for an unhealthy individual is an important, yet mostly unaccounted for, component.

Apart from defining costs (an issue that cannot be covered exhaustively here⁶), measuring economic costs is also a challenge. Identifying accurate ways to account for the time allocated to informal care is only one of the many measurement challenges faced. Difficulty also exists in measuring the costs of formal services used by the patient. The ability to measure those costs depends crucially on how the payment system is organized in any one country or region (8). In the United States, a type of “billing” system records the amounts transferred between a payer and a provider of services utilized by individual patients. This is far less feasible in most European health care systems, where no such billing data exist and where information systems are too underdeveloped to provide a basis for cost calculation.

In this case, other creative ways of collecting data have to be found, such as via interviews with family members or service professionals (15,16). Once the service-use patterns have been specified, unit-cost estimates must be attached to each of the services used. These unit costs may be available from public sources, other research, or may need to be estimated anew by the researcher (17,18).

Cost assessment becomes even more complicated as one moves beyond the simple service cost assessments, for example into the estimation of possible productivity consequences. While the foregone productivity can in principle be proxied by future (foregone) earnings, it is difficult to assess what earnings the child would have had if he or she had not developed mental illness. Referring to some sort of average earnings is the commonly applied solution, but is subject to a potentially large amount of bias. The studies reviewed below only focus on the contemporary productivity consequences for the parents of the child with mental illness, and fail to take into account the child’s future foregone productivity costs.

The difficulties increase when attempting to assign a monetary value to some of the broader consequences, such as social exclusion, stigma or lower quality of life. This is why this type of burden is often excluded from the analysis, leaving out a share of the costs that is particularly large in the case of mental illness.

Who bears the burden of the cost, both at the empirical and conceptual level, is also an important cost-measurement issue. What is seen as “costs” from the perspective of the individual is likely to differ from what the health insurance fund or the government sees as such, which again may have little to do with the relevant costs from a societal perspective. It is important that the cost perspective assumed in any economic evaluation is specified from the outset.

The broadest and most frequently assumed perspective is the societal one. This is the right choice if the main concern is the best possible outcome for society as a whole. The perspectives of individual “players”, such as patients, the insurance fund or other social services, can also be informative; the best possible social outcome may differ from the best possible outcome for each of these players individually. In this case, the social optimum may not be reached because it is incompatible with the incentives of the individual players, and the government may need to provide incentives to induce everybody to also pursue the social optimum.

Attempting to derive cost (or cost–benefit) figures exclusively from a health services perspective will provide an incomplete picture of costs, particularly in the case of mental health, and may substantially underestimate “true” (societal) costs (19). A study conducted in the United Kingdom on children with conduct disorder (20) showed that the greatest part of the cost of mental illness affects sectors outside the health care system, such as social care, education, housing, criminal justice and social security systems (*see also 21*). A mere one sixth of the total cost was found to burden the health service, the remainder falling on schools (special education needs), social care agencies, families (disrupted parental employment, household damage) and

⁶ See, for example, Drummond et al. (14) for an in-depth discussion.

the welfare system (disability and similar transfer payments⁷).⁸

In interpreting any of the quantitative evidence presented below, it is important to keep in mind the above-mentioned limitations and problems, which pose severe restrictions on the comparability of cost estimates across different studies.

Results of systematic review of economic cost estimates

A systematic literature search was performed, collecting the published literature (excluding grey literature) over the past five years (see Box 1 for a description of the search criteria).

Box 1. Description of how the literature search was performed

To evaluate the evidence regarding the economic consequences of child and adolescent mental illness in Europe, a comprehensive Medline literature search was conducted of papers published between 1 February 2002 and 1 February 2007 with the following search terms:

- “cost of child and adolescent mental illness”
- “cost” AND the following terms separately (with the criteria that studies will include child and adolescent populations)

<p>“addiction” “ADHD” “affective disorders” “agoraphobia” “anxiety” “autism” “behaviour therapy” “behavioural problems” “CBT” “conduct disorder” “counseling” “deliberate self poisoning” “depression” “developmental delay”</p>	<p>“disruptive behaviour” “Down syndrome” “dysthymia” “educational intervention” “emotional disturbance” “hyperactivity” “insomnia” “manic depression” “mental disability” “mental health” “mental health intervention” “mental retardation” “mood disorder” “music therapy”</p>	<p>“Obsessive Compulsive Disorder” “OCD” “posttraumatic stress” “psychiatric” “psychoeducation” “psychosis” “psychosomatic disorders” “psychotherapy” “psychotropic” “Ritalin” “schizophrenia” “substance abuse” “Tourette’s”</p>
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Only European studies that included economic evaluations on children and adolescents aged below 18 years were selected. Studies that included young people aged less than 18 years but which did not present the costs relevant to the under-18 population separately were not included. Additional relevant publications were found by hand searching “mental illness”-related and health economics journals and by tracking references.

The search led to the identification of only eight studies in the WHO European Region that included economic evaluations of the economic cost/burden of child and adolescent mental illness (Table 2). All studies but one were conducted in the United Kingdom. The reason for this is that the United Kingdom hosts a research centre – the Centre for the Economics of Mental Health (CEMH) at King’s College London – which focuses on economic evaluations of mental health. CEMH conducted six out of the eight economic cost evaluations identified through the literature search.

⁷ Note that, as briefly mentioned above, transfer payments are commonly not considered as true economic costs, if a societal perspective is taken.

⁸ This finding suggests that the cost of mental illness in young people is probably more dispersed over a variety of sectors than it is in adults, as studies of adults in the United Kingdom have shown that up to two thirds of the total cost of mental health problems falls on the health service (22).

Table 2

European studies evaluating the economic consequences of child and adolescent mental illness

Country	Study	Categories of costs/burden that the study included in its economic evaluations					
		Overall	Health system	Social services	Education system	Criminal justice system	Voluntary services
United Kingdom	Barrett et al. (23)	•	•	•	•	•	•
Belgium	De Ridder & De Graeve (24)		•				
United Kingdom	Minnis et al. (25)	•	•	•	•	•	
United Kingdom	Romeo et al. (26)	•	•		•		•
United Kingdom	Clark et al. (27)	•	•	•	•	•	•
United Kingdom	Muntz et al. (28)	•	•	•	•		
United Kingdom	Jäbrink et al. (29)	•			•		•
United Kingdom	Beecham et al. (30)	•	•	•	•		•

The very small number of cost studies indicates the enormous scope for generating more evidence on the economic consequences of child and adolescent mental disorders. The situation is only slightly better for adult mental health in Europe, with only one set of reviews (focusing separately on the economic consequences of psychotic, affective, anxiety and addiction disorders) published in 2004 (31). This set of reviews revealed that economic studies focusing on the burden of adult mental health have been performed in 11 out of the 28 European countries examined; 17 of those countries therefore lack any type of economic data on the burden of mental health for any age.

The comparatively limited interest in economic aspects of mental health is not confined to Europe. Less than 1% of research publications on mental health in low- and middle-income countries globally are devoted to economic evaluations (32). In a review of cost-of-illness (COI) studies on mental health performed globally, only 1 study out of 39 performed in developed countries had focused on children, while none of the 5 studies conducted in developing countries included any evidence on mentally ill children (33).

The relative lack of economic evidence on child and adolescent mental health may be part of a general neglect of research on mental health of children and adolescents. Horwitz et al. (34) examined a database of 45 022 research abstracts and found that, regarding the treatment of depression in primary care settings, there were 15 times more studies focusing on adults than those focusing on children and adolescents. There is also a scarcity of systematic reviews on the currently available epidemiological research on mental illness. According to Wittchen & Jacobi (35), this creates “a core obstacle to the adequate estimation of the total burden associated with these disorders, the degree of met and unmet needs for treatment and intervention, the patterns and costs of treatment, and the health-economic implications and total direct and indirect costs for EU nations”.

The findings of the systematic review are presented below in tables, according to the perspective the cost–estimates are taking. Since not all of the eight studies covered each perspective, the composition of the tables can differ. All costs are converted to euros (1 January 2007 rate). The rate of inflation was calculated using the Consumer Price Index (CPI).

Table 3 presents the results on the estimates of the overall societal cost. Mean annual costs per child range from €7376 to €64 703, depending on the ages included and the conditions examined.

Any attempt to compare the estimated costs is hampered by the large methodological variations among the studies. The methodological differences arise from a variety of sources, ranging from differences in the populations included, the data collection methods employed and the costs included. Also, all the studies examined different age groups and disorders. Age and severity of mental illness, as will be discussed in this paper, can cause considerable variation in costs.

Table 3

Economic evaluations of the overall cost of child and adolescent mental illness to society

Country	Study	Study population		Mean annual cost (per child)	Range of costs
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms).	€51 930	Costs ranged from €27 670 for young offenders out in the community to €68 990 for young offenders in secure facilities. Highest costs incurred were for youngsters suffering from depression – €107 784.
United Kingdom	Minnis et al. (25)	5–16	Children in foster care, of which 90% were previously abused or neglected.	€20 248	
United Kingdom	Romeo et al. (26)	3–8	Severe antisocial behaviour	€7 376	
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€64 703	Annual costs between individuals range from €1 590 to €245 921.
United Kingdom	Muntz et al. (28)	2–10	Severe behavioural problems	€12 946	
United Kingdom	Jäbrink et al. (29)	4–10	Autistic spectrum disorder	€52 725	Estimated annual costs rise to €65 407 if a different measurement method is used.
United Kingdom	Beecham et al. (30)	4–11	Severe learning disabilities	€4 517	Annual costs between individuals range from €10 931 to €57 780.

All of the studies acquired their cost estimates from a postal questionnaire, an interview, or a combination of both. It is questionable whether studies relying on questionnaires sent to patients recruited by physicians are likely to obtain fully reliable and accurate data, but often this may be the only way of obtaining any cost information. A number of studies gathered their data retrospectively, while others followed the patient population prospectively over a certain period of time. A prospective study can capture the relevant medical and other service utilization information more accurately compared to a retrospective study, where the respondents need to recall their past service use. Four out of the eight studies conducted were prospective studies.

Five out of the eight studies used questionnaires based on the Client Service Receipt Inventory (CSRI) devised in the United Kingdom in 1986 (36). The CSRI is an inventory specially designed to estimate the economic burden of mental illness, physical disability, old age and child and family problems. In all five studies which utilized the CSRI, the inventory was adapted to suit the specific mental condition and age of the patients examined.

Although the majority of studies included a wide range of cost components that are part of the overall economic burden to society, only two of the studies incorporated productivity costs, which typically comprise a significant portion of the overall cost to society.

A further limitation of the existing evidence is that only a relatively small number of mental illnesses have been economically evaluated for children and adolescents, leaving for future research any assessment of the economic impact of some of the most serious mental disorders, such as schizophrenia, Down syndrome and obsessive compulsive disorder (OCD).

In terms of concrete results, a large variation across individuals is observed within studies. In one study, a 200-fold difference between individuals was found (costs ranging from €1590 to €245 921) (27). Large variations in costs have consistently been found in many studies. For example, a study conducted among only ten families of children with conduct disorder found annual estimated costs among cases to range from €8450 to €63 865 (20). Knapp (37) claims this indicates that for a small number of young people, the costs of treating mental illness is especially high compared to the average because such individuals (who have more-severe illness) account for a highly disproportionate number of poor outcomes.

A range of factors may be causing the variation between cost estimates within each study, including the following.

- Severity of mental illness: severity of mental illness was found to be associated with higher costs (30). Children who showed higher Parent Account of Child Symptoms (PACS, a semi-structured interview assessing the severity and frequency of antisocial behaviours) scores incurred substantially more costs. A higher “antisocial behaviour” or “hyperactivity” score incurred an additional annual cost of €1990 and €3100 respectively (26).
- Additional co-morbid mental illnesses/abnormal behaviours: Beecham et al. (30) found that each additional behavioural problem added €580 to the total annual cost. Barrett et al. (23) found that among young offenders, the highest costs incurred were for those suffering from depression (€107 784 compared to €27 076 for those without depression). Clark et al. (27) found that children with mental health problems who also exhibited inappropriate sexual behaviours, as defined by the Salford Needs Assessment Schedule for Adolescents (SNASA), incurred additional annual costs of €47 844. Autistic children who also had intellectual disabilities incurred an additional annual cost of €21 573 (29).
- Age of children and parents: mental health care costs were found to be associated with age, with children of younger age and older parents accruing higher costs (24,30). Every additional year of age of the child was found to reduce mean annual costs by €6999 (27).
- Family structure: parents who were married or lived together incurred on average €245 more health care costs due to their child’s mental illness compared with single parents (24). Children who lived away from their families incurred substantially higher costs (additional annual costs of €37 600) (27).
- Ethnicity: children of Caucasian ethnic background incurred significantly more costs than their non-white counterparts (€34 481 more costs annually) (27).
- Size of reimbursement received: children who were entitled to a higher reimbursement incurred higher societal costs (€915 annually) (24).
- Type of measurement instrument used: Jäbrink et al. (29) demonstrated that using a different measurement instrument would result in a 24% (€12 682) increase in the estimated annual costs.

Cost estimates can also provide a picture of how the overall burden is distributed across various sectors in society – the health system, social services, the education system, the criminal justice system, voluntary services and parents’ productivity costs. Table 4 provides summary information on the distribution of the costs across different sectors. The percentage numbers are not directly comparable across the different rows, since the studies differ in their coverage of sector-specific costs.

A literal interpretation of the numbers in Table 4 (which should be made with caution in light of the differences between the studies) confirms the earlier statement that costs accrued by the health system comprise only a very small proportion of the overall costs (1.5–15%, with an average of 6.1% between studies). A large part of the burden appears to fall on the education system (2.1–91%, with an average of 45% between studies). The criminal justice system also seems to carry a considerable economic burden, especially with respect to young offenders with mental health problems (23) or children in foster care who have been previously abused or neglected (25). Only a very small share of the costs falls on voluntary services.

Productivity costs were found to be the highest on average (55.5% on average between studies), but were only estimated in two studies, indicating that the other studies, which omitted this component, may be underestimating the overall economic burden. The burden to parents is considerable; 50% of the total cost falls on them, either directly or indirectly. Parents of mentally ill children also had substantial income loss (mean annual income losses of €17 671) (29). This finding may suggest that lower-income families, who are more likely to have children with mental disorders (see background paper by Ravens-Sieberer et al.) could be exposed to the risk of (even greater) poverty, as they will be less able to cope with the resulting income loss and increased expenditures.

Table 4

Distribution of child and adolescent mental health costs

Country	Study	Health services costs (%)	Social services costs (%)	Education system costs (%)	Criminal justice system costs (%)	Voluntary service costs (%)	Productivity costs (%)	Other costs (%)
United Kingdom	Barrett et al. (23)	1.8	16.8	2.1	70	0.6	-	8.7
United Kingdom	Minnis et al. (25)	1.5	4.5	72	22	-	-	-
United Kingdom	Romeo et al. (26)	8	-	10	-	3	77	2
United Kingdom	Clark et al. (27)	5	51	38	5	1	-	-
United Kingdom	Muntz et al. (28)	5.5	3.5	91	-	-	-	-
United Kingdom	Jäbrink et al. (29)	24		32	-	0.03	34	10
United Kingdom	Beecham et al. (30)	15	13	70	-	2	-	-
Average cost by service sector		6.1	18.8	40.9	32.3	1.3	55.5	6.9

The wide dispersion of costs seen in Table 4 appears to be unique to mental illness in children and adolescents. As a number of European studies have shown, adult mental illness imposes significantly higher costs on the health service than on any other service (22,31). This may be explained to a large extent by the fact that in children and adolescents, a high percentage of the cost falls on the education system, which is not the case with adults.

Table 5 presents specific costs occurring in the health care system. All studies used United Kingdom data except for one Belgian study (24). Costs range from €395 to €2270 across studies, with 43% of the health care cost falling to the parents (24). The highest burden seems to vary, with studies reporting community health services (30), mental health service home visits (28) and inpatient care (26) as the highest costs. Beecham et al. (30) performed a cost evaluation of child and adolescent psychiatric inpatient care in the United Kingdom and estimated the cost to the health system per inpatient day to be €241, with the largest portion accounted for by nursing costs (€93). This study showed that personnel costs absorb two thirds of the total costs of child and adolescent psychiatric inpatient care.

Studies performing evaluations of the economic costs of child and adolescent mental health to social services have found costs to range from €441 to €32 999 (Table 6). Clark et al. (27) reported substantially higher social costs by including cost estimates for the provision of non-domestic accommodation (60% of the children in the study spent time in social services foster or residential care). All other studies found costs incurred to social workers to be the most substantial cost component. Studies performing evaluations on the economic cost of child and adolescent mental health to the education system are summarized in Table 7. Costs were found to range from €758 to €24 587. Clark et al. (27) reported substantially higher social costs by including cost estimations of the provision of accommodation in residential schools. Again, the highest burden varies across studies, with studies reporting the assistance of educational psychologists (30), special needs teachers (28) and learning support at school (25,26) as the highest costs. The presence of co-morbid mental illness is shown to incur an additional annual cost of €28 304 specifically to the education system (29).

Table 5

Economic evaluations estimating the cost of child and adolescent mental illness to the health care system

Country	Study	Study population		Mean annual cost (per child)	Comments
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms)	€617	
Belgium	De Ridder & De Graeve (24)	Under 16	Attention deficit hyperactivity disorder (ADHD)	€1 085	€619 was burden on the public €467 was parents' out-of-pocket costs
United Kingdom	Minnis et al. (25)	5–16	Children in foster care, of whom 90% were previously abused or neglected	€296	Highest costs incurred to gross product, clinical psychologist, child psychiatrist, and hospital paediatrician
United Kingdom	Romeo et al. (26)	3–8	Severe antisocial behaviour	€663	The highest burden was for inpatient care – €355. Attendance to health care occurred predominantly for accident.
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€3 499	
United Kingdom	Muntz et al. (28)	2–10	Severe behavioural problems	€724	Highest costs incurred were for child and adolescent mental health service member home visit – €525
United Kingdom	Beecham et al. (30)	4–11	Severe learning disabilities	€3 842	€875 for hospital services €2 810 for community health services €156 for primary care services

There is considerable evidence to show that mental health problems place young people at heightened risk of involvement with the justice system (38–40), causing a heavy burden to the criminal justice system. The Audit Commission (41) estimated that public services in England and Wales spend around €1.5 billion annually processing and dealing with young offenders. Adults who had conduct disorder as children have been shown to generate costs to society that are 10 times greater than a non-morbid control group (42), indicating the huge continuing burden that adolescent mental illness could have over the whole life-course of an individual. It has been estimated that for every €1 of health service expenditure on people referred for addiction treatment (suffering from substance misuse, which is considered a mental illness), another €3 is incurred by the criminal justice system and €10 by the victims of crime (43).

Economic evaluations estimated the costs to the criminal justice system to range from €3235 to €33 850 (Table 8). Barrett et al. (23) reported substantially higher costs by including only adolescents who committed criminal offences. Youth custody (27) and contact with the police (25) were reported as the highest burden. Regarding the burden on voluntary services, all studies found annual costs to be relatively small, ranging from €163 to €647 (Table 9). Most costs were reported to fall on voluntary day care centres (26) or other voluntary organizations (23,30).

Table 6

Economic evaluations estimating the cost of child and adolescent mental illness to social services

Country	Study	Study population		Mean annual cost (per child)	Comments
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms)	€8 163	
United Kingdom	Minnis et al. (25)	5–16	Children in foster care, of whom 90% were previously abused or neglected	€926	Costs incurred from social worker utilization
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€32 999	
United Kingdom	Muntz et al. (28)	2–10	Severe behavioural behaviour	€441	Highest costs incurred were for social worker assistance – €327
United Kingdom	Beecham et al. (30)	4–11	Severe learning disabilities	€5 379	Includes costs for social workers, domestic support workers and for respite care

The transmission from child to adult mental illness: implications for cost estimates and early intervention

An important point the above studies do not adequately capture relates to the fact that most psychiatric disorders have their origins in childhood, so that the costs incurred by a mentally ill adult can in fact be seen as the delayed costs of child mental illness (which would need to be discounted appropriately). The above studies do not take this lifetime perspective on the costs of mental illness and thereby tend to underestimate the total costs.

It has been shown that the risk for developing most adult-onset disorders can be traced back to childhood adversities. Most disorders which manifest themselves in the early years recur in adulthood (44,45).

Studies carried out in the field of depression, conduct disorder and antisocial behaviour have demonstrated the extent to which the presence of mental illness during childhood can lead to increased costs during adulthood, including the following.

- Depression: Knapp et al. (46) showed that children and adolescents who had depression, with or without co-morbid conduct disorder, incur significantly higher inpatient care and criminal justice service utilization rates when in adulthood and, consequently, significantly higher total costs than the general adult population. McCrone et al. (47) performed an economic evaluation to estimate the mean annual cost of treating adults who had depression during childhood and found it to be €1309 (range €0 – €11 080).
- Conduct disorder: Scott et al. (42) carried out a longitudinal study in London that followed 10-year-old children into adulthood. It found that by age 28, costs for individuals with conduct disorder were 10 times higher than for those who faced no conduct problems during childhood. This finding is explained by the fact that once conduct disorder/antisocial behaviour appears in a child, it tends to persist, as 40% of 8-year-olds with conduct disorder are repeatedly convicted of crimes such as theft, vandalism and assault in adolescence (48). Once these individuals enter adulthood, they continue to commit criminal offences, have erratic employment patterns in unskilled jobs and violent relationships with partners (49).

Table 7

Economic evaluations estimating the cost of child and adolescent mental illness to the education system

Country	Study	Study population		Mean annual cost (per child)	Comments
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms)	€1 045	
United Kingdom	Minnis et al. (25)	5–16	Children in foster care, of whom 90% were previously abused or neglected	€14 598	Costs incurred through having learning support at school, contact with educational psychologists, and creating a record of their special education requirements
United Kingdom	Romeo et al. (26)	3–8	Severe antisocial behaviour	€758	Classroom assistance costs – €129 Special need support costs – €16 Educational psychologist costs – €14
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€24 587	
United Kingdom	Muntz et al. (28)	2–10	Severe behavioural problems	€11 781	Highest costs incurred were for special needs teacher – €7 344, and special school attendance – €2 943
United Kingdom	Jäbrink et al. (29)	4–10	Autistic spectrum disorder	€17 123	Educational costs for a child with a learning disability are higher than for a child without (€33 737 compared to €5 432)
United Kingdom	Beecham et al. (30)	4–11	Severe learning disabilities	€17 490	Includes costs for educational psychologists and educational social workers

- Antisocial behaviour: increased costs in adulthood can also be the product of increased unemployment, low-paid work and/or a reduced income. Research conducted on a cohort of working class boys, who exhibited antisocial behaviour tendencies at an early age and who subsequently engaged in delinquent behaviour during their adolescence, found them to have a significantly higher probability of experiencing long periods of time out of the workforce, lengthy periods of unemployment and low-paid work and lower levels of expected earnings from employment during adulthood (50).

The increased burden child mental illness creates during adulthood is also explained by the fact that the prevalence of certain mental illnesses, such as obsessive compulsive disorder, is known to rise exponentially with increasing age (51). Suffering from a mental illness during childhood generally demonstrates that the individual suffers from the early-onset form of that mental illness, which in most mental illnesses, such as schizophrenia, is considered to be the most severe and, consequently, comes with a higher burden (52).

In summary, child and adolescent mental health problems are closely associated with psychiatric and other problems in adulthood, a feature that a lifetime cost assessment of child or adolescent mental illness should take into account. The close links between child and adult mental illness also indicate that early intervention may be particularly effective and necessary (53–55), an issue that will be expanded in the following section.

Table 8

Economic evaluations estimating the cost of child and adolescent mental illness to the criminal justice system

Country	Study	Study population		Mean annual cost (per child)	Comments
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms)	€33 850	
United Kingdom	Minnis et al. (25)	5–16	Children in foster care, of whom 90% were previously abused or neglected	€4 430	Costs incurred through contact with the police
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€3 235	Youth custody accounted for 60% of total costs. Other significant cost drivers were contacts with youth offending team and days in court.

Table 9

Economic evaluations estimating the cost of child and adolescent mental illness to voluntary services

Country	Study	Study population		Mean annual cost (per child)	Comments
		Ages included	Mental illness		
United Kingdom	Barrett et al. (23)	13–18	Adolescents who committed criminal offences (31% with mental health needs, two thirds of whom had significant depressive symptoms)	€311	
United Kingdom	Romeo et al. (26)	3–8	Severe antisocial behaviour	€205	Costs incurred to voluntary day care, drop-in and home-based services and voluntary advice services
United Kingdom	Clark et al. (27)	8–18	Emotional, behavioural and mental health disturbance	€655	
United Kingdom	Jäbrink et al. (29)	4–10	Autistic spectrum disorder	€163	
United Kingdom	Beecham et al. (30)	4–11	Severe learning disabilities	€531	Costs incurred to voluntary organizations

Economic evaluation of interventions to prevent and treat mental illness among children and adolescents

The previous section covered the existing evidence on the economic consequences of child and adolescent mental illness. Such evidence is useful in helping to better understand its far-reaching consequences and thereby to attract greater attention from policy-makers, especially in the non-health domain. At the same time, the cost evidence on its own is very limited from a policy perspective in that it does not provide useful indications as to where or how to invest, and for what “value for money”.

Cost studies typically measure the economic burden associated with the entire prevalence of a disease or condition. To better inform policy decisions, it would be more useful to know what share of the burden of disease could realistically be eliminated by specific interventions and what the costs of such interventions would be. If this type of information was available for a set of interventions, decision-makers would be able to prefer those that would achieve the greatest benefits for the limited amount of resources available. This is the main aim of the economic evaluation of interventions, and is the focus of the present section. A short typology of the different economic evaluation methodologies is presented in Box 2. The purpose of this section is to utilize existing European work on the economic evaluations of interventions to address children’s and adolescents’ mental health problems. First, a systematic review is presented (following the search criteria outlined in Box 1), featuring published studies that focus on child and adolescent mental health interventions directly. Four studies were identified from the literature as being conducted in the last five years. Another seven studies which were conducted before 2002, identified by the Romeo et al. (56) review, were also included, giving a total of 11 studies (Table 10). There follows a presentation of economic evaluations of interventions that captured broader aspects of child well-being, which included, but were not limited to, specific mental health outcomes.

Considering the wide range of mental health problems in childhood and adolescence and the large number of currently available interventions, the total number of studies identified by the literature search is very small. This severely restricts the extent to which solid conclusions can be reached regarding policy formulation or the general cost–effectiveness of interventions on child and adolescent mental health problems. It will be possible to derive firm policy recommendations only when a larger number of interventions have been evaluated.

The identified studies covered several mental health areas, but mostly focused on ADHD and behavioural/emotional problems. Economic evaluations conducted outside the European region (the United States and Canada) appear to have the same areas of focus (56).

Cost–effectiveness is the most frequently applied economic evaluation method. Seven out of the eleven studies were cost–effectiveness studies, one was a cost–utility analysis, and three were cost–offset evaluations (cost–offset evaluations are included here but it must be noted that they do not represent true economic evaluations, since they do not really measure value for money). The small number cost–utility analysis (CUA) studies is disappointing, considering the fact that CUA is becoming one of the favoured tools in economic evaluation of health care as it is the only type of health-economic analysis which incorporates utility scores (the preferences individuals or society may have for any particular set of health outcomes). The scarcity of CUA studies can be partially explained by the fact that there is still difficulty and controversy concerning the way patients’ points of view can be incorporated in an economic analysis and eventually expressed in monetary terms.

Three studies (57–59) reported no significant differences in costs or outcomes between the interventions examined, one (60) reported poorer outcomes but much lower costs, one (59) reported improved outcomes but higher costs, and six (28,61–65) showed improved outcomes and reduced costs for specific interventions. Such findings could prove useful in determining whether a specific intervention should be favoured, as an intervention that has better outcomes and lower costs should be the preferred intervention for health care providers and policy-makers.

For example, out of the cost–offset studies reviewed, the Bagley & Pritchard study (62) is the clearest example of positive outcomes and reduced costs of one intervention compared to another. It demonstrates how a school social work intervention can bring a significant improvement in outcomes in areas such as self-reported theft, truancy, bullying and net exclusions compared to schools where such an intervention was not implemented, while producing a net saving of €418 889. When studies come to such clear positive conclusions regarding certain interventions, it is much easier for policy-makers to be convinced to invest in such interventions. This may happen as long as more studies focus on this intervention, replicating such positive results.

Box 2. Modes of economic evaluation

Cost-of-illness analysis	To itemize, value and sum the costs of a particular problem with the aim of giving an idea of its economic burden.
Cost–offset analysis	The costs incurred are compared with the costs saved. User-focused outcomes (such as change in clinical status) are not taken into account.
Cost–minimization analysis	If the interventions have the same consequences, the economic analysis can concentrate on inputs only. This analysis is concerned with the identification of the intervention with the lowest possible costs.
Cost–effectiveness analysis	If the outcome of interest is the same in two programmes, but they have different success in achieving the outcome.
Cost–consequences analysis	The total and component costs are computed and change is measured along every one of the relevant dimensions for each intervention.
Cost–benefit analysis	If neither the consequences nor the outcomes of two programmes is the same. Cost–benefit analysis aims to compare all social costs and consequences across different interventions or against a do-nothing option.
Cost–utility analysis	This analysis is preferred by analysts who have reservations about directly valuing benefits in dollar/euro terms. Utility refers to the preferences individuals or society may have for any particular set of health outcomes. This approach incorporates quality of life adjustments to treatment outcomes.

On the other hand, when an intervention proves to have better outcomes but comes with a higher cost (instead of a net saving), the question arises of whether those additional expenditures to perform the intervention (that would otherwise be spent on other health care areas or to cover the cost of treating more patients) are worth the improved health outcomes they will generate. For example, a study that focused on evaluating the cost–effectiveness of individual versus group psychotherapy for sexually abused girls (66) found individual therapy to bring greater improvement in some symptoms of post-traumatic stress, but it was associated with a higher cost (€1833 more costly). The study measured costs and outcomes over a two-year period, which is relatively long compared to the follow-up periods usually employed by similar type of studies, but it is also possible that relative longer-term service use and cost patterns might differ from those observed over two years.

Two of the economic evaluations on interventions focused on children diagnosed with ADHD, examining the cost–utility and cost–effectiveness of methylphenidate treatment. One (64) found methylphenidate treatment to generate a cost–effectiveness ratio of €11 556 to €14 367 per quality-adjusted life-year (QALY) compared to a placebo. The other (65) found methylphenidate to have both better health and cost outcomes compared to behavioural therapy. Combining the findings of both studies suggests that methylphenidate treatment seems to be a sound cost-effective option for treatment of ADHD, although it must also be compared with the other currently available (pharmacological and non-pharmacological) treatments for children who suffer from this disorder.

Factors which influence the cost–effectiveness of interventions

It is important to ascertain which factors are influencing the observed differences in the cost–effectiveness of interventions on child and adolescent mental health. In a comprehensive review of mental health economic studies performed in both children and adults (33), the cost of mental health service provision was shown to be influenced by the clinical, social and demographic characteristics of patients, the treatment and service settings (patients, staff, environmental, institutional and management characteristics) before, during and after the intervention, and the preferences of health and social workers.

Related work has identified a number of factors that influence the cost–effectiveness of interventions performed in child and adolescent mental health, including the following.

- The range of mental health services provided: evidence suggests that the range of mental health services provided to children and adolescents is more important than the location/setting of treatment (67,68).
- Intensity and duration: French et al. (67) found that mental health care costs generally reflect intensity and duration of treatment.
- Supportive environment: there is evidence from the substance misuse context showing that interventions are more likely to be successful if the environment is supportive and if the intervention increases the degree to which health care providers feel able and willing to provide such interventions (69). Of course, such interventions may be unsuccessful in many cases due to locality-specific barriers to change, such as in Georgia, where psychiatric hospital closure and transfer to community services may be resisted, as the hospital will most likely be the main employer in a locality (70,71).
- Amount of training and supervision provided: French et al. (67) suggest that training, supervision and a supportive environment increase the likelihood that health professionals will have access to, and be more likely to use faithfully, the latest treatment technologies, with resultant cost benefits.
- Coordination in the provision of treatment: waiting-list delays and poorly coordinated care of different treatment components affect treatment costs, in addition to young people’s motivation, engagement and adherence (72).

When trying to transfer the results of any one study onto a different setting, it is important to be aware of these (and possibly other) factors affecting the cost–effectiveness of interventions to a large extent.

Economic and non-economic evaluations of “broader” child intervention/prevention programmes

This section focuses on a number of broader interventions that target child and adolescent mental illness as one of several general objectives. Not all of these interventions have been evaluated in economic terms, but the broader perspective they follow presents the scope for further work on economic evaluations. Early interventions are also considered, based on the idea that earlier interventions are more likely to be effective and perhaps even cost effective, an issue that could not be adequately addressed in the studies reviewed above, where the time horizon was commonly rather short. A number of studies have shown that the treatment of mental health problems is most effective when problems are identified early and appropriate treatment begins without delay (73–78). For example, intervening for serious antisocial behaviour in adolescence is considerably less effective than intervening during childhood (49).

Jané-Llopis & Anderson (79) suggest and analyse the multitude of preventive interventions that could be promoted to achieve better mental health outcomes for individuals in childhood, as well as when they enter adulthood (Table 11). (Note that not all of these interventions have undergone an economic evaluation or have been shown to be effective.) This section focuses on a number of broader interventions that target child and adolescent mental illness as one of several general objectives. Not all of these interventions have been evaluated in economic terms, but the broader perspective they follow presents the scope for further work on economic evaluations. Early interventions are also considered, based on the idea that earlier interventions are more likely to be effective and perhaps even cost effective, an issue that could not be adequately addressed in the studies reviewed above, where the time horizon was commonly rather short. A number of studies have shown that the treatment of mental health problems is most effective when problems are identified early and appropriate treatment begins without delay (73–78). For example, intervening for serious antisocial behaviour in adolescence is considerably less effective than intervening during childhood (49).

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What follows is a short summary of some studies that have provided economic evaluations of interventions which target child welfare more generally, including mental health. It appears that there is at least some suggestive economic evidence in favour of a number of early interventions.

Table 10

Economic evaluations of interventions on child and adolescent mental health
Source: Authors; Romeo et al. (56)

Country	Study	Type of evaluation	Mental health problem	Interventions evaluated
United Kingdom, Finland, Greece, Serbia, Cyprus	Knapp et al. (59)	Cost–offset	Families with newborns in need (families characterized by factors known to influence child mental health)	Supportive home visits using the European Early Promotion Project model
United Kingdom	McCrone et al. (47)	Cost–effectiveness	Emotional and behavioural problems arising from sexual abuse	Individual therapy vs group therapy
United Kingdom	Muntz et al. (28)	Cost–effectiveness	Behavioural problems	Intensive practice-based parenting programme vs standard treatment
United Kingdom	Vanoverbeke et al. (65)	Cost–effectiveness	ADHD	Immediate-release methylphenidate (MPH-IR) vs long-acting methylphenidate (MPH) vs behavioural therapy
United Kingdom	Gilmore & Milne (64)	Cost–utility	ADHD	Methylphenidate vs placebo
United Kingdom	Harrington et al. (58)	Cost–effectiveness	Behavioural problems	Community vs hospital-based parental education groups
United Kingdom	Byford et al. (57)	Cost–effectiveness	Deliberate self-poisoning	Home-based social intervention plus routine care vs routine care alone
United Kingdom	Bagley & Pritchard (62)	Cost–offset	Behavioural problems	School social work intervention
Norway	Rund et al. (61)	Cost–effectiveness	Early-onset schizophrenia	Psychoeducational vs standard treatment
Netherlands	Slot et al. (60)	Cost–effectiveness	Antisocial behaviour	Community-based residential treatment vs state correctional institute
Sweden	Gustafsson & Svedin (63)	Cost–offset	Psychosomatic or somatic disorders	Family therapy

Outcome measures	Costs measured	Findings/results
Child, parents and family functioning	Costs of health and social services and criminal justice system	No significant difference was found in costs between interventions in any country or in the cost of interventions between countries. No significant outcomes were found in child and parental outcomes. Significant positive effects were found on child–mother interaction, especially in Greece, while smaller effects were noticed in the United Kingdom and Finland.
Psychiatric symptoms, post-traumatic stress symptoms, and global functioning	Cost of treatment	Greater improvement in some symptoms of post-traumatic stress for the individual therapy group, which was also more costly by €1 833.
Externalist T-scale of the Child Behaviour Checklist	Cost of health, education and social services	At six-month follow up, both groups showed improved behaviour. At four-year follow up, only practice-based treatment showed sustained improvement. Incremental cost–effectiveness ratio (ICER) for parent-based treatment was €329 compared to standard treatment.
Probability of treatment failure or success	Cost of health service	Starting treatment with MPH had the best outcome, followed by MPH-IR and behavioural treatment. The highest costs resulted from behavioural therapy (€2 626). The other two treatments had similar costs (€1 666 for MPH and €1 630 for MPH-IR).
QALY	Cost of health service	Methylphenidate generated a cost–effectiveness ratio of €11 556 to €14 367 per QALY.
Child's behaviour and parental perceptions of parenting problems	Cost of health, education, social, voluntary and private sector services	No significant difference between groups in outcomes or costs.
Suicidal ideations, hopelessness and family functioning	Cost of health, education and social services	No significant differences between groups in outcome measures or scores.
Cost of school exclusions	Cost of exclusion unit, home tuition, project workers	Significant reduction in self-reported theft, truancy, bullying and net exclusions. Reduction in school exclusion brought a net benefit of €418 889.
Relapses and psychosocial functioning	Costs of treatment and social welfare	Psychoeducational intervention more effective in terms of relapse and cost.
Problems, family relationships, and community participation	Costs of residential centre	Poorer outcomes but much lower costs for community intervention.
Cost of inpatient stays	Cost of treatment	Higher decrease in hospitalization days in treated groups vs controls. Total cost of treatment offset by inpatient-days savings.

Early intervention programmes targeting parents

Parent training programmes in the United States and the United Kingdom have been shown to have large effects (42,80). In certain cases, the cost of such programmes could be as low as €800 per child and they have been shown to save money in the long term (42,81).⁹ Interventions involving home visits to first-time mothers (during pregnancy and early infancy) addressing maternal substance use, coping with stress, parental caregiving and links to support systems and health services can achieve health, social and economic gain (83–85). Interventions such as the Prenatal/Early Infancy Project (a nurse-led home visiting programme) improve mental health outcomes in both children and mothers, achieve long-term reductions in child and adolescent problem behaviours (83–85) and are considered to be cost effective, especially when long-term outcomes are taken into account (85,86).

Preventive preschool education programmes

A preventive preschool education programme in the United States, which focused on children aged 3–4 years who were growing up in poverty, achieved fewer delinquent acts, less use of special education, less reliance on social assistance and better peer relationships. The cost–offset derived from the intervention was US\$ 15 000 per child by age 19 and accrued net benefits were found to rise to US\$ 29 000 by age 27. By age 40, it has been estimated that the programme returned to the public US\$ 17.07 for every dollar spent (87–92).

Karoly et al. (92) conducted a comprehensive cost–offset analysis of early childhood interventions and found that of the six individual programmes they evaluated and found to be effective, only one did not accrue any savings. The other five programmes brought returns to society ranging from €1.26 to €17.07 for every €1.00 spent. A significant finding of this study was that the largest benefit–cost ratios were associated with programmes with longer-term follow up, which allowed measurement of outcomes at older ages. This demonstrates that the benefits from early interventions are long lasting and that the savings the programmes generate can in effect be substantially more than are estimated in short-term follow ups.

Table 11

Approaches for prevention and promotion of child and adolescent mental health

Source: adapted from Jané-Llopis & Anderson (79)

Mental health policy and programmes	Public health and public policy
<ul style="list-style-type: none"> • General school skill-building programmes (such as life skills, problem solving) • Changing school environment • Holistic school interventions combining skill building and changes in the environment • Cognitive behavioural programmes for children at risk of depression • Stress-management techniques 	<ul style="list-style-type: none"> • Home visiting, healthy development • Parenting interventions • Taxation of alcohol and tobacco • Comprehensive and media community interventions for alcohol • Reduction of means to commit suicide • Policies to reduce economic insecurity • Social policies to promote social support and inclusion and prevent social exclusion • Access to preschool education • Housing improvement

⁹ For an extensive review of the effectiveness and cost–effectiveness of parent training programmes for the treatment of conduct disorders in children, see Dretzke et al. (82).

It is clear that more work could be done on early intervention programmes, but the nature of such interventions, with the long-time horizon over which the resulting benefits will be accrued and will have to be monitored, is likely to reduce their attractiveness to policy-makers, who want quick results, and to researchers, who may not have the resources to undertake long-term studies.

Limitations of the study

Only some of the potentially relevant economic aspects (or issues where an economic perspective might add potential value) could be covered in this paper. For instance, the inefficiency of the current health system in terms of mental health care provision for children and adolescents has not been addressed. Evidence exists of large unmet needs and barriers to care and problems created (93–97). The socioeconomic distribution of child and adolescent mental illness has not been considered (this issue is addressed by the background paper by Ravens-Sieberer et al.), nor has the economic justification for public intervention in this specific area been discussed. This is a potentially significant issue as the presence of higher costs or the evidence of cost–effectiveness by themselves do not provide a sufficient justification for government to step in and carry out such interventions. Other work exists, however, most notably Beeharry et al. (98), which develops a fairly good case for government involvement based on strict economic criteria.

Conclusion

The main purpose of the background paper has been to assess the available European evidence on the economic consequences of child and adolescent mental illness and the economic evaluations of interventions. Overall, very sparse evidence was found on both issues, the majority coming from the United Kingdom. Given the limits to transferability of results from one country to another, this poses severe restrictions on the extent to which other European countries can make reference to such country-specific information (33).

With increasing requests to prove value for money in public spending, it is possible that the lack of economic evidence has contributed to the low budgetary priority on child and adolescent mental health policy. At the same time, it must be acknowledged that while economic evidence is an important input into decision-making, it is clearly not the only relevant issue.

Despite the limited evidence, certain important findings stand out, which can be summarized as follows.

- An interesting, possibly striking, finding regards the costs of mental illness among children and adolescents falling to a very large extent on sectors outside the health care system. Only 6% of cost falls on the health system. This may provide a rationale for other sectors to become more involved in addressing the problem.
- The evidence suggests that productivity costs seem to take the highest burden. Unfortunately, only two of the studies within the sample have considered this issue. Should this result be shown to hold more generally, the policy implications would be to support low-income families with children with mental illness, as they would be affected most by such a burden.
- Only a few types of mental illnesses, out of the wide range, have been economically evaluated, leaving a lack of any type of cost information for many serious mental illnesses (such as schizophrenia).
- The economic burden of a mental illness can vary greatly between individuals. A variety of factors that can affect the cost of illness have been suggested, such as the severity of the mental illness, age, family structure, ethnicity and the presence of co-morbid mental illness.
- There are close links between child and adult mental illness – the presence of mental illness during childhood may lead to up to 10 times higher costs during adulthood, which indicates that early intervention may be particularly effective and necessary.
- It is very difficult to derive solid conclusions about the general cost–effectiveness of interventions on child and adolescent mental health problems, as only a very limited number of economic evaluations have been conducted. Certain studies are indicative of cost–effectiveness and improved outcomes that specific interventions can achieve, such as the Bagley & Pritchard study (62) on a school social work intervention.
- Consequently, more research is needed to better understand the size and distribution of the cost burden (especially in European countries outside the United Kingdom) and to provide more comprehensive and comparable assessments of the

“return” on investing in child and adolescent mental health via the different, narrow and broad options available. There appears to be a particular “return” to more investment in economic evaluation of early child interventions.

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Case studies

Case studies: an introduction

National and subnational case studies were a core component of the WHO/HBSC Forum 2007 process. The aim of the case studies is not to record best practices, but to document experiences in relation to enabling and restraining factors in building social cohesion for mental well-being among adolescents.

Each case study describes:

- mental health and well-being status among adolescents in the particular country or region which is the focus of the case study;
- the social and policy context affecting the country or region;
- one or more specific policies and/or interventions aiming to build social cohesion for mental well-being and the prevention of mental disorders among adolescents at national or regional level; and
- the lessons learned through the application of the policy or the implementation of the intervention highlighted in the previous section.

See Annex 4 for a reproduction of the advice offered to case study authors.



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Case study review meeting 30–31, March 2007, Las Palmas, Canary Islands, Spain.

Armenia: experiences of a country in transition

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Executive summary

Armenia declared its independence in 1991. Immediately following this, disruption of trade and production led to a severe economic crisis and a rise in poverty. The crisis was complicated by the consequences of the devastating earthquake and armed conflict over Nagorno Karabagh.

Economic progress has been evident in Armenia since 2000, but inequalities between social groups are still present. These factors have combined to impact critically on the health status – including mental health – of the population. The rapid changes have also significantly affected the general health and mental health status of children and young people. Indeed, the whole population has been forced to change their behaviours and overall lifestyle to adapt to the new situation.

The recent HBSC survey has shown how transition has affected the behaviour of young people in Armenia. Participating adolescents who lived in villages were less satisfied with life than their high-school counterparts living in the capital city of Yerevan and in other towns (this was an expected result, reflecting geographical inequalities). Adolescents considered themselves generally healthy, but reported a number of complaints. Unexpectedly high levels of bullying and abuse were identified. Although the suicide rate in Armenia is not high, 9% of boys and 10% of girls had thought about suicide; the same number of young people considered using alcohol to overcome psychological difficulties.

Some 90% of males and 85% of females reported having close friends, and the rate of reported sexual activity in Armenian adolescents was among the lowest in Europe.

Generally, the survey results show that the traditional Armenian family structure still plays an important role in the lives of adolescents and, in some situations, can be considered a positive health asset. On the other hand, the family is not able to fully protect adolescents from new threats, and the role of social factors and mechanisms for establishing social cohesion in Armenian society is also crucial.

According to the Association of Child Psychiatrists and Psychologists, risk factors that have an impact on adolescent mental health include: poverty, parental loss, child abuse and family conflict; problems related to parental migration; chronic health problems in family members; and parental substance misuse. Many children do not receive treatment for mental health problems due to lack of awareness, fear of stigma or lack of access to appropriate services. At the same time, “old-fashioned” approaches to health, which eschew social and psychological elements of health in favour of biomedical ones, remain popular with some care providers.

The HBSC data emphasized the scope of problems faced in Armenia in relation to adolescent mental health. In response, the Ministry of Health has developed the concept of “Youth-friendly health services” which are now being introduced with support from UNICEF. The Association of Child Psychiatrists and Psychologists has launched the “Child-adolescent mental health care service” project and has developed a position paper on reforming mental health care for children and adolescents.

The mental health status of children and adolescents should be thoroughly and continuously assessed. Appropriate policies and interventions are crucial for meeting the existing and future challenges in child and adolescent mental health in Armenia.

Social and historical context

Historical and socioeconomic status

Armenia is a land-locked country located in the southern Caucasus with a population of 3.5 million. Administratively, Armenia consists of 10 regions and the capital city of Yerevan. At 29 800 km², Armenia is one of the smallest countries in Europe. Currently, about 97% of the population is native Armenian; one third live in the capital, one third in smaller cities and one third in villages.

Armenia has a long and complicated history. The capital city of Yerevan was founded in 782 B.C. In 301 A.D., Armenia became the first state in the world to adopt Christianity. In 1828, eastern Armenia was taken into the Russian Empire, becoming a Soviet Republic in 1920. Some 1.5 million people who lived in the western part of the Armenian plateau (under Ottoman power) were killed during the First World War; hundreds of thousands of survivors were forced to leave the country. Their descendants form the large Armenian diasporas which currently account for some 7 million living in the United States, France, the Russian Federation, Lebanon, the Syrian Arab Republic and other countries.

Contemporary Armenia declared its independence in 1991. Immediately following independence, the collapse of the Soviet Union and disruption of trade and production led to a severe economic crisis and rise in poverty. The social and economic crisis was complicated by the consequences of a devastating earthquake and armed conflict in Nagorno Karabagh. The hidden unemployment rate in the 1990s was estimated to be as much as one third of the adult population. In the late 1990s, 55% of the population lived in poverty, one third of whom were in extreme poverty. Public expenditure on health care fell from 2.7% of GDP in 1990 to 1.3% in 1997. Actual expenditure on health was very low at US\$ 20 million, or US\$ 5.4 per person, in the 1990s.

As a country in transition, Armenia faces economic, political and social problems. The development of a market economy, a burgeoning democratic and civil society and integration into the global community has created a number of challenges. Declining industrial and agricultural production has resulted in food insecurity, poor sanitation and increased vulnerability to diseases. Individuals and families have been forced to change their behaviours and lifestyle. These factors have combined to critically impact on the health status of the population, including their mental health.

Economic progress has been evident since 2000 with an annual economic growth rate of more than 10%. This has led to an improving social situation, with only 34% of the population reported to be living in poverty in 2006, and among them only 5.5% in extreme poverty (1). In the same year, the state financing of the health sector was 39.4 billion Armenian drams or approximately US\$ 98 million. However, the percentage of public health expenditure in GDP did not increase substantially and now accounts for only approximately 1.5%, one of the lowest indicators in the European region (2). There are, however, large inequalities among social groups and between populations in the capital and provinces.

Child and adolescent health

Armenia inherited the Semashko's model health care system from the Soviet era, with both positive and negative effects. The Ministry of Health started reforming the health sector in the 1990s with assistance from WHO, UNICEF and other international, bilateral and Armenian diaspora organizations. This has involved decentralizing management of the health system. The health care system budget has been based on a government-funded basic benefit package since 1997, but the package is restricted. Health care services for children and adolescents are provided through children's hospitals and specialized centres, "policlinics" and rural health centres. Family doctors began operating in Armenia in 1999.

Regardless of difficulties, the government of Armenia has always shown commitment to improving the health status of children and young people. Armenia signed the Declaration of Children's Survival, Protection and Development and the Plan of Action in the 1990s, setting out specific goals such as reducing mortality and morbidity caused by acute respiratory infections, diarrhoea and malnutrition. As a consequence, Armenia has made visible progress in reducing infant mortality rates. Official statistics and demographic health survey data indicate that child mortality rates have significantly reduced over the last decade as a result of the fruitful partnership involving the country, WHO and UNICEF (3).

The Armenian Government adopted the National Plan of Action for Maternal and Child Health in 2003, and the Ministry of Health (with support from UNICEF) developed the concept of “Youth-friendly health services” in 2005 (4). The Ministry of Health instigated the development of the National Strategy on Child and Adolescent Health and Development in 2006, with adolescent mental health issues expected to be high in the list of priorities. Support was provided by the WHO Regional Office for Europe for the exploration of the policy/legislative and strategic fields related to child and adolescent health, and potential steps for the development of said strategy. This indicates how things have progressed since the early 1990s, when priority areas were about promoting child survival.

Child and adolescent mental health

During the Soviet era, approaches to psychiatry ignored the social and psychological elements of mental illness and were biased towards those that were biomedical in origin. Interventions such as family therapy and psychotherapy were consequently undervalued, with great store being set on the provision of drug therapy. While great efforts have since been made to encourage the adoption of internationally recognized approaches to therapy, “old-fashioned” and outmoded practices which reflect only biological considerations remain popular.

After independence, social and behavioural habits of Armenians were affected by the opening of society to “western” influences, with the adoption of different attitudes towards sexual habits and eating habits, among others. These factors created a number of risks to health, especially for young people. Currently, the new attitudes are confronting national traditions. Current lifestyle patterns and behavioural habits of adolescents in Armenia are therefore arising as the consequences of many factors, some of them controversial. As adolescence is a period of experimentation and risk-taking behaviour, habits and lifestyles established early in life and the influences of the surrounding environment have a profound impact on future health and development.

There are several centres which provide specialized mental health care for children, including the National Psychiatric Hospital, the Institute of Child and Adolescent Health and the Lusavorich Medical Centre. In the provinces, care is provided by psychiatric regional centres and by some recently established psychological services provided by NGOs.

The Association of Child Psychiatrists and Psychologists (ACPP) was established in 1997 as a NGO, uniting all child psychiatrists and many psychologists. ACPP has launched a number of activities since its inception (5).

Policies and interventions

The Institute of Child and Adolescent Health, with support from UNICEF and under the auspices of the Ministry of Health, is currently introducing the “Youth-friendly health services” concept. The WHO Orientation Programme has been used to develop the relevant materials, and formal criteria for youth-friendly health services and relevant guidelines for health care providers in Armenia are expected to be developed in the near future.

A number of projects have been launched by ACPP over last decade, including the Child and Adolescent Mental Health Care (CAMHC) project, which has been funded by the Catholic Aid for Overseas Development charity organization in the United Kingdom since 2000. There has been a marked increase in the number of referred children and adolescents to whom professional care is provided in recent years as a result of the “Training of primary health care system professionals and public education” project, funded by the Global Initiative on Psychiatry.

ACPP implemented the World Psychiatric Association’s (WPA) “Global child mental health” programme in 2004/2005. The main purposes of the programme were to increase the awareness of health decision-makers and health professionals, promote primary prevention of mental disorders in childhood and adolescence, and encourage interventions that would contribute to the healthy mental development of children and adolescents.

ACPP and the Global Initiative on Psychiatry launched a project on initiating reforms in child and adolescent mental health care in Armenia. Within the framework of this project, ACPP developed a concept paper for use as a matrix for long-term development of CAMHC in Armenia (6).

Several steps were required before the final development of the system concept. These included:

- gathering epidemiological data and information on available resources;
- determining priority problems and effective strategies;
- performing wide consultations with government ministries (including the Ministry of Health, Ministry of Social Care and Ministry of Finance), parent organizations, NGOs and international organizations such as WHO and UNICEF;
- performing an analysis of international experience; and
- outlining the principles and objectives the future system will pursue, in accordance with WHO recommendations.

The draft concept was recently presented to partners from NGOs and state structures, both executive and legislative, to enable them to form an opinion and suggest amendments. A project of agreement on collaboration between NGOs was also presented, recommending the joining of forces to bring the proposed system concept to life.

Mental health and well-being among adolescents

It is well known that most mental and physical illnesses are influenced by a combination of biological, psychological and social factors. Currently, poverty and associated conditions of unemployment, low education levels and deprivation are widespread in Armenia; these factors create barriers to mental health care, especially for disadvantaged elements of society. In addition, economically disadvantaged people often raise mental health concerns when seeking treatment for physical problems.

The recent history of Armenia is complicated by conflicts, including wars and civil strife, and natural disasters which have affected a large number of people and have resulted in mental health problems. A recent study found a high rate of psychiatric and psychological symptoms and a poor quality of life among earthquake survivors. The most vulnerable groups are children and adolescents. Other studies have reported that exposure to stressors during early development is associated with persistent increased likelihood of psychiatric illness later in life (7).

The CAMHC project data show high rates of mental disorders in children and adolescents. Young people are affected by a wide spectrum of mental disorders ranging from mild to severe conditions, and more than one disorder may be present. Common mental, emotional and behavioural disorders identified in the CAMHC project database are classified in Box 1.

Implementing new concepts and mechanisms on mental health care in a country in transition such as Armenia is strongly dependent upon public perceptions. Within the frame of the “Global child mental health” programme presented by the WPA, and using manuals and instruments developed by WHO and the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP), a survey of awareness of mental health issues among students, teachers and parents of the high schools of the capital city of Yerevan was carried out.

A brief, anonymized questionnaire was sent out two weeks to one month before a mental health awareness-raising campaign began and two weeks to one month after it ended. The questionnaire was read out by a member of the survey team or by teachers while students filled out the forms. Children were asked about their opinions on children’s mental health and what they had learned from the campaign. They were also asked about their own feelings and behaviours (students’ participation in the survey was confidential and voluntary).

Survey results showed there were many risk factors impacting on adolescents’ mental health and well-being, including: poverty; early parental loss; child abuse and family conflict; problems related to parental migration; chronic health problems in family members; and parental substance misuse. Many children did not receive treatment for mental health problems due to lack of awareness of the problem, fear of stigma or lack of access to appropriate services. Students who had low social and family support were more likely to report negative levels of health, happiness and well-being. About 15% of scholars reported “being unhappy” every week and around half claimed they had “less than good” health and “felt low” every week. About 80% of respondents reported “feeling nervous” (girls 52% and boys 28%), and 18% of respondents reported difficulties in getting to sleep. Concerns about being “too fat” were much more prevalent among girls and increased with age.

Box 2. Common mental disorders according to CAMHC project data

A. Non-psychotic disorders	B. Psychotic spectrum disorders, with schizophrenia being the most serious disabling and often chronic condition
Conduct disorders: many of these children were able to control the behaviour related to their conduct disorder and succeed in school through early diagnosis and intervention, along with therapy and medication from the CAMHC service.	Disintegrative psychosis
Anxiety disorders: CAMHC data have shown that anxiety disorders are the most common mental disorders affecting children and adolescents. Some of these disorders were hard to diagnose, but they can be successfully managed.	Bipolar disorders
Depression: there were observed changes in emotion (sad/cries/hyperactive), motivation (schoolwork declines), physical well-being (appetite/sleep/health), and thoughts (hopelessness/can't do anything right).	Schizo-affective
Learning disorders: these ranged from mild language and reading problems to decreased mental capacity. Early diagnosis and intervention allowed children to function and succeed at school.	Schizophrenia
Eating disorders: according to CAMHC data, eating disorders have increased in Armenia. Children and adolescents with either disorder had: low self-esteem, low sense of self-worth and poor body image; abused laxatives; and/or exercised obsessively.	Pervasive developmental disorders (PDDs), autistic spectrum disorders
Substance misuse: statistics on rates of overall substance misuse were not readily available. Use and abuse of alcohol and other drugs is not common in Armenian adolescents compared to other countries.	

HBSC survey

The 2005 HBSC survey was carried out by the “Arabkir” Joint Medical Centre – Institute of Child and Adolescent Health of Armenia, with support and participation of the UNICEF Armenian office and in close collaboration with the Ministry of Health and Ministry of Education and Science.

The Armenian HBSC is a school-based survey with a multi-stage cluster sample design to produce a nationally representative sample in the eighth, ninth and tenth grades, covering pupils aged 13–17 (8). The primary sampling unit – the cluster – was a class or, in the absence of a sampling frame in small rural schools, the entire school. The study covered the total actual sampling frame of 1205 students. It should be noted that achieving the recommended sample size of 4500 respondents was not possible due to lack of resources. While this affects the reliability of the results to an extent, this was nevertheless the largest survey of its kind ever held in Armenia.

To best reflect the population distribution, the first stage of sampling divided 60 schools into three groups of 20 schools from Yerevan, 20 from other urban areas and 20 village schools. Data from the National Statistical Service and Ministry of Education and Science were used to identify schools with a representative number of students enrolled. The second sampling stage consisted of random-start systematic equal-probability sampling of the schools that participated in the survey. All eighth to tenth grade classes in the selected schools were included in the sampling frame. One school for children with physical disabilities and one “commercial” high school were included in the list to reflect truly random sampling. All students in the selected classes were eligible to participate in the survey.

The survey instrument was a standard anonymized questionnaire adapted to take the Armenian context into account. The questionnaire consisted of 122 questions divided into 11 main categories: personal; family; general health status; eating behaviours; alcohol, drug and tobacco use; hygiene; mental health; behaviour and violence; physical activity; knowledge, attitudes, life skills and sources of information; and sexual behaviours.

Data collection was carried out in classrooms during school hours. The interviewers asked teachers to leave the room to ensure full anonymity. Each student was provided with an answer sheet upon which he or she recorded responses to each of the survey questions. Data were collected from October to December 2005. All documentation was sent to, and collated by, the Institute of Child and Adolescent Health. The prevalence percentage differences are described in this case study with 95% confidence intervals (CI). Standard deviation, which indicates how widely values are dispersed from the average (mean), was estimated based on the sample size.

Of the 1205 respondents, 758 were female (62.8%) and 447 were male (37.1%), reflecting the predominance of girls in the high schools of Armenia. The geographical distribution of respondents covered 435 students (36.1%) from Yerevan, 375 (31.2%) from other cities and 395 (32.7%) from rural areas. The response rate was 100%, although not all respondents answered every question, as the percentages in the tables below reflect.

Survey results – selected indicators in relation to mental health

Family

The Armenian family generally has a traditional structure with two parents, typically 2–3 children and grandparents all living under the same roof. The role of family and traditions in Armenian society are still held in great esteem. A majority (88.1%) of respondents live with both parents and siblings.

Physical health

Almost half of the students (48.2%) thought they were in good health, with 22.2% believing they were in perfect health. Adolescents nevertheless reported numerous complaints during the previous six months, ranging from headaches and toothaches to abdominal pain, heart pain or heart palpitations, insomnia and other conditions more commonly associated with adults. Nearly half of all young men and women surveyed complained of headaches, followed by toothaches, as the most common health concerns. No significant gender differences were found.

Life satisfaction

Most respondents, regardless of gender, were generally satisfied with their lives; young people living in urban areas, however, were more satisfied than those in rural areas (Table 1). This may provide critical indicators for health interventions among young people in different environments. It should also be noted, however, that around one in seven respondents refused to answer this question.

Body image

There are no scientific data on the prevalence of obesity in Armenia. Results of the survey, however, show that 18% of girls thought they had “some-to-severe” weight problems; among boys, this figure was about 10% (Table 2). Approximately 15% of girls and 23% of boys noted that their body weight was lower than they would like. Generally, gender did not appear to be a significant determinant for body image, as rates of dissatisfaction with the body were at 34% for both boys and girls.

Behaviour, physical fighting and injuries

One third of boys and one fifth of girls surveyed reported that they had been injured in the past year. Ten per cent of girls and eight per cent of boys noted that someone had bullied them during the month prior to being surveyed. Significantly fewer children from rural areas had been bullied (Table 3), perhaps as a result of the closeness of rural communities and differing means of addressing and resolving conflict compared to urban centres.

Only 35% of boys and 40% of girls responded that they were not abused verbally by a teacher during the past year. Some 12.3% of boys and 1.2% of girls stated that they were abused frequently, indicating up to 12 occurrences of verbal and physical abuse per month, or nearly every school day (Table 4).

Table 1

Overall life satisfaction by location

“How satisfied are you with your life (on a scale of 0–10, with 10 as the highest mark)?”	Yerevan		Urban		Rural	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0–2	6	1.4	4	1.1	4	1.1
3–7	72	16.5	60	16.0	98	24.8
8–10	299	68.8	248	66.1	230	58.2
No response	58	13.3	63	16.8	63	15.9
Total	435	100	375	100	395	100

Table 2

Self-perceived weight by gender

“How do you describe your weight?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
Severely underweight	13	1.9	14	2.6
Somewhat underweight	102	23.0	97	12.7
Normal	279	62.6	493	64.7
Somewhat overweight	40	8.9	137	18.0
Severely overweight/obese	2	0.6	2	0.2
No response	12	3.0	15	1.8
Total	448	100	758	100

Some children – 10% of boys and 5% of girls – reported that they had refused to go to school due to fear at least once and sometimes more frequently (Table 5). A significant number of students did not respond to these violence-related questions, raising concerns about the perceived and actual safety afforded to students within schools.

Suicidal ideation

During the year prior to the survey, 9% of boys and 10% of girls reported that they had considered suicide (Table 6). Approximately the same number of young people considered using alcohol or drugs to overcome their difficulties.

Eighty-nine per cent of males and eighty-four per cent of females reported having close friends, but those in the cities appeared to have more friends than those in rural areas (Table 7).

Some 77% of boys and 53% of girls surveyed said that they rarely or never felt lonely (Table 8).

Male students preferred discussing issues with their friends. When they turned to family members, they preferred to speak with their mothers and older brothers/sisters rather than with their fathers (Table 9). Girls liked to discuss issues with their mothers and friends, with few ever talking things over with their fathers. In both rural and urban areas, mothers seemed to be the partners of choice with whom young people could discuss their issues. It is therefore critical that mothers play a role and have opportunities to participate in interventions designed to improve the health and well-being of their children.

Table 3

Frequency of bullying by location

“During the past 30 days, how many times were you bullied?”	Yerevan		Urban		Rural	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	376	86.4	330	88.0	321	81.3
1 or 2 times	24	5.5	26	6.9	19	4.8
A few times	15	3.4	7	1.9	9	2.3
Often	2	0.5	3	0.8	2	0.5
Always	1	0.3	1	0.3	1	0.2
No response	17	3.9	8	2.1	43	10.9
Total	435	100	375	100	395	100

Table 4

Frequency of verbal abuse by teachers by gender

“During the past 12 months, how many times were you verbally abused by a teacher?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	159	35.5	305	40.2
1 time	58	13.0	116	15.3
2 or 3 times	62	13.8	54	7.1
4 or 5 times	15	3.3	8	1.0
6 or 7 times	11	2.4	2	0.3
8 or 9 times	6	1.3	4	0.5
10 or 11 times	1	0.2	2	0.3
12 or more times	55	12.3	9	1.3
No response	81	18.2	258	34.0
Total	448	100	758	100

Sexual experiences

One in every five males surveyed reported that they had already had sexual intercourse, but only one in a hundred females stated they had engaged in sexual intercourse. This number is lower even than the former Yugoslav Republic of Macedonia’s 3.6% and Greece’s 9.6% and significantly lower than the United Kingdom (England’s) 40% (9). Most young women explained their primary reason for delaying first sexual intercourse as being respectful of tradition and a desire to remain a virgin until marriage (Table 10).

Lessons learned

Data from the HBSC and other relevant surveys clearly indicate that while child and adolescent mental health is currently a high priority for Armenia, problems related to mental ill health among this group require increased attention.

A number of controversial factors affect the mental and health status of Armenian children and adolescents. Some “traditional” factors sometimes play a protective role, but due to rapid changes in the social, economic and cultural context of Armenia, the situation changes very dramatically and leads to changes in the scope and character of mental health problems, especially in adolescents.

Table 5

Frequency of truancy due to fear for safety by gender

“During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 days	306	68.0	450	59.4
1 day	21	4.9	13	1.7
2 or 3 days	17	3.8	17	2.2
4 or 5 days	5	1.1	4	0.5
6 or more days	6	1.3	3	0.4
No response	93	20.9	271	35.8
Total	448	100	758	100

Table 6

Frequency of suicidal ideation by gender

“During the past 12 months, how many times did you actually attempt suicide or think about it?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
0 times	374	83.5	617	81.3
Once	22	4.9	58	7.6
2 or 3 times	6	1.3	13	1.7
4 or 5 times	0	0.0	2	0.3
6 or more times	13	2.9	6	0.9
No response	33	7.4	62	8.2
Total	448	100	758	100

Table 7

Relations with peers

“Do you have close friends?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
Yes	397	88.6	641	84.4
No	19	4.2	56	7.4
I don't know	11	2.4	13	1.7
No response	21	4.8	48	6.5
Total	448	100	758	100

The rationale for establishing new policies for children’s and adolescents’ mental health is currently strong (10). The government and many professionals recognize the importance of this field, and all policies on adolescent health adopted by the Ministry of Health in recent years have considered mental health an important area.

Despite some achievements, significant barriers for successful implementation of projects remain, including:

Table 8

Frequency of feeling lonely by gender

“During the past 12 months, how often did you feel lonely?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
Never	249	55.6	263	34.6
Rarely	94	21.0	140	18.4
Sometimes	51	11.4	191	25.5
Most of the time	16	3.6	76	10.0
Always	7	1.6	27	3.5
No response	31	6.8	61	8.0
Total	448	100	758	100

Table 9

People with whom students discuss their problems by gender

“With whom do you usually discuss your problems?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
With mother	58	12.9	292	38.6
With father	40	8.9	6	0.8
With older sister/brother	49	10.9	63	8.3
With grandparents	1	0.2	5	0.6
With female friends	23	5.1	226	29.8
With male friends	183	41.0	17	2.2
No response	94	21.0	149	19.7
Total	448	100	758	100

Table 10

Reason for delaying first sexual intercourse by gender

“What is the main reason you have not had sexual intercourse?”	Boys		Girls	
	Number (N)	Percentage (%)	Number (N)	Percentage (%)
I have had sexual intercourse	89	19.9	7	0.9
I want to wait until I am older	130	29.0	85	11.2
I want to wait until I am married	59	13.2	431	56.9
I do not want to risk getting pregnant	6	1.3	5	0.7
I do not want to risk getting a sexually transmitted infection, such as HIV or AIDS	28	6.3	7	0.9
I have not had a chance to have sex or met anyone that I wanted to have sex with	43	9.6	19	2.5
It is against my religious values	2	0.4	9	1.2
Some other reason	30	6.7	12	1.6
No response	61	13.6	184	24.1
Total	448	100	758	100

- the continued existence of outmoded perceptions and approaches to adolescent mental health issues;
- controversies in existing legislation, with discrepancies in laws related to adolescent health and in regulations on health care and education;
- the low capacity and inadequate structure of the health system, including lack of resources and trained staff, especially in the provinces;
- lack of coordination of the efforts of governmental bodies, health institutions and different NGOs;
- limited experience of comprehensive interventions which involve all levels of mental health care;
- lack of programme experience connected to other fields of adolescent health and lack of intersectoral interventions involving education and social sectors;
- existing social and geographical inequalities complicating the prospects for social cohesion; and
- lack of clear definition and scope of parental consent.

Consequently, the following issues are presented for consideration.

- The development of proper legislation and policies related to adolescent mental health within the comprehensive child and adolescent health strategies in Armenia is high on the agenda.
- There is an urgent need to coordinate existing adolescent-friendly health services and mechanisms and relevant education institutions to create a collaborative network for improving mental health care.
- These services need to be unified through the system to make them more effective, enhance their ability to collect precise epidemiological data and ensure sustainable financial resources through cooperation with the state.
- Any interventions and/or field activities in adolescent health should be connected to other aspects of young people's health and welfare, including general health, reproductive and sexual health and prevention of unhealthy habits such as smoking and drug and alcohol use.
- All newly planned interventions (whenever possible) should take into account the rapid changes in attitude of Armenian young people and focus on preventing expected negative outcomes of lifestyle changes.
- The health, education, youth, social and justice sectors should develop awareness-raising activities on adolescent health issues for the public and policy-makers.
- Family doctors, paediatricians and other relevant health care providers should be educated on adolescent mental health issues; relevant staff in education institutions should also be trained in adolescent mental health and rights issues, with a focus on mental health.
- Key adolescent health and rights issues, including integration of new topics such as violence prevention and dealing with psychological problems, should be added to the curriculum of high schools and colleges in Armenia.
- Further studies, including regular HBSC surveys, should be carried out to enable better understanding of current issues and trends in mental health and psychosocial well-being of adolescents; taking into consideration the rapid transitions in Armenia, the regular implementation of the HBSC survey, an internationally accepted tool for measuring trends in health behaviour of young people, is crucial.

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Belgium (Flanders): beyond boundaries – integrating school and mental health policies

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Executive summary

Adolescents are an important target population for mental health promotion. Indicators of mental health show a decrease in well-being with increasing age in adolescence. Adolescents from low SES backgrounds are more likely to have low life satisfaction, low self-rated health status and a higher score on suicide ideation. School variables (especially acceptance of students within the school) have a (modest) impact on the negative association between SES and mental well-being.

In 2005, the Flemish Minister of Health formulated a health target aimed at reducing the high suicide rate in Flanders. A consensus health conference was organized to ensure that all relevant sectors were involved in discussing the evidence base of the health target and the proposed strategies with which it would be pursued. One of the strategies discussed was the implementation of a mental health policy in schools.

In January 2006, four ministers of the Flemish Government (the Minister-President together with the ministers of education, health and youth) signed a declaration of intent to support the implementation of a health policy in all schools. A framework was subsequently developed by the Commission of Health Promotion of the Flemish Educational Council, and all schools should have had a health policy in place by September 2007. The presence of a health policy in all schools will be verified in 2009.

The framework builds on the education sector's existing structures and facilities and the expertise of representatives of all stakeholders involved, including pupils and parents. Health promotion experts are full members of the Commission and act as advisers to representatives of the education sector on implementing evidence-based strategies identified during the consensus health conference.

Although the Belgium (Flanders) case study is not an example of a truly intersectoral approach, it does demonstrate how the focus shifted from the health sector and the policy-dominated consensus conference in the development of the mental health action plan, to the education sector and the fieldwork-dominated Commission of Health Promotion of the Flemish Educational Council for implementation of the action plan.

The weakness of this strategy is the dependency on individuals having links with both sectors and the lack of structures for intersectoral work. The strength is the participative approach adopted and the integration of health aspects in other initiatives in the schools, most importantly in actions to promote equal education opportunities for children from disadvantaged families and communities and for children with special needs.

The integration of health in all aspects of the school ensures the sustainability of the work and enhances the “reach” of activities. Evaluating the impact of the strategy on the mental health of young people, however, remains a challenge.

The Flemish case study does not focus on one specific policy or intervention, but describes how a mental health action plan, an initiative of the health sector, can build on initiatives taken in the education sector to reach all children and adolescents, even in the absence of a truly intersectoral approach.

Mental well-being in Flanders – the 2006 HBSC survey

The HBSC survey is administered in Flanders with students from 5th year elementary school (10-year-olds) to the last year of secondary school (18-year-olds). The study is financed by the Ministry of Health. Data from the last two survey rounds (2001/2002 and 2005/2006) are discussed below.

Self-reported health

Self-reported health was measured with the question: “Would you say your health is excellent, good, fair or poor?” The percentages of fair or poor health are shown by gender for the last two HBSC surveys in Table 1.

A clear linear association can be observed between having fair or poor subjective health and age, with older pupils more likely to report fair or poor health. In 2006, girls were more likely to evaluate their health as fair or poor. Girls’ percentages were higher in 2005/2006 than they were in 2001/2002. No large differences were found in boys between the two surveys.

Table 1

Percentages of fair or poor subjective health in boys and girls

Age	Boys		Girls	
	2001/2002	2005/2006	2001/2002	2005/2006
11–12	10.3%	10.2%	9.3%	14.6%
13–14	11.0%	13.5%	15.8%	22.1%
15–16	17.1%	18.5%	23.0%	24.6%
17–18	20.0%	21.6%	25.1%	28.5%

Health complaints

Table 2 shows percentages of young people reporting health complaints at least weekly by gender and age. Most symptoms increased with age and were reported more frequently by girls than boys. Stomach ache and sleeping problems were more or less stable across ages. The same can be observed for “feeling dizzy”, but only in boys.

Life satisfaction

The Cantril ladder is used to measure life satisfaction. Pupils are asked to indicate how they see their lives at the current time, going from “0” (worst possible life) to “10” (best possible life). Pupils scoring “7” or less are considered to have low life satisfaction. In Table 3, percentages of low life satisfaction are shown from the two last HBSC surveys for boys and girls.

Low life satisfaction increased with age. Girls in older age groups were more likely to indicate a low life satisfaction compared with boys of the same age. No large differences were observed between the two surveys.

Table 2

Percentages of at least weekly health complaints by gender and age

	Headache	Stomach ache	Backache	Tiredness	Irritability	Nervousness	Sleeping problems	Dizziness
Boys								
11–12	15.2%	10.0%	8.9%	15.7%	17.1%	23.5%	25.4%	8.3%
13–14	17.7%	11.0%	18.6%	21.8%	22.0%	27.5%	25.4%	11.2%
15–16	17.0%	10.5%	22.5%	33.1%	29.0%	29.9%	28.4%	12.7%
17–18	18.8%	11.3%	25.9%	38.3%	30.4%	30.5%	26.3%	11.3%
Girls								
11–12	20.9%	18.4%	13.6%	18.9%	18.9%	26.8%	29.9%	10.0%
13–14	27.1%	19.4%	18.5%	28.2%	28.1%	30.9%	30.1%	13.8%
15–16	29.2%	19.0%	21.8%	38.9%	34.6%	34.0%	30.7%	16.2%
17–18	36.7%	20.5%	31.2%	47.9%	37.7%	35.7%	30.8%	18.7%

Suicide ideation

A question on suicide ideation was included in the Flemish version of the HBSC study for pupils in the highest grade of secondary schools. The results for pupils who had thought about suicide once or more are shown in Table 4.

Girls were more likely to think about suicide than boys. As with the two previous indicators of mental well-being, thinking about suicide increased with age. No large differences were found in boys compared with the 2001/2002 survey, but suicide ideation increased in girls. The (fatal) suicide rates confirm this trend.

Table 3

Percentages of low life satisfaction by gender

Age	Boys		Girls	
	2001/2002	2005/2006	2001/2002	2005/2006
11–12	30.3%	31.7%	28.1%	31.2%
13–14	40.5%	39.0%	40.6%	42.2%
15–16	46.5%	43.4%	52.0%	51.2%
17–18	49.0%	47.8%	52.5%	53.1%

Self-harm

Questions on self-harm were included in the 2005/2006 HBSC survey for the first time. Because of the sensitive nature of the questions, they were only asked of pupils in the two last years of secondary school. It was found that 11.2% of boys and 22.2% of girls had already deliberately taken too many pills or tried to damage themselves in some other way.

Table 4

Percentages of suicide ideation in boys and girls

Age	Boys		Girls	
	2001/2002	2005/2006	2001/2002	2005/2006
11–12	30.6%	33.9%	39.4%	45.5%
13–14	36.0%	35.6%	49.8%	49.0%
15–16	38.0%	36.3%	48.9%	52.1%
17–18	49.0%	47.8%	52.5%	53.1%

Relationship between socioeconomic status and indicators of well-being

Several indicators of socioeconomic inequality are included in the HBSC study. In these analyses, FAS II and the question on perceived family wealth were used.

FAS

The FAS consists of questions on: family car ownership; bedroom occupancy; family holidays; and computer ownership. Tertiles are used to compare groups. Logistic analyses were done, controlling for age and gender. Percentages and the odds ratios (OR) of the logistic regressions are shown in Table 5.

Adolescents having a low FAS score were more likely to have low life satisfaction and a low self-rated health status. They were also more likely to think about suicide. No significant relation was found between FAS score and self-harm.

Perceived family wealth

For perceived family wealth, the categories “(very) well off”, “average” and “not (at all) well off” were compared. Table 6 shows the percentages of the well-being indicators by perceived family wealth and the OR of the logistic regressions controlled for age and gender.

Adolescents with a low perceived family wealth were more likely to have low life satisfaction, a low self-rated health status and to think about suicide. Remarkably, adolescents in the low and high categories of perceived wealth were more likely to have damaged their body once or more.

Table 5

Well-being by FAS score (logistic regressions)

	High	Medium	Low
Life satisfaction low	36.2% (OR = 1)	42.4% (OR = 1.22)***	48.7% (OR = 1.49)***
Self-rated health low	15.1% (OR = 1)	18.2% (OR = 1.15)*	25.5% (OR = 1.66)***
Suicide ideation	38.2% (OR = 1)	41.5% (OR = 1.10)	46.2% (OR = 1.30)***
Self-harm	16.3% (OR = 1)	15.6% (OR = 0.97)	20.0% (OR = 1.20)

School variables

School climate was measured by students’ support (“students accept me as I am”), teacher support (“teachers show interest in me”) and perceptions of the school (“school is a nice place”). The relationships between mental health and SES by school climate are shown in Tables 7, 8 and 9. Percentages of poor mental health in pupils of low SES were higher when students did not get support from students and teachers and when they perceived the school as not being a nice place to be. In logistic regressions, the school climate variables all had a significant positive influence on mental health, even when controlled for SES, gender and age.

Table 6

Well-being by perceived family wealth (logistic regressions)

	High	Medium	Low
Life satisfaction low	31.0% (OR = 1)	41.4% (OR = 1.56)***	62.2% (OR = 3.50)***
Self-rated health low	13.9% (OR = 1)	17.7% (OR = 1.25)**	33.1% (OR = 2.75)***
Suicide ideation	40.1% (OR = 1)	39.2% (OR = 0.89)	56.7% (OR = 1.77)***
Self-harm	17.0% (OR = 1)	15.3% (OR = 0.74)*	24.7% (OR = 1.37)

Dissemination of the HBSC results

The results of the HBSC survey were presented to the Flemish Minister of Health, with tables and a discussion of the results made public through the web site of the study. The HBSC team answered specific questions from the cabinet minister and administration of the Flemish Community and wrote contributions for the Health indicators report, a publication of the Ministry of the Flemish Community.

Reports of each HBSC survey have been presented and discussed within the Commission of Health Promotion of the Flemish Educational Council. The principal investigator of the Flemish HBSC team is Chair of the Commission for Health Promotion of the Flemish Educational Council and a member of the Flemish Health Council. HBSC data have also fed into the work of various committees and media outlets to provide an evidence base for their outputs.

Table 7

Relationship between mental health and SES by student support

	Fair or poor health	Low life satisfaction	Suicide ideation	Self-harm
Student support	%	%	%	%
Low FAS	23.9	45.7	43.6	18.0
Medium FAS	17.1	41.0	40.0	15.6
High FAS	14.0	34.7	37.0	15.5
Not well off	31.9	59.4	53.8	23.3
Medium well off	16.3	39.8	37.8	14.6
Well off	13.2	29.4	38.9	16.6
No student support				
Low FAS	38.5	74.3	66.2	34.9
Medium FAS	30.8	59.3	57.6	15.9
High FAS	28.7	54.1	51.1	23.9
Not well off	40.3	79.8	73.8	32.6
Medium well off	34.1	61.1	54.8	23.1
Well off	20.4	48.9	51.3	19.1

Table 8

Relationship between mental health and SES by teacher support

	Fair or poor health	Low life satisfaction	Suicide ideation	Self-harm
Teacher support	%	%	%	%
Low FAS	23.6	45.9	43.5	17.6
Medium FAS	16.5	39.6	39.0	15.2
High FAS	13.5	33.8	35.8	16.0
Not well off	31.3	59.4	54.3	21.5
Medium well off	16.2	39.0	37.3	14.8
Well off	11.8	27.8	36.5	16.6
No teacher support				
Low FAS	33.5	61.7	56.1	28.2
Medium FAS	26.9	55.6	51.5	16.4
High FAS	23.9	48.6	48.6	17.5
Not well off	39.7	72.3	64.5	33.3
Medium well off	26.1	55.2	48.1	17.3
Well off	22.9	44.0	52.4	18.1

Summary of HBSC

Adolescents are an important target population for mental health promotion, as mental well-being has been shown to decrease with increasing age. Girls scored worse on mental health indicators than boys. Adolescents with low socioeconomic status (based on FAS and perceived family wealth) are more likely to have low life satisfaction, a low self-rated health status and a higher score on suicide ideation. School variables (especially acceptance of students) have a (modest) impact on the negative association between SES and mental well-being.

Table 9

Relationship between mental health and SES by perception of school

	Fair or poor health	Low life satisfaction	Suicide ideation	Self-harm
School is a nice place	%	%	%	%
Low FAS	23.3	46.3	43.0	18.2
Medium FAS	16.0	39.8	39.3	14.5
High FAS	13.4	33.3	36.0	15.4
Not well off	30.2	58.8	53.9	22.0
Medium well off	15.7	39.2	37.4	14.4
Well off	12.6	27.9	36.8	16.7
School is not a nice place				
Low FAS	33.8	58.7	57.0	25.0
Medium FAS	27.8	54.0	49.9	18.1
High FAS	23.8	50.4	47.8	19.2
Not well off	42.8	72.7	65.4	31.7
Medium well off	27.3	52.3	46.9	18.0
Well off	19.5	45.2	51.6	17.2

It can be concluded that mental health promotion programmes for the general school population are required. Equally important is the finding that student support, as part of a positive school climate, can have an impact on socioeconomic inequalities in mental health.

Social and policy context

The Flemish communities

Belgium is a federal state consisting of three communities (based on the three official languages – Dutch, French and German) and three Regions (Flemish Region, Walloon Region and Brussels–Capital Region). The communities have a parliament and a government. In addition to cultural matters, issues such as health, social services and education are responsibilities for the communities.

Health promotion in Flanders

Following the WHO Health for all strategy (1), five Flemish health targets aimed at decreasing smoking rates, enhancing nutrition habits, preventing infectious diseases, increasing breast cancer screening and decreasing accidents were adopted in 1998. In 2005, and following the *Mental Health Action Plan for Europe* (2), the Flemish Minister of Health formulated a sixth health target aimed at reducing the high rate of suicide in Flanders.

The decree for preventive health policy (21 November 2003) (3) stated that a health target and the strategies necessary to reach the target must be formulated in a health conference. After the health conference, the government and parliament would have to approve the health target and action plan. By this process, a broad social basis for the health target could be obtained.

The Ministry of Health has established 26 local health organizations (LOGOs) in Flanders and Brussels to help the government reach the health targets. Their task is the realization of the health targets in their specific region. LOGOs are networks of local partners, such as local authorities, schools, companies, health and other organizations, health insurance services and general practitioners. The Flemish Institute of Health Promotion gives support to the LOGOs.

Education in Flanders

Compulsory education starts when a child reaches the age of 6 and lasts 12 full school years. All children who reside in Belgium are subject to compulsory education, including children with a foreign nationality. Vulnerable groups of children are protected. Schools are not allowed to use the absence of a residence permit to refuse pupils access to their school. Children in this situation are eligible for subsidies from the government from the moment of enrolment. To guarantee the right to education, Flanders has made arrangements with the Federal Ministry of Home Affairs and the Federal Police on picking up illegal refugee children. A federal circular letter confirms that it is prohibited to pick up children of illegal migrants who are of school age at school during school hours.

Although nursery education is not compulsory, almost all children receive nursery education in Flanders (from the age of 2.5 years). The fact that children can go to school at this very early age is a special stimulus to children from deprived backgrounds. The results of the HBSC survey showed that children in lower SES situations are at particular risk of mental health problems, and that schools are able to reach these children and provide an environment that enhances mental health.

The Flemish Government recognized in the 1990s that school curricula will increasingly reflect dynamic interactions taking place in society at local and global levels. School policies and curricula are consequently becoming the subject of more and more debate. Decisions on what has to be taught in schools are taken in the parliament, based on scientific information. One of the challenges is to ensure that the whole community is involved and can support what is learned in schools.

Several pieces of legislation and instruments have been developed to help in attaining this goal. They are crucial in developing sustainable integration of health aspects in Flemish schools and in reaching vulnerable groups of children.

Instruments/facilities in the school system supporting sustainable implementation of a school mental health policy

The following policy instruments and facilities have been developed in accordance with the principles of the *WHO European strategy for child and adolescent health and development (4)*, which are: a life-course approach, equity, intersectoral action and participation.

Tackling inequalities: Act on Equal Opportunities in Education of 28 June 2002

The Flemish Government approved a strategic plan for an inclusive and coordinated minority policy in 1996. Within the education and training policy area, preference was given to policy measures that touched upon the very core of the education system and resulted in structural reform: an integrated regulation paying special attention to children from deprived backgrounds. This new regulation provides full opportunities for all children to learn and develop and to counter exclusion, social separation and discrimination.

The Act on Equal Opportunities in Education (5) stipulates the following.

- Each pupil has in principle the right to enrol in the school of his or her (parents') choice. Only in a strictly limited number of cases can a school refuse an enrolment or refer a newly enrolled pupil to another school. The governing body or school board has to justify the refusal or referral in writing. Local accountability is enhanced through local consultation platforms that have a mediating capacity. Pupils or parents who are of the opinion that they have been wrongfully refused enrolment can file a complaint with the pupil rights committee.
- The establishment of local consultation platforms, with a threefold task: to ensure the right of enrolment, act as an intermediary in case of conflicts, and cooperate in implementing a local policy on equal opportunities in education. The platform consists of different participants (including representatives of the target groups) involved at local level in the implementation of equal opportunities in education. All schools and guidance centres in the action zone of a local consultation platform are obliged to participate constructively in the consultation. Participating in and cooperating within a consultation platform is a condition for funding and subsidies.
- Provision of additional resources to enable schools to develop integrated support for deprived children. Support is given to schools with a large number of pupils who meet specific, mainly socioeconomic, indicators. Additional teaching periods or additional teaching hours per teacher are financed for these schools. Individual schools choose the goals they want to

achieve, determine the way they want to reach these goals and establish how self-evaluation will be realized in the course of the second school year.

The government provides additional staff in educational guidance services. These educational advisers support schools in carrying out the policy on equal opportunities in education. Both educational guidance services and central organizations with representatives in local consultation platforms get additional staff members and operating resources to support and monitor schools and activities within the local consultation platform.

The Act on Equal Opportunities in Education enables schools to create a learning environment that caters for the needs of all children. The schools can choose the priorities on which they want to focus based on the characteristics of their school population and can decide what support they need.

Several pilot projects have been started, with integration of the school in the local community as a priority area. These schools reach out to parents, open themselves to the local community and enhance social cohesion in the often disadvantaged neighbourhoods in which the schools are embedded. Supporting children of migrant parents is also a priority in many schools.

Cross-curricular themes in relation to health promotion (6,7)

Cross-curricular themes in the Flemish education system reflect a societal consensus on important goals for the schools and are based on a broad vision of what should be learned at school. Cross-curricular final objectives act as a kind of “safety net” for core objectives that are rarely if ever raised in the topics taught in schools. In secondary education, not a single subject completely covers all aspects of such themes. A cross-curricular approach is therefore required, setting objectives for the whole school.

The cross-curricular themes were developed by the Department of Educational Development of the Flemish Ministry of Education, supported by working parties with representatives of relevant organizations for the specific themes and scientists (the health promotion working party was chaired by the Principal Investigator of the Flemish HBSC survey). The cross-curricular themes were discussed and adopted by the Flemish Parliament. They include not only topics such as drug prevention, sexual education, nutrition and physical activity, but also social relations, emotional well-being and social cohesion.

Besides health promotion, other cross-curricular themes are also relevant for the health and well-being of pupils, such as social skills, citizenship, environmental education, learning to learn, creative education and technical education (for general education students). Schools can choose how to organize these topics within their school curriculum. There are no examinations for the students on these topics, but the cross-curricular themes are part of the evaluation of schools by the schools inspectorate.

Integration of all pupils

The following measures have been put in place to promote integration of all pupils.

- Special educational care: young people whose physical, psychological, social or intellectual development is hampered by a disability, or who have learning or behavioural difficulties, can temporarily or permanently access special assistance and education adapted to meet their needs. The aim is to integrate the pupil as far as possible in the education environment and in society by means of individually tailored education and teaching measures. Young people with a disability can also be admitted to a school for mainstream secondary education through the system of integrated education (8). They are supported by experts from special education.
- Framework for learning support: the Government of Flanders is currently discussing a memorandum concept, proposed by the Minister of Education, for the reorganization of compulsory education. This concept is a framework for tailor-made learning support for every child. The reason for this new concept is the increasing demand for learning support in schools for children with emotional and behavioural problems and who lack social skills. Schools and school teams have expressed the need to increase their competences to cope with these problems. There is also a demand to create more inclusive settings for children with specific learning disorders. The new framework offers possibilities for support and measures to address these problems.

“To your health”: a declaration of intent for an intersectoral strategic plan for school health promotion

The Flemish Government has set out an agreement to create a Flanders in which all people can live together on a basis of equality and active citizenship. The ultimate goal is to attain sufficient social cohesion in society to give individuals the best possible opportunities in their lives. Preventive health care is one of the tools to achieve this goal.

The ministers of education, health, youth and the Minister–President agreed on 26 January 2006 on a policy to stimulate the implementation of a health policy in all schools (9). Each school should have had a policy to enhance eating habits and physical activity of children and adolescents in place by September 2007. These first topics were chosen to reflect international and national interest in the prevention of obesity. In coming years, new topics such as mental health can be the focus.

The post of Flemish Health Coordinator was created to support schools to develop a health policy and the Commission on Health Promotion of the Flemish Educational Council was re-established to support the work of the Health Coordinator. The Commission includes representatives of all stakeholders in the school sector and experts in different areas of health promotion and is chaired by the Principal Investigator of the HBSC survey. The Coordinator and the Commission have developed a four-year strategy, “To your health” (10), which has been developed to empower schools to create their own health policy. Schools will also be supported by educational guidance centres that will give seminars throughout Flanders. New tools have made available at an informative web site (11) and a DVD with examples of good practice has been developed. Funding is provided by the Ministry of Education, while the health sector gives support by making expertise on health promotion available.

The participation of teachers, parents, pupils and external partners is central to the process of building a school health policy. Actions take place at class, school and environment levels. The structures that help this process are described in the participation decree.

Partners in the school health policy include pupil guidance centres, an existing service funded by the government to provide information, help and guidance for pupils, parents, teachers and school management teams. The pupil guidance centres monitor the welfare of pupils and play an important role in contacts between pupils, parents, the school and welfare and health institutions.

Pupil guidance centre advice is free of charge and is based on four important pillars: learning and studying; the school career; preventive health care; and social and emotional development. The pupil takes a central place in the process, and guidance is offered in an atmosphere of trust and dialogue. Supervision provided by the pupil guidance centres has a multidisciplinary character and focuses particularly on pupils with learning difficulties due to their social background and situation. In addition to officering medical examinations, pupil guidance centres are also responsible for preventive health care for young people.

Other key partners in the health policy are:

- educational guidance centres;
- umbrella organizations for parents and the Flemish umbrella organization of pupils;
- LOGOs and the Flemish Institute of Health Promotion;
- expert centres such as the Organization for Alcohol and other Drug Problems, SENSOA (the Flemish expert organization on sexual health and HIV) and the Red Cross; and
- executive organizations such as the Nutrition Information Centre and the Flemish Foundation of School Sport.

Financing arrangements are described in the declaration. The Minister of Health subsidizes partner organizations (such as the LOGOs and the Organization for Alcohol and other Drug Problems) who develop the methods that can be used in schools. The Minister of Education finances the costs of dissemination of information to stakeholders in the education sector. The Minister for Agriculture finances the costs of cooperation with the Nutrition Information Centre, and the Minister of Sports finances the costs linked with cooperation with the Flemish Foundation of School Sport and the focal point, Sports, Movement and Health. The Department of Education receives €150 000 yearly for the development of the action plan To your health. The application of this budget will be determined by the Commission on Health Promotion in consultation with the Administration of Health and the Administration of Support.

The Flemish health target on the prevention of suicide and depression

The target (12) is to reduce death by suicide by 8% in 2010 compared with 2000. Three subtargets were formulated:

1. a decrease in suicide attempts
2. a decrease in suicide ideation
3. a decrease in depression.

Although the target is formulated in terms of reducing risk factors, mental health promotion is also part of the action plan.

The new health target was prepared by a working group and discussed within a health conference (or consensus conference) in which representatives of all sectors and organizations involved participated, including representatives from the school sector. They discussed the evidence base for the new health target and the strategies and interventions identified to enhance mental health and to prevent future suicides. An action plan was developed and approved by the Flemish Government in January 2007.

The five strategies described in the action plan are:

1. improve the mental health of the individual and society
2. improve access to care by telephone
3. enhance the expertise of professional carers and optimize networking
4. reduce predisposing factors for suicide
5. give special attention to specific target groups.

The last item on the list has a focus (among others) on adolescents and the development of a mental health policy in schools.

The strategy was further developed by a working group consisting mainly of mental health and health promotion specialists, with no representatives from the school sector. This phase was taken forward within the health administration. A literature review revealed two effective approaches: a suicide-specific approach, and a global mental health approach. In a first exploratory meeting, the working group concluded that a global mental health strategy would be the better choice in the Flemish context.

The proposed action plan for schools has six components:

1. the implementation of a health promoting environment using an integrated approach; protocols on bullying (and cyber-bullying), violence in schools and substance use will be developed;
2. training of relevant stakeholders, including teachers, with special attention to the needs of young people who are homosexual, and information evenings and e-learning packages for parents;
3. an intervention strategy on suicide prevention (crisis and postvention) in cooperation with schools, school guidance centres and centres of mental health;
4. recognizing signals for early detection of pupils at risk in schools, in cooperation with guidance centres and centres of mental health;
5. activities promoting mental well-being of pupils in schools; and
6. counselling in schools and in school guidance centres, with adequate processes for referral to treatment.

The implementation of the mental health action plan for schools can build on the existing initiatives and structures identified above. Integrating implementation within existing structures makes best use of initiatives that support the mental health action plan, such as integrating mental health in the activities of the Act on Equal Opportunities in Education and the Special Care Act. This is an essential element in reaching the most vulnerable children and adolescents. The Commission on Health

Promotion of the Flemish Educational Council plays an important role in bringing the different stakeholders together, facilitating the discussion of ways of integrating mental health and the strategies identified in the action plan into existing initiatives and developing new initiatives to support the work of all involved.

There is no intention to have an isolated evaluation plan. Strategies identified in the mental health action plan for schools are already evidence based, and it would make little sense to try and evaluate an action plan that is intended to be integrated within a variety of existing structures in the school sector. The following activities and research will, however, make it possible to assess the impact of the mental health plan in the short and long term:

- the Health Coordinator of the Flemish Educational Council writes an annual report on the implementation of activities planned by the Commission for Health Promotion, suggesting measures to enhance implementation if necessary;
- the inspectorate of the Department of Education visits all schools subsidized by the government regularly, and implementation of the cross-curricular themes and school health policy is part of the inspection, with inspection reports being made public;
- the Flemish Institute for Health Promotion monitors the implementation of several aspects of the school health policy every three years (13);
- the HBSC survey, carried out every four years, monitors several aspects of the mental health of young people;
- the health interview survey monitors several aspects of mental health of adults; and
- mortality rates for suicide are a final instrument for evaluating the health target on suicide.

The declaration of intent of the ministers of education, welfare, health, youth and agriculture to implement a school health policy (9) has strong potential to promote evidence-based health promotion (including mental health) in Flemish schools. The development of a strategic plan for a health policy in schools (10), provision of a comprehensive framework for learning support and the creation of an intersectoral commission to advise, support and create tools for action provide a good start to the effort to achieve the final goal.

Lessons learned

Precondition: health and equity as elements of the education policy

Equity is not only an issue in health; it is also an issue in education and in other sectors of society. Societal challenges are often intertwined. Sectoral policies can support each other or can counteract each other. In Flanders, the education policy supports the health promotion policy in many ways, even in the absence of a truly intersectoral policy. Although the decree on preventive health care foresees the participation of other sectors in the development of health targets through the organization of health conferences, the development of health targets is not a truly intersectoral exercise.

Implementing a health policy in schools (in this case, a mental health policy) would be difficult in the absence of structures within the education sector that have the same final aim – the creation of a supportive society with equal opportunities for all children. In Flanders, the education system provides a framework in which all children, including the most vulnerable, can be reached with health initiatives.

Barriers: intersectoral work remains difficult

Even if opportunities to integrate mental health in school policy exist, recognizing and making use of them depends on individual people and the vision, capacity and willingness to take advantage of opportunities. Training can play an important role in developing the vision and skills needed for intersectoral work. At policy level, recognition of an overall responsibility for health and the willingness of the health sector to invest in other sectors are needed.

Health promotion (mental health promotion in particular) can only reach its objectives through the integration of health aspects in other policies; this is the strength, but also the weakness, of health promotion. Leadership in this context is often problematic.

Intersectoral committees are often dominated by the health sector (as in this case study, in which the health conference was the instrument used to foster discussion on the integration of mental health considerations across other sectors). The dominant position of the health sector hinders representatives of other sectors from making a full impact on decision-making, leading to frustration and withdrawal. Ways to encourage the participation of other sectors in the decision-making process within the health conference must be sought. A more stepwise process could be helpful, building from a first step of developing a common vision about actions to be implemented.

As problematic (especially from a political point of view) is the health sector's ability to provide support and financial resources for initiatives in other sectors. Representatives of the health sector were members on a voluntary basis of the Commission for Health Promotion of the Flemish Educational Council. The functioning of the Commission depends to an extent on the willingness of health experts to listen, discuss and accept consensus.

The Commission for School Health Promotion has survived by adapting to political reality and taking opportunities when they arise. Launched more than 15 years ago to guide the implementation of health education packages initiated by the Minister of Health in schools, it is now the advisory commission on school health policy of the Flemish Educational Council and is financially supported by the Flemish Minister of Education. Efforts to agree a co-financing arrangement between health and education have as yet been unfruitful, and attempts to align the Commission to a more "neutral" body have not been successful.

In addition to structural problems, the lack of "hard" evidence for the effectiveness of intersectoral mental health promotion hinders important investment in intersectoral work. Developing a vision and a methodology to evaluate this type of intervention is an urgent priority.

Although representatives of pupils are members of the Commission on Health Promotion, their impact on the work of the Commission is minimal, as health is not a priority action point of student school committees. The impact of the student committees within the schools is more important, but more initiatives to engage students in the work of the Commission are required.

A recent education inspectorate report (14) on the state of health promotion (one of the cross-curricular themes) and health policies in schools provided some important recommendations. One of these was that schools need support to develop a school policy that includes health promotion, rather than support with ad hoc actions and themes.

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Finland: innovative health education curriculum and other investments for promoting mental health and social cohesion among children and young people

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Executive summary

Finland is a Nordic welfare state. The health system is designed to provide universal coverage and equal access to health care services for everybody. Finland's public health policy is widely known as having been particularly successful in reducing coronary heart disease mortality through a multisectoral approach. Extensive health monitoring systems developed systematically from the 1970s demonstrate that Finland's population is healthier than ever and that the population health is improving continuously, but economic, social and cultural developments and the effects of globalization are challenging traditional ways of life and welfare structures. As in many countries, health inequalities are on the rise in Finland.

In this context, young people's health has been debated vigorously. Sources of concern include young people's risky health behaviours and an increase in mental health problems among (and marginalization of) children and young people. Results from the HBSC survey revealed that there is also a pattern of gradually increasing gender differences, with girls at comparatively higher risk for low self-rated health status and more recurrent subjective health complaints.

According to recent studies of the Programme for International Student Assessment (PISA) of the Organisation for Economic Co-operation and Development (OECD), Finnish students demonstrate the highest performance across all the OECD countries. Results from the HBSC survey, however, indicated that school satisfaction among Finnish students has been far from high. These contradictory notions relating to Finnish schoolchildren's school competence and health emphasize the need to consider more carefully the well-being of children and young people within the school context.

School is the health promotion setting in the Finnish case study. The aims of the study are, firstly, to explore public organization initiatives, actions and resolutions directed at promoting young people's health, mental well-being and social cohesion. The Ministry of Education, the National Board of Education, the Ministry of Social Affairs and Health and the National Research and Development Centre for Welfare and Health have launched several comprehensive initiatives to promote the health and well-being of children and adolescents in their everyday life contexts.

Secondly, some actions taken by NGOs are briefly described to enhance well-being and health learning at schools. There is extensive collaboration with NGOs in the field of health promotion, especially in promoting mental health among young people.

As background to the case study, the current social situation in Finland and results of recent health research on adolescents are described. There are good descriptions of the health care system elsewhere (such as the WHO country profile), so the description of structural determinants focuses on the education system.

Important interventions concerning health (especially mental health) include the creation of favourable circumstances for social cohesion among young people through the new National Core Curriculum (National Board of Education), Quality Recommendations for School Health Care (Ministry of Social Affairs and Health) and the strategy for school well-being (Ministry of Education). Intersectoral cooperation on these specific policy interventions, which have been complemented by activity in the nongovernmental sector, is an important prerequisite for successful health promotion.

Mental health and well-being status among adolescents in Finland

Surveillance of the health of Finnish young people is based on three different repeated studies. The adolescent health and lifestyle survey (1) (nationally representative samples of 12-, 14-, 16- and 18-year-old Finns repeated biennially since 1977) is performed by the University of Tampere. The HBSC study (2) started in 1984 with the aim of investigating the health and health behaviours of 11-, 13- and 15-year-olds within their daily social contexts. The Development Centre for Welfare and Health, in cooperation with the University of Jyväskylä, has been running the school health promotion study (3) since 1995. This is a service available to and used by municipalities which covers 50% of municipalities one year and the other half the following year. The study is particularly useful for participating municipalities and schools as it gives them direct feedback based on data gathered from basic education (from 14- to 16-year-olds) and from upper secondary schools (from 16- to 18-year-olds). In addition, the National Public Health Institute started monitoring the health of children below 12 years in 2007, based on information gathered in child health clinics. The new Department of Child and Adolescent Health supports the maternity and child health care system and school health care service.

Results from the HBSC study

The majority of children and adolescents taking part in Finnish HBSC surveys between 1984 and 2002 reported positive assessments of their self-rated health. Despite the fact that boys considered their health to be “excellent” or “good” more frequently than girls, a number of symptoms were quite commonly reported by adolescents during the entire period of the study. Older schoolchildren reported recurrent health complaints more commonly than younger ones. Gender differences were more pronounced in the older age groups, with 15-year-old girls reporting symptoms more often than boys. Experiencing multiple subjective health complaints weekly became more common from 1984 to 2002, particularly with girls in the oldest age group. Perceived good economic family wealth and adolescents’ orientations towards higher education after compulsory school were positively associated with fewer perceived symptoms. Good social relationships with parents and friends were also associated with positive assessments of health (4).

HBSC data from 2006 revealed that the quality of life of Finnish 11–15-year-old boys and girls was good. Very high percentages of young people placed themselves clearly above the mid-point of the Cantril ladder (scores > 6), with 93% of boys and 90% of girls indicating high satisfaction. Among 15-year-olds, 15% of girls and 8% of boys placed themselves below the mid-point of the ladder.

A large majority of Finnish 11–15-year-olds (91% of boys and 88% of girls) reported their self-rated health as “excellent” or “good”. The amount of boys and girls rating their health as “fair” or “poor” increased with greater age, with 12% of 15-year-old boys and 15% of girls reporting having “fair” or “poor” health. Seventeen per cent of 11–15-year-old boys and thirty per cent of girls reported that they had symptoms indicating depressed mood approximately every week during the six months preceding the survey. Almost 10% of girls reported depressed mood about every day during the previous six months. Recurrent subjective health complaints were associated with students’ reports of school-related stress, perceived psychosocial school environment index (student autonomy, student support, teacher support, demands concerning school work), being a victim of bullying and feeling lonely (Table 1).

The quality of school life is vital for the health of children and young people. The Ministry of Education, in cooperation with the Centre of Learning Research at the Department of Psychology, University of Turku, has launched a project which aims to reduce and prevent bullying in basic education in grades 1–9 (5).

Results from other Finnish adolescent health studies

Self-rated health and subjective health complaints

Karvonen et al. (6) studied the common health complaints of 14- and 15-year-old Finnish pupils (n = 60 347) using data from the School Health Promotion Study in 1996, 1998 and 2000. Common health complaints increased steadily during the follow up for all schools, and varied across schools. Most of the variation was explained by individual pupils’ health-related, school-related and family-related characteristics. Health complaints were common among those adolescents whose parents were not familiar with their friends and who rarely discussed matters of concern with them. Complaints also increased when

Table 1

Percentage of children reporting three or more subjective health complaints about once a week or more often

	Boys			Girls		
	11 years	13 years	15 years	11 years	13 years	15 years
Feeling lonely						
Often	68.5%	70.5%	84.6%	76.9%	81.2%	86%
Sometimes/No	26.5%	36.1%	42.0%	34.0%	48.4%	50.9%
P	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perceived psychosocial school environment index						
Negative	37.3%	48.8%	53%	61.4%	72.5%	70.8%
Moderate	32.4%	37.2%	36.8%	41.9%	56.5%	50.9%
Good	22.3%	26.3%	38.8%	30.6%	39.4%	42.9%
P	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perceived school stress						
A lot	58.6%	67.1%	77.8%	75.9%	83.6 %	79.8%
Some/Not at all	26.8%	35.1%	41.5%	36.7%	50.9%	54.1%
P	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
A victim of bullying during the past couple of months						
Yes, at least two times	53.2%	65.1%	74.5%	60.0%	69.3%	76.3%
No	26.0%	35.7%	43.9%	36.9%	52.0%	56.2%
P	<0.001	<0.001	<0.001	<0.001	<0.004	<0.010
N	884	845	781	960	890	889

adolescents perceived that the amount of school work they had to complete was increasing, even after controlling for other school-related factors such as poor class atmosphere, bad relationships with teachers and bullying. Interestingly, the study showed that those who performed well at school appeared to be particularly vulnerable to poor health.

Although some school-level factors, such as teacher–student relationships and the average of school marks, were related to pupils’ health complaints, they did not contribute to explaining the increase in health complaints. This was partially explained by increased smoking and alcohol use among pupils, but most of the trend remained unexplained. The study suggests that young people’s psychosocial health involves a range of influences derived from individual susceptibility and from the social and educational functioning of schools. None of these factors alone, however, can account for the rapid decrease in young people’s psychosocial health (6).

Depression

In a longitudinal study of an urban community cohort, Pelkonen et al. (7) found that symptoms of distress in mid-adolescence (16 years) were a risk factor for later depression in males and females at the age of 22. Thirteen per cent of the females and nine per cent of the males had depression in young adulthood. Baseline distress symptoms, low self-esteem, dissatisfaction with academic achievement, problems with the police, poor atmosphere at home and having no close friends were predictive of subsequent depression. Risk factors for males included more “externalizing” aspects, and for females more “internalizing” factors. Adolescents’ recurrent symptoms have to be taken seriously, as self-reported perceptions of psychological well-being have predictive value. Strengthening self-esteem and improving academic achievement seem to be essential preventive measures for depression-prone adolescents (7).

Health inequalities

Higher rates of health complaints have been observed among adults from lower socioeconomic groups (8,9). Health selection has been considered as one of the processes through which social class differences in health are created (10). The basis of health selection is that an individual's health status is one of the factors influencing their chances of upward or downward social mobility. Alternatively, the social causation hypothesis explains socioeconomic health differences through the experience of adversity and stressors in low social status groups versus more favourable experiences in higher groups (9).

Hurre et al. (11) studied socioeconomic status as a cause and consequence of psychosomatic symptoms in a follow-up study of Finnish schoolchildren. The aim of the study was to investigate whether lower socioeconomic status led to higher levels of symptoms (social causation), or whether higher levels of symptoms led to lower socioeconomic status (health selection), or both. All ninth graders (aged 16 years) of one Finnish city completed questionnaires at school. Subjects were followed up using postal questionnaires when aged 22 and 32 years.

The researchers noticed a female excess of psychosomatic symptoms both in adolescence and adulthood. Higher rates of symptoms were found among:

- females of manual class origin at 16 years
- females and males with only comprehensive school education at 22 years
- those who worked in manual jobs at 32 years.

The findings supported both proposed paths: lower SES as cause and consequence among females, and a tendency towards health selection among males. Class-based differences in psychosomatic symptoms were more marked in early adulthood and adulthood than in adolescence. In adolescence, they were seen only among females (11).

Social and policy context

Work on protecting and improving the health of children and young people is widespread in Finland, involving a broad range of multidisciplinary agencies in different sectors of Finnish society. In this case study, the focus is on activities that are linked to school well-being and the development and implementation of the new National Core Curriculum and health teaching.

The comprehensive education system, which covers the entire population, is a pillar of Finland's social and economic development. Young people grow up in school by developing a concept of themselves as individuals as well as members of social groups and society.

Children's and young people's health has been a priority in Finland for many years. The country introduced child health clinics in the 1940s, which was early in comparison to other nations. The primary focus was on nutrition, growth and physical development, early identification of pathologies and immunization.

The system of child health clinics has been developed from the 1950s as part of the expanding welfare state. Today, almost all Finnish families use the services of child health clinics, evidenced by the high take-up of the national immunization programme (97% in 2001 (12)). The legal basis of the service, delivered relatively independently by the municipalities, has been secured by re-adjusting and strengthening legislation along the years (Primary Health Care Act). A comprehensive guideline for the service was published in 2004 (13). The child health clinics were followed by the establishment of maternity health clinics and a school health service, for which national authorities have also published guidelines (14,15). The country has been covered by preventive social and health services since the 1950s. These have come under scrutiny when concerns over the well-being of adolescents have been raised. Social security benefits for families with children and for adolescents themselves have also been scrutinized (16).

Finland experienced an extremely severe economic recession in the early 1990s, resulting in a simultaneous drop in the GDP and rise in unemployment. At the same time, power over the delivery of health, school and social services, including health promotion, was devolved to the local level, which consists of more than 400 municipalities whose populations range from some

hundreds up to 600 000 inhabitants. Resources for maternal and child health care, psychosocial services for children and school health were on average reduced by 15%. The devolution policy has resulted in local variations in the physical characteristics of schools, their social functioning and operational culture, reflecting significant differences in policy direction among the municipalities (17). It has been suggested that these changes have led to a worsening of young people's health (6).

The Finnish economy has recovered over the last decade, with Finland now being rated among the most competitive economies in the world and unemployment rates falling. The growing economy, which is tied to global economics, has brought changes in people's working lives. Long-term employment seems increasingly to have been replaced by short-term contracting, and work is generally felt to be more challenging than in previous eras. People find difficulties in combining work and family life, which has been suggested as a possible influence for the increase in ill health seen among children and young people.

Promoting the mental health of families and children in primary health care

Ongoing research and development programmes aim to enhance the mental health of families, children and young people. Child health clinics support early interaction between children and parents, and special attention has been paid to the prevention of mental health problems among children of mentally ill parents. Mental disorders and other severe illnesses in parents represent a risk to children's development. Children in such families are at higher risk of developing mental disorders both in childhood and as adults. These families can be helped, however, and disorders in children can be prevented. Provision is made under the Child Welfare Act and the Act on Welfare for Substance Abusers for the child's need for care and support to be met if the parent has mental or substance misuse problems.

The Effective Family project (18) aims to provide service delivery systems to support families and children when a parent has mental health problems, a severe somatic illness or other issue that makes it more difficult to cope with the responsibilities of parenthood. The Effective Family project has developed training packages and ways of embedding the method in practice, and has also carried out research involving international cooperation.

The education system

The Finnish education system is composed of:

- a nine-year basic education (comprehensive school)
- upper secondary education, consisting of vocational and general education
- higher education, provided by universities and polytechnics (see Fig.1).

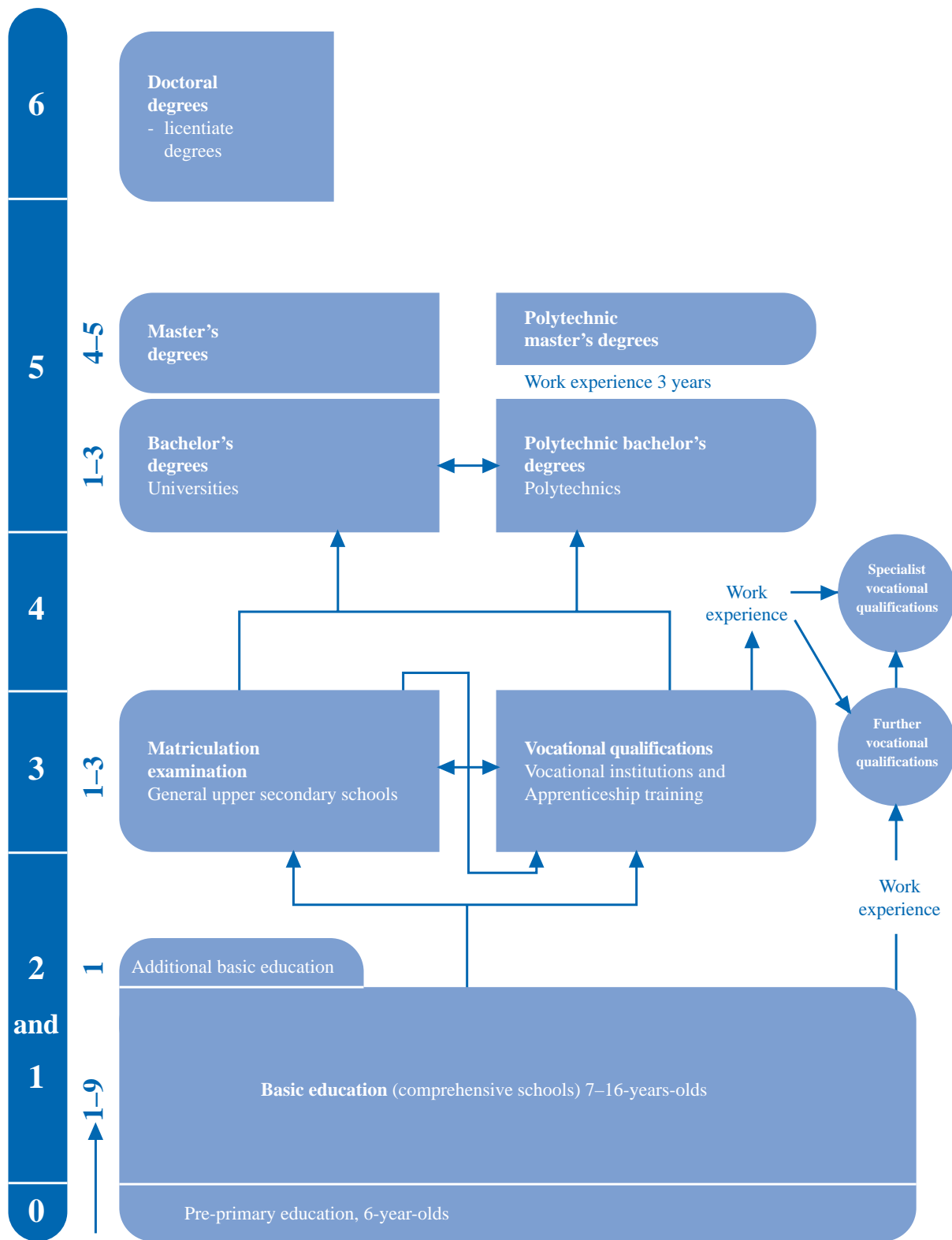
The main aim of the Finnish education system is to ensure that the entire population has access to education and training. The Finnish school system does not have any preschools, but preschool teaching (education during the year before children start comprehensive school) is provided at schools and day-care centres with the aim of improving children's capacity for learning. In practice, children are taught new facts and new skills through play. Legislation requires all municipalities to provide preschool teaching free of charge to all children aged six, but participation in such teaching is voluntary. Most 6-year-olds now go to preschool.

Compulsory education in Finland starts with comprehensive school, which generally commences in the year children turn age seven. Comprehensive school lasts for nine years and ends once a young person has completed the curriculum of the comprehensive school or when ten years have passed since the start of their compulsory education.

Everyone in Finland has the right to free basic education, including access to necessary equipment and textbooks, school transportation and adequate free meals. Post-compulsory education is also free. This means there are no tuition fees in general and vocational upper secondary education, in polytechnics or in universities. Students pay for their textbooks, travel and meals in polytechnics and universities, but school meals are free and students can get subsidies for school travel in general and vocational upper secondary education. Modest fees can be charged to students in continuing vocational education and in adult education. The Ministry of Education allocates government grants for basic, upper secondary, vocational, polytechnic and university education, with co-financing from local authorities. Universities, continuing vocational and professional education and adult education are state funded.

Fig. 1

The Finnish education system (19)



Duration
in years

- International Standard Classification of Education (ISCED)
- 0 Pre-primary education
 - 1 Primary education or first stage of basic education
 - 2 Lower secondary or second stage of basic education
 - 3 (Upper) secondary education
 - 4 Post-secondary non-tertiary education
 - 5 First cycle of tertiary education
 - 6 Second cycle of tertiary education

The Finnish Parliament makes decisions about the subjects taught in general education schools. The Basic Education Act, the General Upper Secondary School Act, the Act for Vocational Education and the Governmental Decree on the General National Objectives and Distribution of Lesson Hours, as well as the National Core Curriculum, provide the underpinning values, strategies and guidance from which municipalities construct their own curricula.

Education during the first six years is provided by the class teacher, who teaches all or most subjects, but each subject is usually taught by a specialist subject teacher during the last three years of comprehensive schooling. In general, local authorities are responsible for providing basic education. Local authorities assign pupils a place in a local school, but pupils are free to enrol in another school if it has places available. In addition to public schools, there are also a few private schools, which are funded by public authorities and follow the same national curricula as public schools.

Policy and intervention

The underpinning values of the Finnish education system are about supporting equality and human rights. Education promotes responsibility, a sense of community and respect for the rights and freedoms of the individual (20–22). Schools are excellent places in which to promote children's and adolescents' health and well-being. Schools' responsibilities in educating children and promoting well-being are regulated by legislation in the Basic Education Act, which stipulates the following:

- education must be provided in accordance with the age and development level of the pupils/students, and in such a manner that it supports healthy growth and development of the child;
- the school must cooperate with pupils' homes; and
- the pupil has a right to a safe learning environment and student welfare.

Pupil/student welfare is the responsibility of all those working in school and in student welfare services (school nurse, school doctor, school counsellor, school psychologist) and is implemented in cooperation with families. Student welfare refers to the promotion and maintenance of good learning, good mental and physical health and good social well-being of students. It includes:

- student welfare in accordance with the curriculum approved by the provider of education and student welfare services, which is part of the school health care referred to in the Primary Health Care Act (school health nurses and doctors); and
- support for upbringing referred to in the Child Welfare Act (school social workers and school psychologists).

In general and vocational upper secondary education, the education provider shall ensure that students are given information about health and social services and that they are guided to seek these services (23).

The obligation of taking a cooperative stance set out in school legislation is strengthened by the Primary Health Care Act (which came into force in July 2007). The headteacher is recognized as the pedagogical leader of the school, which includes a responsibility for matters of student welfare. He or she is also responsible for the functioning of the student welfare group, which is the key multidisciplinary cooperation group in the school working on pupil/student welfare.

The National Core Curriculum is the framework on which local curricula are formulated. Education authorities within the municipalities take responsibility for developing and preparing local curricula. The local curriculum sets out the educational and teaching elements, the objectives and contents specified in the national curriculum and other factors bearing on the provision of education. The education authority can delegate preparation of the local curriculum (or parts of it) to the schools, but is still responsible for ensuring the curriculum is acceptable and complies with the National Core Curriculum.

Cooperation among student welfare services, families and social and health authorities is present at national, municipal and school level. Curricular elements dealing with pupil/student welfare are prepared in collaboration with personnel from social and health services. In practice, this usually means cooperation with school municipal health authorities and school health nurses, the school social counsellor and the school psychologist.

The following examples depict the kinds of content areas addressed in relation to key principles of pupil welfare services that may impact on mental well-being and social cohesion in schools:

- activities to promote health, well-being, security, social responsibility and interaction in the school community;
- general pupil welfare support, guidance and counselling in schooling, and in support of the child's or young person's physical, psychological and social development;
- cooperation of pupil welfare personnel with families, school, pupil welfare experts and other experts, and local support networks;
- measures and division of labour and responsibility aimed at the prevention, observation or care of the following problem and crisis situations: monitoring of absences; bullying, violence and harassment; mental health issues; smoking and the use of intoxicants; and various accidents, misfortunes, and deaths;
- implementation of general safety objectives for transport to and from school;
- objectives for health and nutrition education and observing proper conduct in relation to eating meals in school; and
- curricular activities to promote pupils' mental health.

Legislation and resolutions provide schools with positive potential to effectively promote mental health and social cohesion among all children and young people, and to target vulnerable or at-risk groups.

Supporting the growth, development and learning of children and young people is the most important task homes and schools have in common. All schools and education institutions must set down the principles of cooperation between homes and schools as a part of the local curriculum. This calls on teachers to initiate activity and interaction with parents and for a clear definition of the role of parents, teachers and students within the terms of the principles of cooperation. Parents must be able to acquaint themselves with the operating culture of the school and have a say (and be heard) when education objectives are being discussed. This can be implemented in practice by involving parents and giving them the opportunity to express their opinions on the local curriculum. The equality of all the parties involved must be the starting-point of cooperation between home and schools (23).

The new National Core Curriculum – a tool for promoting mental health and social cohesion

The school curriculum provides an interesting reflection of the cultural development of a country. It reflects the current status of national education and its value base. Health learning and health literacy are considered as basic rights of children and young people, yet health education in Finland was not recognized as an autonomous and official school subject until this millennium (24,25), when laws amending the Basic Education Act (453/2001) and the General Upper Secondary School Education Act (454/2001) introduced health education as an independent subject. The National Core Curriculum for Upper Secondary Schools was adopted in 2003 and came into force in 2005. The National Core Curriculum for Basic Education was adopted in 2004 and took effect gradually in grades 1–9, with instruction in all grades completed by 1 August 2006.

Instruction may be separated into subjects or integrated issues both in basic education and in upper secondary education. The objective of integrating instruction is to guide pupils in examining phenomena from different perspectives or fields of knowledge. In formulating the curriculum, cross-curricular themes must be included in the core and optional subjects and in joint events such as assemblies, and must be manifested in the school's operational culture. Health promotion is well represented within cross-cultural themes. In basic education, they are: growth as a person; cultural identity and internationalism; media skills and communication; participatory citizenship; responsibility for the environment, well-being and a sustainable future; and safety and traffic. In secondary education, the cross-curricular themes are: active citizenship; safety and well-being; sustainable development; cultural identity and knowledge of cultures; technology and society; and communication and media competence.

In basic education (forms 1–9), the foundation of health teaching is to understand health as physical, psychological and social capability. Health teaching is based on a multidisciplinary foundation of knowledge. The intention is to promote pupils' competence regarding health, well-being and safety. The task is to develop pupils' cognitive, social, functional and ethical capabilities and their capabilities for regulating emotions. The health subject is pupil centred and supports functionality and inclusion. Teaching must be based on children's and young people's everyday lives, their growth and developmental needs and the course of human life. It aims to develop important skills related to the acquisition and application of information and

to promoting critical reflection on the values of health and well-being (20).

Health education is integrated into environmental and natural studies in grades 1–4; in grades 5–6, it is integrated into biology/geography and into physics/chemistry. In grades 7–9, health education is an autonomous subject with 3 courses and 38 school lessons of 45 minutes each. The main themes of health education are: growth and development; health in everyday choices; resources and coping skills; and, health, society and culture. Mental health and socioemotional skills are important contents of teaching for 13–16-year-old students. As an example, the curriculum states that the main content areas in “Resources and coping skills” are: health, working skills, and functional abilities as a resource; personal resources; emotions and their expression, social support and safety nets (social networks); interaction skills; and changes related to human development and lifespan, crises and coping with them.

Upper secondary schools and vocational education

Health teaching moves continuously from preschool to upper secondary schooling. In upper secondary schools, health is defined in terms of physical, mental and social working and functional abilities. Health education as a school subject examines phenomena relating to health and diseases by means of scientific and empirical knowledge, but also considers values in relation to health. There is one compulsory course, “Foundations of health”, and two specialization courses, “Young people, health and everyday life” and “Health and research”. Students taking the compulsory course familiarize themselves with factors influencing health and diseases from the perspectives of prevention and promotion of working and functional abilities. Another important theme is the development of self-care skills.

The first specialization course elaborates on the objectives of the compulsory course in relation to people’s everyday health habits and means of coping. Students also reflect on their perceptions of themselves and other people on physical, mental and social levels. Important themes concerning mental health literature include: self-knowledge, growing up, the significance of social support in families and local communities, joy of life, maintenance of mental health and mental and physical resources, facing depression and crisis, physical and mental safety, non-violent communication, and sexual health (21).

Students could include health education in their matriculation examination for the first time in 2007, with test items also containing questions concerning mental health literature. The Matriculation Examination Board is responsible for administering the examination. The Ministry of Education nominates the chair of the board and its members (about 40 in number; the person responsible for health education is Professor Lasse Kannas). The curriculum for vocational education includes one course of health education which focuses on public health issues, occupational health, functional capacity and self-care skills (22).

The Ottawa Charter identifies the fundamental conditions and resources for health and emphasizes a commitment to diminishing inequalities (26). Health can be influenced by policies of other sectors and, in turn, has important effects on the realization of the goals of other sectors, such as education (27). The principles of the Ottawa Charter and the *Mental Health Action Plan for Europe* (28), as well as the spirit of the EU Green Paper on improving mental health (29), are apparent in the contents, objectives and strategies in the new National Core Curriculum, which strengthens mental health literacy including socioemotional skills. These aspects are also taken into account in teacher training programmes for health education teachers.

Health education teacher training

Teachers have an important role in decisions concerning the running of schools in Finland. The PISA survey shows that Finnish teachers are responsible in many more instances than the OECD average for teaching content, choice of textbooks, discipline and assessment policies, school budgets and the distribution of resources. The unusually high potential for Finnish teachers to wield influence is a reflection of their university-level Master’s training and their substantially high social status. An international comparison shows that respect for Finnish teachers is high. But the major challenges in teaching today require a more community-minded approach on the part of both teachers and schools (30).

The Department of Health Sciences in the University of Jyväskylä has a long tradition of teaching health sciences for future teachers (mainly physical education teachers). When health education became an autonomous school subject, the qualifications for health education teachers in forms 7–9 in basic education and for teachers in upper secondary schools changed. After a transition period (to 2010/2011), health education teachers will need 60 credits in health sciences (school health education).

The Department of Health Sciences started the first new course (including study modules on mental health) for subject teachers in 2002, funded by the Finnish National Board of Education. Training programmes and shorter courses (five or eight credit points) have been organized for teachers in service by some universities and open universities (Jyväskylä, Turku, Oulu and Kuopio). Virtual learning environments have also been utilized by open universities of Jyväskylä, Oulu and Kuopio to assure regional equality in teacher training.

The production of materials for teachers is an integral part of the development of the new school subject. The Finnish National Board of Education and the Research Centre for Health Promotion at the University of Jyväskylä have published supplementary materials for teachers aimed at improving their knowledge and skills to teach topics on mental health and socioemotional skills (31,32). Pupils and students in basic and secondary schools have received new textbooks which cover the themes of mental health and socioemotional skills. In addition, results from the HBSC study have been used widely in pupil/student materials.

Research supporting health teaching and teacher training

Research is an essential part of developing teacher training and the new school subject of health education. Quantitative and qualitative research projects are in progress to study the perceptions, teaching methods, knowledge, skills and attitudes of pupils, students and teachers and the resource allocation and operational cultures in schools.

The Research Centre for Health Promotion at the University of Jyväskylä, in cooperation with the Finnish National Board of Education, collected data in 2007 from health education teachers, pupils and students on their opinions and experiences of health education. The study is part of the assessment and development of the new school subject and also contributes to the development of the current teacher training programme. Implementation of health teaching is also being studied by videotaping lessons and interviewing students (in focus groups) and teachers.

The HBSC study is a vital tool in research because it covers health and school variables to produce a comprehensive picture of school-aged children's experiences. The HBSC questionnaire included particular questions on health teaching, with complementary and comparable data available from the School Health Promotion Study.

Health literacy, the key desired outcome of health teaching, is a relatively new research focus in school health teaching as well as in health promotion (33,34). The role of basic education for health literacy and public health is crucial in health promotion (35,36), but relatively little evaluative research has been done on school health education in Finland (37). Pilot data on health literacy have been collected, but the challenge is to start new innovative research projects to evaluate health literacy (including mental health literacy) of adolescents and the impact of health education lessons on knowledge, attitudes and skills in schools.

The National Research and Development Centre for Welfare and Health gathers information on health promotion activities in municipalities, including those taking place in the school context. Information gathering on the school context is planned by the Finnish National Board of Education and the Research Centre for Health Promotion at the University of Jyväskylä. These data make it possible to monitor, for instance, cooperation in curriculum processes and in school welfare, as well as the implementation of health education.

NGO investments for mental health promotion in Finnish schools

This section describes select collaborative initiatives with nongovernmental organizations in the field of health promotion, especially in relation to promoting mental health among young people.

The Finnish Centre for Health Promotion

The Finnish Centre for Health Promotion (38) aims to increase the functionality of communities and the potential of individuals to manage their everyday life by enabling health-supporting choices to increase equality between various population groups. This goal requires society to adopt health promotion as an integral part of social policy. The centre works in collaboration with partners in various related fields, including schools. It has 124 members representing organizations in the health care sector and other communities.

The School Health Programme is a national project which continues the work with the European Network of Health Promoting Schools (ENHPS) in Finland. The project supports health promotion teams in their work, promotes student participation and increases cooperation with pupils' families.

The Finnish Association for Mental Health: pupils and teacher as learners of mental health

The Finnish Association for Mental Health (39) started a four-year project in 2006 which aims to improve the positive mental health skills of young adolescents in basic education (grades 7–9). The project has been planned and executed in close cooperation with the Finnish National Board of Education. The message of the project is that there are numerous ways in which personal mental health can be maintained and improved. The subject is approached from the “well-being of the mind” standpoint instead of the “mental health” point of view in an attempt to change attitudes from negative to positive. The project has three main objectives:

1. to devise a comprehensive school course that is taught within the health education school lessons during a three-year period (This study package includes information on how to support and maintain personal mental health, starting from the basics, such as nutrition, rest, exercise, personal relationships, family and friends and hobbies. The pilot study includes three schools with about 500 students.);
2. to support teachers' educational skills on the subject; and
3. to include parents in the project by developing cooperation between schools and parents. Long-term cooperation between schools and families during the hectic adolescent years is a valuable resource for young people.

Evaluation and research are built into the project.

Parents' associations

The role of parents' associations is important. There are two nongovernmental associations representing Finnish parents operating at both national and local level. The two central parents' associations in Finland are the Finnish Parents' Association, which has 1100 local parents' associations with 200 000 parents engaged, and the Home and School Association in Finland, which represents parents whose children attend Swedish-speaking schools in Finland, with 193 local parent associations and about 55 000 parents engaged.

The common goal of parents' associations is to combine parents' resources to build a good learning and growing environment for all children and young people. The associations strive to influence national opinion and decisions and work in cooperation with education, social and health institutions at national and local level. The most important forms of activity for the associations are supporting the upbringing of children and young people, informing and exerting influence, advising, providing education seminars and running the so-called Parental Parliament, where parents gather once a year to discuss current issues of social relevance (40).

Lessons learned

The development of the National Core Curriculum and associated activities has involved a long process of advocating, lobbying and negotiating with different levels and sectors of society. There are still challenges to be met, such as developing teaching methods to meet pupils' health learning needs and learning styles, developing health education textbooks and teaching materials for schools and for teacher training, and assuring finance for health education teacher training.

Important changes in the National Core Curriculum include:

- the role of municipalities, schools and teachers
- the unity and coherence of the comprehensive school
- the role of home–school relations and cooperation between schools and other authorities or partners
- the importance of school culture and learning environment

- the role of individual support in learning
- special needs education
- pupil welfare services
- interactive ways of drawing up the curriculum.

On the whole, a holistic view of health and learning enables and fosters long-term investment and the development of the school as a health-promoting setting. Adolescents' own experiences of health should form an integral part of any health education and health promotion that is directed at them. Research results indicate that everyday support and help received from adolescents' immediate social circle was of particular significance to their health (41). Other important factors that have facilitated the development of comprehensive school reforms are:

- management by national goals in legislation and in the national core curriculum
- strong autonomy of municipal authorities as providers of education
- good and flexible interaction between national, municipal and school levels
- teachers' expertise in curriculum development at all levels
- the curriculum being seen as a process that has a central role in school improvement.

Important resources in the promotion of mental well-being and social cohesion among Finnish schoolchildren include, firstly, the role of universities in teacher training. Combining research and practice is a strength in Finnish teacher education along with international cooperation in the fields of educational and health research. Secondly, the value basis of Finnish education is based on equality. In mental health promotion, it is important to offer necessary knowledge and skills to all children and young people and to foster awareness of the importance of mental health. It is also necessary to monitor the situation and to develop research on health literacy and on school as a social context.

Health education as a new school subject, and mental health-related learning goals at the core of the health education curriculum, have an important role in improving schoolchildren's mental health literacy. New school and public health legislation has also strengthened the potential to support and promote mental health and social cohesion in Finnish schools. On the whole, the very important prerequisite for mental health is that the schools can promote mental health in their everyday life and function as mental health promoting settings.

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Germany: adolescent mental well-being – current status and promotion and prevention initiatives

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Executive summary

This case study focuses on the promotion of mental well-being in adolescents in Germany by means of empowerment, strengthening life skills and healthy behaviours and reducing substance use. It describes a recent evaluation study that has a special focus on adolescents who are at higher risk of developing mental health problems.

The BELLA Study, which is a mental health module part of a representative nationwide health survey, revealed that nearly 22% of interviewed children and adolescents aged 7–17 years showed symptoms suggesting possible or probable mental health problems. Boys were more often affected than girls and the percentage of children and adolescents with general psychological problems increased with age.

In addition to low family socioeconomic status, other risk factors for mental health were identified, such as an adverse family climate, the presence of a parent with a mental disorder, and living in a one-parent household. The prevalence of mental health problems increased markedly when several risk factors were present simultaneously. Conversely, positive individual, family and social resources coincided with an absence of mental health problems.

Substance use was identified as a risk factor for the development of mental health problems, with results from the 2002 HBSC survey on adolescents' risk behaviours being alarming. At that time, Germany not only had one of the highest rates of daily smoking, but was also one of the countries with highest rates of weekly drinking.

Germany is a federal country, so policies aimed at reducing the extent of adolescents' risk behaviours (such as special taxation on tobacco products and spirit-based “alcopops”) are developed at national level by the Federal Government and at regional level within each federal state. Regional activities within the federal states against substance misuse among adolescents are predominantly school-based, using school activities as measures of intervention. The implementation of school-based life-skills programmes designed to prevent substance misuse and promote mental health and well-being has become more important in this regard.

Although school-based life-skills programmes are effective in delaying the onset of substance use and in reducing the rates of substance use during adolescence, it is not sufficiently clear whether children and adolescents from families with low socioeconomic status and/or with a migrant background also benefit from these programmes. Unfortunately, previous evaluation studies have failed to address mental health as a main outcome.

To address deficits in existing research, the “Prima schule” project is evaluating three life-skills programmes in two German federal states –the predominantly rural Schleswig-Holstein in the north, and the capital city of Berlin. Problematic schools with an increased proportion of children with low academic performance or who come from families with lower socioeconomic status and/or with a migrant background are being particularly targeted for participation.

Mental health, social cohesion and substance use were the foci of the project. The programmes were evaluated using a pre- and post-design which included baseline, post-intervention and three-month post-intervention measurements. Intervention and control groups were randomly assigned. Quantitative analyses of questionnaire data and qualitative analyses of focus groups and interviews with pupils, parents and teachers were carried out.

Mental health and well-being status among adolescents: mental health and risk behaviour among German adolescents

Germany is a western industrialized welfare state with good facilities for health care services. The country has experienced a considerable decrease in perinatal, infant and child mortality during the past century. The WHO understanding of health as having physical, mental and social well-being components has gradually come to the fore. Official statistics, however, focus on mortality and do not provide a complete picture of the health status – including mental health – of children and adolescents in Germany. Additional data are therefore needed.

Results from the BELLA Study

Having recognized the need for representative data on the health and development of children and adolescents in Germany, the Robert Koch Institute (Federal Public Health Institute of Germany) in Berlin was commissioned by the Federal Ministry of Health to develop a health examination survey approach to fill the information gap.

The German National Health Interview and Examination Survey among Children and Adolescents was designed as a representative nationwide health survey of children and adolescents from 0–17 years. Following a pilot study carried out between March 2001 and March 2002, the main survey was launched in May 2003. Over the following years until May 2006, 17 641 participants were examined in 167 randomly selected study locations all over Germany. Data collected at an individual level included objective measures of physical and mental health and self-reported information on subjective health status, health behaviour, use of health care services, social and migratory status, living conditions and environmental determinants of health.

The core of the survey – compiling benchmark health information from the complete sample – was supplemented by further modules investigating specific target areas, such as mental health in representative subsamples. The BELLA Study used key data from the core survey on behavioural problems and subjective well-being, supplementing it with targeted questions and additional instruments. The BELLA Study examined mental disorders and emotional well-being and behaviour in a representative subsample of the core survey, including 2863 families with children aged 7–17. This large sample allows results to be extended to the national level. An additional longitudinal design also enabled an analysis of a connection between risks and protective factors, also known as “assets for mental health”.

Prevalence of mental health problems within the mental health survey was assessed using the SDQ and additional standardized screening measures. Out of the total sample, 21.9% (CI: 19.9–24.0) of children and adolescents showed signs of mental health problems. The psychiatric disorders observed included anxiety (10.0%; CI: 8.7–11.6), conduct disorder (7.6%; CI: 6.5–8.7) and depression (5.4%; CI: 4.3–6.6). Of the risk factors examined, adverse family climate and low socioeconomic status stood out particularly as negative contributors. The prevalence of mental health problems increased markedly when several risk factors occurred simultaneously. Conversely, positive individual, family and social resources coincided with an absence of mental health problems. Children and adolescents with mental health problems displayed distinctly impaired health-related quality of life. Very few of them were receiving treatment.

The results of the BELLA Study indicate that identifying high-risk groups requires the assessment of available resources and assets to be added to the usual risk factors for mental and subjective health screening. Strengthening these resources should be a key objective, both in prevention and intervention.

Results from HBSC survey

The German HBSC survey was realized as a regional sample of four federal states (Berlin, Hesse, North Rhine-Westphalia and Saxony) in 2002, and five federal states (Berlin, Hamburg, Hesse, North Rhine-Westphalia and Saxony) in 2006. The resulting representative samples consisted of 5650 (in 2002) and 7274 (in 2006) children and adolescents aged 11, 13 and 15 years.

Risk behaviour

HBSC data from the 2002 survey showed that Germany was one of the countries with the highest rates of daily smoking in

15-year-old adolescents (girls: 28.7%; boys: 26.3%) – only pupils in Greenland reported higher rates. Germany was also one of the countries with the highest rates of weekly drinking (in this age group) (girls: 33.3%; boys: 45.7%).

Data from the recent HBSC survey, however, show that these high rates in substance use among 15-year-olds are declining. In 2006, “only” 16.4% of girls and 13.3% of boys reported smoking on a daily basis. The rates for weekly drinking had also decreased substantially (girls: 14.9%; boys: 24.8%). The same trend applied for drunkenness. After an increase in 2002 (girls: 34.4%; boys: 44.3%), fewer adolescents reported having been drunk on two or more occasions in their lifetime in the 2006 survey (girls: 27.7%; boys: 31.2%). The declining trends in substance use in adolescents are very positive and confirm the efforts of national and regional policy and interventions in recent years.

Findings from an international study (1) show that adolescents who smoke on a regular basis report mental health problems more frequently than their non-smoking peers. Binge drinking on a regular basis also increases general psychological problems. Adolescents who smoke and binge drink regularly are more likely to report a lower quality of life in almost all dimensions.

From this perspective, strategies which prevent or delay adolescent substance use should also be used to promote and improve mental well-being in young people.

Social and policy context: German initiatives for the promotion of a healthy lifestyle and improving mental well-being among adolescents

Germany is a federation consisting of 16 federal states, each with its own constitution, parliament and government. Policies aiming to reduce the extent of adolescents’ risk-taking behaviours are initiated by the federal government at national level and also at regional level within each federal state. The federal states are responsible for education programmes and policies and are more-or-less free to choose specific school-based prevention programmes and strategies.

National activities

The federal government has changed a number of legal requirements to combat high substance use among adolescents in recent years. These activities were outlined in the Act for Improving the Protection of Young People against Dangers of Alcohol and Tobacco Consumption. Tobacco taxes were raised and the sale of cigarettes via cigarette automats was limited to adults only, using a special ID card. The act also aims to reduce the consumption of alcopops by increasing the price.

The implementation of extraordinary taxes for spirit-based alcopops proved a very successful policy initiative. This special tax was introduced in 2004 after the dramatic increase in the consumption of alcopops by young people was recognized. Alcopops were the most-favoured alcoholic beverage at that time, especially for young girls. The special tax is levied exclusively on alcopops manufactured using distilled spirits or products containing distilled spirits.

Consumption of spirits-based alcopops among 12–17-year-old young people declined significantly from 28% in 2004, when the tax was introduced, to 16% one year after the intervention (2). Spirit-based alcopops are no longer being purchased in the same high numbers, primarily because they have become too expensive and because young people are better informed about the associated health risks. Additional analyses show that the change in alcopop consumption has not led to increased consumption of other alcoholic beverages.

Regional activities

Regional activities against adolescents’ substance use within the federal states refer mostly to school and school-related activities. For example, the responsible ministries of education are prohibiting smoking in schools and school areas in a growing number of federal states.

The importance of implementing school-based life-skills programmes has also been recognized. A multitude of prevention and health promotion strategies following the life-skills approach are being introduced in German schools at the current time.

Within these programmes, the life-skills approach is used to promote mental health and well-being by strengthening life skills, empowerment and healthy behaviour and reducing substance use in young people.

Since the 1990s, several school-based prevention programmes using the life-skills approach have been developed, adapted and evaluated in Germany. Life-skills education programmes attempt to have a positive influence on adolescents' feelings of empathy and communication skills to help them establish and maintain social relationships. Programme activities encourage positive self-awareness, thoughtful decision-making and the development of problem-solving and coping strategies. The manual-based prevention programmes, administered by trained teachers in schools, use interactive methods such as role playing, small group interactions and group discussions to focus on encouraging cooperative learning, communication skills, non-violent problem solving and reinforcement strategies. As these programmes were conceptualized and developed to prevent or delay substance misuse, their unspecific and resource-orientated approach not only supports healthy behaviour, but also attempts to improve mental health and well-being.

Three of the most common life-skills programmes in Germany are “Erwachsen werden”, “Fit und stark für's Leben” and “Buddy-Projekt”.

The “Fit und stark für's Leben” project is a recommended and well-established school-based programme with age-appropriate teaching and learning material for three age groups (grades 1–2; 3–4; and 5–6). It focuses on prevention of aggression, violence, stress, and substance misuse. There are 20 weekly teaching sessions lasting from 60 to 90 minutes each, directed by trained teachers. Topics discussed include self-perception and empathy, stress reduction, resisting peer pressure, promoting healthy behaviour, communication and problem-solving skills.

The Lions' Quest programme “Erwachsen werden” is also based on the life-skills approach. It was designed for adolescents aged 10–15 years. Training in social and communication skills and information about substance misuse are major aspects of this prevention programme. Teachers are trained and are provided with a manual containing material for 70 optional teaching sessions. Education material and workbooks are also available for pupils and parents.

The “Buddy-Projekt”, established in 2002, is a relatively new life-skill programme. Teachers attend a workshop conducted by certified trainers in which they are given information about substance misuse, empowerment and conflict-resolution strategies. Through the combination of a theoretical framework and practical interaction, teachers learn to be aware of specific problems within their school and their classes. They are encouraged to develop and implement self-directed school projects with their pupils to tackle these problems.

In general, each school is free to take part in the prevention programmes that are authorized by the ministry of education. Interested teachers are selected by the principal of their school. The workshops are conducted by certified trainers. In some federal states, the ministry of education has installed a counsellor system to support programme activities.

Since each federal state is responsible for its own education programmes and policies, they are able to choose specific school-based prevention programmes and strategies. These programmes, usually preventive in nature, are founded by non-profit associations or institutions but are organized and authorized by the ministry of education of each individual federal state.

Each ministry of education and its subordinate authorities provide organizational support for the programmes, such as authorization for additional school lessons. Programme providers are in charge of organizing and financing the training of teachers. In some federal states (such as Berlin, Hesse, Saarland, Lower Saxony and Saxony), cooperation agreements between programme providers and the ministries of education have been established to ensure programme sustainability.

Policy and interventions: school-based life-skills programmes

An essential criterion for the success of prevention programmes is the degree of differentiation and target-group specificity. As children and adolescents undergo various socialization processes and experience different life circumstances, a general preventive effect cannot be assumed. Indeed, current programmes still take specific life conditions and prevention needs too little into account. The result is what is referred to as the “prevention paradox”, according to which those population groups who are the most vulnerable benefit the least from preventive measures (3).

International and national findings attest to the fact that social and ethnic affiliations are two of the key determinants of health inequality (4–14). Socially disadvantaged children and adolescents exhibit more health-risk behaviours, rate their physical and mental health more negatively and show more behavioural disorders, especially disorders of social behaviour, hyperactivity and attention disorders (2,15). The Drug Affinity Study, which has been conducted by the Federal Centre for Health Education (BZgA) since 1985, shows that adolescents who have completed general school smoke more frequently and are more often regular smokers than adolescents who have an intermediate school degree or a grammar school degree (16).

Children and adolescents from families with a migratory background are more at risk in certain health-related areas than their German peers. These risks include a higher prevalence of overweight, including obesity, a higher rate of involvement in accidents, a lower rate of utilization of physical examinations, lower vaccination rates and more risk behaviours regarding oral health care (17–22). Pressures associated with a migratory background and developmental crises also contribute to a higher addiction potential in children and adolescents (23). Smoking and drug consumption vary greatly depending on religious and cultural backgrounds and are also gender specific (24). There are several factors which influence the health and health behaviours in a migrant population. These include the health and social situation in the migrant's country of origin, the migrant generation and the duration of stay. An effective health promotion strategy must therefore not only be focused on social aspects, but must also take the migratory background of children and adolescents into account.

Since these target groups evidently have a greater need for health promotion measures but apparently use social and health services only rarely, it is important that setting-orientated prevention strategies, such as health promotion measures in schools, are implemented. In this way, children and adolescents from less-privileged social backgrounds and migrants can be reached.

Evaluation of school-based life-skills programmes

In their 2000/2001 report, the German Advisory Council for Concerted Action in Health Care pointed towards a need for improving health promotion and primary prevention in Germany to ensure quality and efficacy of the health care system (25).

The German Federal Ministry of Education and Research (BMBF) initiated the promotional activities focused “Prevention research” in 2003. The promotion focus is on the integration of programme providers and research. In addition to developing and testing new concepts and programmes, established health promotion programmes are evaluated for effectiveness, practical orientation and applicability. The goal is to improve primary prevention by means of more-focused and high-quality research.

Only a few of the popular and well-established programmes have been evaluated (26–37). Many of the evaluation studies, however, were conceptualized within the framework of the projects, using only relatively small sample sizes and lacking information on both the long-term effects and transferability of the results under “real-life” conditions (32), which greatly limits the significance of the results. Published studies have been largely based on a quasi-experimental, pre-post-test design and have not included randomization. As a consequence, the effectiveness of these studies/programmes could not be statistically verified in the same way as would have been possible with a randomized design.

How the effects on the pupils differ based on their educational and migratory backgrounds was only rarely and, for the most part, inadequately studied. An extensive analysis of the Lions' Quest programme (32), which used the teacher survey as a basis, came to the conclusion that the student and parent material may be inadequate, especially in relation to comprehensibility and length of the text for students from a migratory background, and the cultural perspective was insufficiently taken into account. No current studies include a detailed analysis of health promotion programmes from the pupil's perspective (in relation to contents, language and amount of material and inclusion of varying cultural perspectives).

The mediator – the person responsible for the realization of the programme – is an important factor in a programme's success. Studies from the United States have analysed various groups (teachers, peer leaders, external trainers) to determine the most suitable to act as mediator (38–40). The results show that a determining factor for the success of a programme is the mediator's personal traits, such as the perceived social support of the teacher by the pupils (33,34). These studies did not include systematic measures of the teacher's effect on the pupils depending on his or her motivation, however, and also did not take personal and social competence into consideration.

The present evaluation studies indicate that programmes focusing on preventing addictive behaviours are not only effective in relation to smoking in children and adolescents, but also have an influence on mental health outcomes, such as reducing problem behaviours (27–30). Mental health and subsequent problems can be understood as a result of a successful or unsuccessful mastering of developmental tasks. This developmental process can be positively or negatively influenced by risk and protective factors, which is where school-based health promotion programmes step in. They strengthen pupils' positive resources through behavioural and system-orientated prevention measures.

Most of the school-based health promotion programmes based on the life-skills concept were developed and evaluated as substance misuse prevention measures. Due to their unspecific and resource-orientated approach, however, many also have the capacity to develop mental health in pupils (41). It can be deduced that school-based health promotion measures, conducted as part of a life-skills approach, are suitable in positively influencing mental health, including health behaviours. They achieve this by improving individual competence and empowering pupils (in such areas as communicative competence, acquiring and maintaining social support, knowledge, attitudes, perceived control, self-worth and self-efficacy) and influencing the environment (social support and classroom atmosphere). A holistic approach including mental health for the effect evaluation of programmes does not currently exist.

Within this framework, an evaluation study of school-based life-skills programmes was planned to focus on fifth and sixth graders from families with low socioeconomic status and/or a foreign background. Mental health is a major target within these programmes.

Aims of the “Prima Schule” study

“Prima Schule” is evaluating three previously mentioned school-based programmes in two federal states. The focus is on their effectiveness specifically for socially disadvantaged children and adolescents and those with a migratory background. The methodological deficits of previous evaluation studies are being avoided by adopting a more suitable study design. Guidelines for the adaptation and improved implementation of preventive measures for socially disadvantaged groups and migrant populations are being jointly developed in partnership with relevant stakeholders (the developers, providers and mediators of prevention measures and pupils).

The two federal states chosen for the study, Schleswig-Holstein and Berlin, differ in various structural aspects (school system, population density and proportion of migrants, for instance). The target population is pupils from the fifth and sixth grade in general schools (Schleswig-Holstein) and in primary schools in socially disadvantaged areas (Berlin). In Berlin, the social structure atlas allows us to select primary schools which lie in socially disadvantaged areas with a high proportion of unemployed people and welfare recipients.

The selected age group (11–13-year-olds) is a population group which falls into a period in life in which health-relevant behaviours are developed and begin to stabilize and gender aspects start to manifest. Fortunately, validated instruments measuring life competence and mental health by means of individuals' self-reporting already exist for this age group.

The following questions are being dealt with in detail.

1. Which effects of the health promoting programmes “Fit und stark für’s Leben”, “Erwachsen werden” and “Buddy-Projekt” can be proven for socially disadvantaged children and adolescents and children from a migratory background in relation to “life competence”, “substance consumption” and “mental health”?
2. What factors that influence the success of an intervention for this target group can be identified? The integration of various programmes makes it possible to differentiate here between programme effects and those which result from the specific format of programme implementation.
3. What role do teachers play as key participants in conveying programme contents?
4. What differences arise in programme effectiveness in terms of gender, social and migrant background? How must these be dealt with in the programmes?
5. Which orientations/views of pupils and teachers have an influence on the success of the programme, and what conclusions can be drawn from this in relation to adjusting the programme?

6. Which of the identified protective factors of mental health in the studies can be promoted through the employed measures? To what extent is this possible? To what extent can the achieved effects of the measures be explained by influencing the specific protective factors?

Design and methods

The school-based life-skills programmes are being evaluated using a pre-test and post-test design (baseline, post-intervention, three-month post intervention) with randomly assigned intervention and control groups. Quantitative analyses of questionnaire data, qualitative analyses of focus groups and interviews with pupils, parents and teachers are being carried out to assess improvements in mental well-being. Effects of the prevention programme are being measured by the outcome variables of self-efficacy, social competence, school and class climate, substance misuse, mental health and health-related quality of life (as well as bullying). Data from approximately 3000 fifth and sixth graders and 90 participating teachers are being collected.

Lessons learned

One of the aims of this case study was to highlight the main strengths and advantages of German initiatives for the promotion of mental well-being in adolescents. At the same time, it also attempted to point out the challenges and problems that need to be addressed for future policy improvements.

Germany now possesses nationally representative data on mental health and well-being in children and adolescents. Analyses of an association between risks and protective factors make it possible to identify children at risk. Data on health care utilization further show that additional efforts are necessary to reach these children.

Prevention programmes focusing on substance use offer one example of a national strategy to promote mental health and well-being in Germany. These prevention programmes, however, must take the special requirements of pupils with the greatest need into account. Further research is needed to create a better understanding of the accessibility and effects of these programmes for children and adolescents who come from families with a lower social status and/or a foreign background.

An evaluation of school-based life-skills programmes should focus on the integration of programme providers and research to ensure evidence-based effectiveness, practical orientation and applicability of the applied programmes. In terms of a process evaluation, results should be used to improve the programmes.

In this regard, the views and perspectives of all parties, including programme providers, teachers, pupils and their parents, should be used and integrated into the evaluation process. The case study shows that different research strategies should be used simultaneously to collect qualitative and quantitative data. Questionnaire data, interviews and focus-group discussions with all participating parties ensure that all views and opinions are considered.

Once high-quality research has proven the effectiveness and efficiency of a programme, it should be promoted beyond regional implementation. A continuous evaluation process should nevertheless be established to ensure quality maintenance and appropriate reactions to the needs of children at risk in the future. Needs of children and adolescents with other risk factors, such as living in one-parent households or having parents with mental health problems, should also be taken into account for further evaluation studies and research. The development of new measures for the special needs of this group of children should also be promoted.

Establishing a system that ensures financing and implementation of the prevention programmes on a sustained and enduring basis remains a big challenge. The case study has been able to point to this and a number of other challenges and problems that need to be addressed to improve future policy.

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Hungary: social cohesion for mental well-being in adolescents

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Executive summary

Mental disorders and illnesses represent over 11% of the total disease burden worldwide. In Hungary, 30% of social and economic loss due to all morbidity among people aged 15–44 years is related to mental ill health. Despite this, recent Hungarian data show that the number of patients treated in adult or paediatric psychiatric care institutions and in psychiatric outpatient services has decreased.

According to national epidemiological studies, one fifth of children and adolescents suffer from some kind of emotional or conduct disorder or have psychosomatic complaints. Follow-up studies provide evidence that mental health is one of the most significant background variables for mortality; coping skills and positive self-evaluations established in childhood and adolescence are therefore crucial in promoting good lifelong physical and mental health. Indicators of mental health influence the quality of life, health status and economic status of any given population.

The Hungarian case study firstly describes the mental health and well-being status of adolescents based on 2006 HBSC survey data and some other sources. The following topics are covered in detail: suicide; suicide attempt; risk behaviour (briefly); child abuse and intentional injury; subjective well-being; self-rated health; satisfaction with life; depression; self-esteem; and somatic and psychological complaints. The socioeconomic status of young people with some relevant links to mental health indicators is also analysed.

The study then briefly presents some demographic information and descriptions of characteristics of the mental health care system and the main mental health promotion projects before going on to introduce the “Children – our common treasure” national infant and child health programme, a comprehensive strategy addressing child and adolescent health. Mental health can be affected not only by explicit mental health policies, but also by policies that seem to have no direct link, such as those on housing and education. The national programme is a good example of an approach that takes all these diverse elements into account.

Two live examples are described to illustrate mental health initiatives in practice: the role of primary health care professionals in the prevention of later developmental and mental disorders, and a community psychiatric NGO’s activity to coordinate local welfare services in covering a wide variety of mental health issues.

Finally, some conclusions about the national programme – its strengths, experiences, weaknesses and future directions – are drawn.

About Hungary

Hungary is a republic with a territory of 93 000 km². For administrative purposes, the country is divided into 19 counties and the capital city of Budapest.

In 1990, following changes in the political system, a new independent democratic state was established, with parliamentary democracy based on free elections and a multiparty structure and new legislation eliminating barriers to the development of a market economy. Hungary faced temporary severe economic decline, unemployment and social polarization in the 1990s, but by the end of the decade, development had accelerated.

Currently, Hungary is a member of the United Nations, WHO, the CoE and OECD. It joined the North Atlantic Treaty Organization (NATO) in 1999 and the EU in 2004.

Mental health and well-being among adolescents

Subjective well-being in the 2006 HBSC data

Self-rated health

Most of the students reported their health to be “excellent” (31.4% of boys and 18.7% of girls) or “good” (47.1% of boys and 50.0% of girls). Some of them – 21.5% of boys and 31.2% of girls – considered their health to be “average” or “bad”.

Life satisfaction

Applying the Cantril ladder (the top of the ladder (10) indicates the best possible life, and the bottom (0), the worst possible life), the Hungarian average was 6.96 (SD = 1.94), with no gender difference observable. Life satisfaction decreased with age. Most of the students belonged to the average range or above, although the proportion decreased with age. There was no significant difference from the previous HBSC survey (1).

Depression

Measured with the Child Depression Inventory (CDI, shortened version applied in the seventh, ninth and eleventh grade), the average for the whole sample was 2.36 (SD = 2.47). Boys scored significantly lower than girls, with the difference remaining stable across all age groups. The cut-off point in CDI is considered to be 4 (2); for most students (56.1% of boys and 40.1% of girls), the total score was 0–1, which indicates good general mood and a lack of depressive symptoms. Approximately 25% (24.5% of boys, 27.8% of girls) scored 2–3, indicating disturbed mood, and nearly 30% of girls and 19% of boys had 4 or more points, which might indicate depressive mood.

Self-esteem

The average of the whole sample was 28.49 (SD = 4.92), measured with the Rosenberg Self-Esteem Scale (a ten-item scale ranging from 10 to 40 in measuring global self-esteem). Boys scored significantly higher than girls, and this difference remained stable across all age groups. This was similar to the previous study results, as the ninth grade girls had less-favourable measures on self-esteem and depressive mood (1).

Somatic and psychological symptoms

The average of the symptom checklist (a nine-item standard symptom checklist with five frequency options, ranging from 9 to 45) of the whole sample was 20.43 (SD = 7.36). Girls scored significantly higher (mean = 21.80, SD = 7.56, boys' mean = 19.12, SD = 6.92) and reported symptoms more frequently. The gender difference remained stable across all grades. There was a significant difference between age groups in girls.

For both genders in all grades, there was a high occurrence of irritability and feeling low (both prevalences were higher among older girls), nervousness and feeling tired at least weekly (approximately 30% in the fifth grade and above 40% in boys and above 55% in girls in eleventh grade).

A significantly higher rate of girls reported experiencing headache, stomach ache and backache regularly. In the ninth and eleventh grade, one third of the girls experienced frequent headache and a quarter complained about frequent stomach ache and backache. For boys, the frequent occurrence of these symptoms never exceeded 15% in any grade. Difficulties in getting to sleep were more common for girls, especially with increasing age, while it declined to under 10% for eleventh grade boys.

A high rate of students reported having two or more symptoms at a time. More than one fifth of the seventh, ninth and eleventh grade girls experienced at least two symptoms several times a week.

Approximately 15% of the fifth to eleventh graders indicated having some chronic disease requiring regular medical follow-up.

The socioeconomic status of young people

According to the 2006 HBSC data, 82.3% of the young people's fathers and 72.2% of their mothers were employed; 10.8% of fathers and 25.8% of mothers did not have a job. Both parents were unemployed in 5.9% of families; this group was considered to be at high risk of mental health problems. There were just under 11% of families in which both parents belonged to the high SES category and who probably lived in very good material circumstances. When taking both fathers' and mothers' financial situations into account (applying the four-category FAS), 6.4% of the families belonged to the low category and were lacking financial resources. Just over 43% of the young people belonged to the low–middle category and 43.2% to the high–middle FAS groups. According to this scale, 7.3% of the families could be considered to be in the most well off range.

Based on subjective categorization, 13% of students considered their families very well off, 25.4% quite well off, 54.9% average, 4.3% not very well off and 1.4% not at all well off.

Differences by FAS

Means of depressive mood scores are shown in Table 1.

When comparing means of depressive mood scores, there was a significant difference between the low and low–middle groups ($F = 5.95^*$, $t = 5.29^{**}$)¹ and between the low–middle group and high–middle group ($F = 30.67^{**}$, $t = 5.96^{**}$), but no meaningful difference between high–middle and high groups ($F = 0.52$, $t = 0.99$).

Table 1

Means of depressive mood scores

FAS group	Depressive mood		Symptom checklist		Life satisfaction	
	Mean	SD	Mean	SD	Mean	SD
FAS low	3.54	2.79	21.88	8.27	5.83	2.20
FAS low–middle	2.57	2.53	20.67	7.28	6.59	1.94
FAS high–middle	2.00	2.27	19.98	7.28	7.33	1.78
FAS high	1.83	2.20	20.31	6.98	7.88	1.64

There was a significant difference in the symptom checklist between low and low–middle FAS category ($F = 10.18^{**}$, $t = 2.69^{**}$) and low–middle and high–middle groups ($F = 1.15$, $t = 3.14^{**}$), but no difference between high–middle and high categories ($F = 0.52$, $t = -0.80$) and no difference between low–middle and the high group ($F = 1.82$, $t = 0.89$).

In relation to life satisfaction, there was a meaningful difference between low and low–middle groups ($F = 6.91^{**}$, $t = -6.52^{**}$), low–middle and high–middle categories ($F = 24.71^{**}$, $t = -13.21^{**}$), and high–middle and high groups ($F = 8.15^{**}$, $t = -5.67^{**}$).

Differences by SES

Differences between the highest and lowest by SES are shown in Table 2.

In depressive mood and life satisfaction, there were significant differences between the highest and lowest maternal SES groups ($t = -3.00^*$ and $t = 4.52^{**}$). Students reported fewer depressive symptoms and higher life satisfaction in the highest maternal SES group. There was no difference between the two groups in the symptoms checklist ($t = -1.43$, ns.).

¹ F = F-probe, t = t-probe, * $p < .05$, ** $p < .01$

Table 2

Differences by SES

Maternal SES	Depressive mood		Symptom checklist		Life satisfaction	
	Mean	SD	Mean	SD	Mean	SD
Highest	1.758	2.232	20.343	6.914	7.48	1.763
Lowest	2.703	2.659	21.532	8.153	6.56	2.040

Dissemination of health data among decision-makers

The Hungarian Government has been made aware of the above-mentioned data. HBSC national reports are disseminated across different ministries, research centres, public health institutions, welfare institutions, education services and participatory schools. They are also published on the web site of the National Institute of Child Health and a press conference is organized to mark the release of the national and international reports. The international report is sent out to a narrower governmental and professional circle. In addition, fact sheets, journal articles, conference presentations and posters on HBSC and related topics are prepared. HBSC data were considered in the relevant topics when the National Infant and Child Health Programme was being designed.

Some other mental health indicators

Suicide

Suicide rates are higher for boys. The number of deaths due to suicide in 2004 was 1.6/100 000 for boys in the age group 10–14 (girls were 0.7/100 000), and 5.8/100 000 for boys in the age group 15–17 (girls: 3.3/100 000).

The ratio of suicide in the child population between 1996 and 2004 shows that the number of suicides for both age groups was significantly lower for girls. For boys, the suicide rate is decreasing after a temporary increase, and for girls there is a slight increase between the ages of 10 and 14. A decrease for boys and no change for girls can be observed in the older group (3).

Attempted suicide

Exact statistical data regarding attempted suicide are not available, but it is known that the rate is significantly higher than for executed suicides. Girls produced more suicide attempts than boys and the rate of attempted suicide has increased since 1996 for both genders in the 10–14 age group. The attempted suicide rate in the 15–17 age group has gradually increased after a sudden decrease in 1997 for both genders (3).

Risk behaviour

According to the 2006 HBSC data, 42.9% of the sample (38.5% of girls and 47.2% of boys aged 11–18 years) had been drunk at least once in their lifetime.

Data on cannabis use showed that 26.6% of boys and 18.7% of girls (aged 15–18) had smoked cannabis at least once. A so-called “heavy user” is considered to be someone who has smoked cannabis 40 times or more; the rate of heavy users by this criterion was 3.8% for boys and 1.3% for girls. The lifetime prevalence of “ecstasy” use was 6.6% for boys and 5.6% for girls, and 0.8% of boys and 0.7% of girls had consumed opiates.

Child abuse, intentional injury

It is very difficult to capture or measure the phenomenon of child abuse within the family. In Hungary, approximately 30 children die every year in cases considered to be homicide, including infant murders and deaths due to severe neglect, but

most cases remain undiscovered (4). Regarding bullying in Hungary, 2006 HBSC data show that 61.9% of young people were not involved in bullying at all, 12.9% were considered to be “bullies-victims” (that is, children and young people who were bullies and the victims of bullies simultaneously), 12.9% were victims and 14.9% were bullies. There were significant gender differences, with more boys among bullies and bullies-victims and more girls among victims.

The current situation in mental health care

Child and adolescent mental health care

Resolving mental health problems in children is a complex task requiring close cooperation among health care, welfare, education and child protection services. It is evident that the current care-provision network in Hungary is unable to cope with the scope of the problem. The network (paediatric outpatient psychiatry, outpatient psychology and counselling services, child protection network, organizations involved in crime prevention, NGOs and inpatient facilities) is so widely separated and areas of competence are so indistinct that care is often provided in a haphazard manner.

The 36 child and adolescent psychiatry centres are the backbone of outpatient psychiatry care for children and adolescents. Their access to equipment and professional staff differs sharply across the country. Existing early development centres that focus on children over the age of one year who have been identified as having pathological symptoms and/or cognitive development difficulties do not have sufficient capacity. Centres focused on seeking out and treating young drug addicts have been established to reflect rising drug problems in society. The emphasis in the past 10 years has shifted towards offering care for 16–18-year-old patients, but the challenge of providing appropriate treatment to those under 16 years remains unresolved.

Day sanatorium/hospital care facilities (a total of 51 places) have been established in three sites in the country. There are currently six inpatient facilities, unevenly distributed throughout the country. There is a complete shortage of child psychiatry intensive rehabilitation beds. In all wards, parents may be admitted with their children. There are two paediatric neuropsychology wards in operation, in addition to the child and adolescent psychiatry wards. Rehabilitation is available in four wards nationwide. There is no separate paediatric rehabilitation ward.

For 44 years, child and adolescent psychiatry training was available only to medical doctors who had specialized in psychiatry; consequently, in order to become a child and adolescent psychiatrist, one had first to have specialized in adult psychiatry. The training system has changed, with child and adolescent psychiatry training being available to doctors immediately after they complete medical training, and they can now practise child and adolescent psychiatry as a basic medical profession. The main mental health promoting projects introduced in public education are shown in Table 3.

Currently, there are a number of projects and policies under way that are related to this case study:

- National Strategy for Drug Prevention;
- National Strategy and Action Plan for Crime Prevention;
- National Programme Countering Child Poverty (this programme has merged into the “Won’t give up on anyone” National Equal Opportunities Programme);
- National Programme for Mental Health;
- National Public Health Programme;
- National Environmental Health Action Programme;
- Injury Prevention Programme;
- Health Development Policy Concept; and
- Human Resource Strategy.

Table 3

Main mental health promoting projects introduced in public education

Project's name	Focus	Target group	Project management
“Healthy life” complex health promotion	Healthy nutrition, environment, personal hygiene, family life and peer relations, alcohol, smoking and substance use	5th–8th graders	National Institute of Health Development
Life-skills and health knowledge	Self-development, healthy and safe life, risk factors, personal safety and responsibility	From nursery school to 14 years	Private initiative
Shapiro programme	Nutrition and health, sexuality, HIV, conflict management and communication, smoking, alcohol and drug prevention, environmental health	Age 10–18 years	Soros Foundation
In healthy body and soul	Personal development, drug and alcohol prevention programme	Age 5–18 years	Canada–Hungary Educational Foundation (CHEF), with the support of Soros Foundation
DADA project	Tobacco smoking, alcohol, drug, HIV prevention programme	Age 6–14 years	National Police Headquarters (ORFK)
UNICRI project	Drug and alcohol integrated prevention programme	Elementary and secondary school students	United Nations Crime and Justice Research Institute's project
Training in conflict management	Self-management, communication and cooperation skills, constructive problem solving and conflict management	Elementary and secondary school students, adults	ENCORE Hungarian Conflict-pedagogy Foundation

“Children – our common treasure” – National Infant and Child Health Programme

Background and objectives

The National Infant and Child Health Programme (NICHP) is based on the principle that the period of life from conception to 18 years is crucial in preserving health and preventing disease during the entire lifespan. The programme was adopted in November 2005 by the Prime Minister.

The main objectives of the NICHP are to:

- focus on child and adolescent health and on the related components of the health care system;
- analyse the current situation related to the state of child and adolescent health and health care and identify the main improvement goals, with a particular focus on equity;
- mobilize society, involving all concerned parties and seeking their support for successful implementation; and
- identify a framework for monitoring and regularly reviewing implementation.

Development and implementation of the NICHP

Building ownership and ensuring coordination

Following the adoption of the NICHP, a programme council with 27 representatives from social and professional organizations and government departments was established. The council contacted representatives of national programmes and the institutions and organizations that would play a key role in NICHP's implementation. The process of developing the NICHP has been participatory, which seems to have contributed to building sound awareness in society and within the government about the importance of investing in child and adolescent health.

Situation analysis

The NICHP identifies priority problems in health status and in health service delivery. These have been defined as: newborn health, nutrition, communicable diseases, injuries and violence, physical environment, adolescent health, psychosocial and mental health, noncommunicable diseases, and disability.

The NICHP recognizes that equal opportunity is not fully existent in the care system. In socially disadvantaged regions, principles of equality operate in a limited manner, if at all. This particularly affects the country's largest ethnic minority, the Roma population. Only about 70–75% of children are offered primary health care in any form, which means that marked differences in available professional services exist across regions. Small communities and economically disadvantaged regions of the country are particularly hit by regional inequalities. In these areas, paediatric health care posts and regional paediatric home visitor positions are often vacant.

Strategy development

As in other European countries, Hungary faces the problem of updating a system that was conceived in times when infectious diseases were the main problem in child health. The prevailing hospital-centred approach of Hungarian paediatric care is not coherent with new needs. So, in addition to restructuring superfluous hospital capacity, the focus is on developing and extending primary health care competencies (see example in Box 1) and creating specialist outpatient care services attached to inpatient settings. Eleven of the thirteen goals of the NICHP are devoted to these “two pillars” of the health care sector, and it is hoped that most of them will be achieved during 2008.

Box 1. Example: the primary paediatric health care system's (home visitors and paediatricians) role in the prevention of developmental disorders.

The health visitors' network has a ninety-year tradition in the area of prevention (5). On the basis of the principle of equity, each community has its own local health visitor. Each and every resident may therefore contact his or her local health visitor *in his or her own environment* on the basis of an established relationship built on first-hand experience and trust. Health visitors are present at the most important stages of family life – pregnancy and childbirth, the shaping of family life, when the child goes to kindergarten/school, and when young people are preparing for family life.

District health visitors provide regular care for expectant mothers, newborns, infants and kindergarten-age children. School health visitors take part in preventive school health initiatives in primary and secondary schools. The most important school health care tasks are carrying out prescribed tests, screening examinations and health promotion activities. Hospital health visitors contribute to caring for expectant and confined mothers and newborns, supporting the mother-child attachment and teaching mothers child care techniques and breastfeeding.

Health visitors and paediatricians can monitor children's and young people's development and help them to achieve optimal progress. They have to be able to identify developmental delays as soon as possible, to help the family to find proper care and to support the family in taking care of children with special needs.

The National Institute of Child Health, in cooperation with the National Programme Countering Child Poverty and the “Won't give up on anyone” programme, has developed a follow-up study system for health visitors and paediatricians to enable them to monitor somatic, motor, cognitive, psychological and social development. Based on regular contact with the family and awareness of the quality of parent-child attachments, parental expectations and child-rearing practices, it enables the professional to gain a deeper insight into child development. The recommended timing of checkups are the ages of 1, 2, 4, 6, 9, 12, 15 and 18 months, and 2, 3, 4 and 5 years. Evaluation aspects are age specific and include all the important developmental tasks for sensorimotor skills (vision, attention, fine and large movements) social skills, behaviours and parent-child relationships.

Parents are provided with an easy-to-understand “child health book” that enables them to follow up their own baby’s development. It begins with all the important information about the newborn (data about the family, pregnancy, birth, newborn medical checkup data), followed by the regular checkups to the age of five years. Parents are encouraged to check their babies and can add their own observations. Parental experiences can be shared with the health visitor or paediatrician and, if needed, families can be referred to special care centres, early development centres or family counselling centres.

There is a significant compulsory checkup for all children at the age of five years that is carried out by the paediatrician with the support of health visitors. The execution of this psychomotor and medical checkup is regulated by law and is administered approximately one year prior to the School Maturity Test (carried out by the local family counselling service). Children with (or with suspected) developmental delays are again referred to family counselling services.

Within the frame of the “Won’t give up on anyone” programme, it was suggested that screening of children should commence much earlier, as interventions to correct developmental delays are more effective if introduced earlier. Consequently, the initiation of a developmental checklist for children at the age of three years is currently in progress under the National Institute of Child Health. It is expected that tenders for the “Won’t give up on anyone” national equal opportunities programme will be announced soon and the developmental service will be given priority.

The NICHP recognizes that several public health issues must be addressed by multisectoral action. In particular, the NICHP goal 13 (“public health tasks requiring multidisciplinary cooperation and the collaboration of several ministries”) is of special interest. These tasks are:

- accident prevention;
- improvement of psychological support at all levels of care to promote psychosocial health and, in particular, to prevent suicide;
- prevention and management of child abuse and bullying;
- design of complex health promotion projects not only in schools, but also at all levels of care;
- joint work with the Public Foundation for Patients’, Care Recipients’ and Children’s Rights Advocacy Groups/NGOs to protect the rights of children;
- cooperation with the National Environmental Health Action Programme to prevent environmental hazards from harming children’s health;
- participation in designing government measures to counter child poverty;
- provision of care for children in disadvantaged situations; and
- joint work with the Interdepartmental Committee for Roma Affairs to reduce the specific types of discrimination to which Roma children are subjected.

Cooperation with education and law enforcement networks is also necessary. Health visitors and paediatricians have developed close cooperation with child protection and custodial services, the Ministry of Youth, Family, Social Affairs and Equal Opportunities and the Public Foundation for Patients’, Care Recipients’, and Children’s Rights Advocacy. The role of the various NGOs and foundations in offering significant help in providing for children, working in close cooperation with the institutes, and in relaying public demands to the health care system, is also stressed.

Integration of child and adolescent health strategy and action plan in sectoral and multisectoral plans

The NICHP complements other government and sectoral programmes and plans already in progress or in a draft form. There is a complex activity net leading jointly to the achievement of the objectives of promotion of health and healthy development of children. The NICHP is seen as a specific set of policies affecting children and as a component of more comprehensive plans relating to health and many other sectors. The “child strategies” of individual ministries and sectors have to be developed and implemented under government coordination, involving many partners from the civil sector and NGOs (see as example Box 2).

Box 2. An example of NGO activity – a community psychiatry centre: the activities of the Awakenings Foundation for comprehensive mental reform

The Awakenings Foundation was established in 1989 by the Semmelweis School of Medicine, Budapest. The foundation operates in the 8th District, one of the most disadvantaged parts of Budapest with a high proportion of Roma inhabitants and people living in extreme poverty. Employees and managers of the foundation are trained in psychiatry, community care and rehabilitation. Evidence-based methods of community psychiatry and supported employment programmes have been developed.

The professionals of this NGO launched a pioneer project in the 8th District with the support of local government. The objective is to develop comprehensive mental health prevention services with a special emphasis on NGO participation. Cooperation among welfare agencies and the development of a common professional paradigm were facilitated. Team-building and assertive-behaviour training were organized for the participants to establish cooperation, and regular meetings are held (members of the district police are regular guests at these meetings; they frequently take part in crime-prevention activities in support of high-risk clients). A guidance manual was published with ongoing supervision for the project partners (38 organizations are currently involved), and supportive services are being extended. Evidence-based methods of prevention are discussed and their everyday application is planned at the foundation's conferences.

As part of this project, a high-risk pregnancy "signal" system has been developed, through which pregnant adolescents will be offered special care and support. The programme takes special interest in the systematic care of families, especially those with multiple disabilities and where more than one family member needs social, medical or other care.

Informal networking among welfare service providers and the development of assertiveness techniques through group work on challenging cases are supported. The groups design and manage projects which, depending on efficiency evaluation results, support the everyday activities of service providers. As an example, a database of service providers (NGOs and other organizations and institutions in the district), which is available on the Internet and in the local newspaper, was created following recommendations from the family issues workgroup.

Volunteers have been recruited to a NGO project called "We help at home". The volunteers provide training and supervision for the Child Welfare Division of the local council. Communication and conflict-management training has been organized for welfare workers who work with aggressive clients, and professionals from schools have participated in a special course focusing on assertive communication skills in childhood.

At the behest of the antidiscrimination workgroup, a roundtable discussion was held for welfare service providers to share experiences of best practices in reducing stigmatization. The Barka Theatre was contacted to promote partnerships with local artists supported by the Roma Parliament. Together with several other NGOs, foundation partners participated in a local health day and carried out alcohol and depression screening. The foundation's most important goal is to make contact with many organizations and welfare service providers and increase the number of volunteers. Participation of NGOs in service provision is acknowledged by local and state governments, but their lack of resources is still an issue.

There is a significant compulsory checkup for all children at the age of five years that is carried out by the paediatrician with the support of health visitors. The execution of this psychomotor and medical checkup is regulated by law and is administered approximately one year prior to the School Maturity Test (carried out by the local family counselling service). Children with (or with suspected) developmental delays are again referred to family counselling services.

Within the frame of the "Won't give up on anyone" programme, it was suggested that screening of children should commence much earlier, as interventions to correct developmental delays are more effective if introduced earlier. Consequently, the initiation of a developmental checklist for children at the age of three years is currently in progress under the National Institute of Child Health. It is expected that tenders for the "Won't give up on anyone" national equal opportunities programme will be announced soon and the developmental service will be given priority.

Lessons learned

Hungary has been among the first countries in Europe to adopt a fully developed national child and adolescent health plan and to seek to harmonize it with the *WHO European strategy for child and adolescent health and development (6)*. The NICHP acknowledges the good results obtained so far with respect to child health in Hungary, but also identifies important issues represented by social and cultural risk conditions, by inadequate provision of health care in underserved areas and for minority population groups, and by emerging health issues.

The NICHP promotes the concept of a restructured health care system based on two pillars (primary child care services provided to all children and a more-focused and efficient hospital and outpatient care system for specialized care). It recognizes the need for a good information system based on selected indicators that are consistent with EU and WHO definitions and recommendations. Both in the process of its development and its contents, the NICHP emphasizes the importance of intersectoral collaboration and participation of all interested parties, including civil society and children and adolescents.

There is a need to examine to a greater extent issues related to ensuring the financial sustainability of NICHP. This would entail examining ways to ensure adequate and sustained resources for:

- improving primary care and specialist services;
- restructuring of child health services; and
- improving the living conditions of the poorest families (correctly seen as a means to improve health outcomes of the entire nation) and increasing investment in children in Hungary's social and economic policies.

All possible options should be carefully considered, particularly in the light of current budgetary constraints.

There is also a need to define more precisely an action plan with roles and responsibilities at various levels (health professionals, health system managers and planners and cross-sectoral action at central and peripheral level) for implementation. Tasks defined in action plans could be framed at regional level according to the subsidiary principle.

Ensuring collaboration and coordination among programmes addressing child and adolescent health issues has proven challenging. This could potentially be remedied through the establishment of a support organization to harmonize the National Public Health Programme and other programmes and to ensure continuous collaboration. This organization could be enabled by the government to coordinate and negotiate with all the ministries that have responsibilities for child and adolescent health, development and social protection. This type of approach could enable programmes and initiatives to serve common objectives in more of a cooperative, and not competitive, manner. Collaboration of NICHP with the National Programme Countering Child Poverty has been established, but both programmes' funding is precarious at the present time, underlining the need for sustained financing mechanisms.

Other issues that need to be addressed include:

- focusing public health approaches and activities, as there is a clear lack of health promotion and prevention;
- amending the process of validating children's rights in health care and supporting the principles of the "Sick Children's Charter";
- developing programme-monitoring and quality-assurance processes;
- involving the public and children and adolescents in planning and implementation; and
- reconsidering the time frame of the action plan and refining criteria for completion of tasks.

In summary, further work should consequently include:

- a costing exercise for the NICHP, defining the financial means that are believed to be necessary as a prerequisite for negotiation with the health sector and the government;
- the precise identification of the coordinating body for the NICHP implementation and definition of its mandate vis-à-vis related programmes and government agencies;

- the shared formulation of a feasible and financially sound action plan which includes priorities along a multiyear time frame; and
- action involving all interested parties at community level to further build awareness of the importance of investing in children and of the contribution to the health and development of the nation that can derive from a well-developed public health approach to child and adolescent health.

The last action in the list above should include a communication strategy based on selected health indicators and estimates of cost of action and inaction to the public as well as to political leaders.

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Iceland: inequalities and social cohesion in psychosomatic health – individual and community processes

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Executive summary

Mental and physical health are intimately related to inequality and marginalization. People with higher socioeconomic status tend to enjoy better health than people in lower positions. The association between inequality and poor health appears to be rooted in various social, cultural, economic and behavioural differences.

The socioeconomic status of parents may influence the psychological and physical health of children in similar ways as among adults. At community level, adolescents living in neighbourhoods characterized by low socioeconomic status, material deprivation, regional marginalization and high levels of non-traditional families may also experience more physical, psychological and social problems. Adolescents also belong to social status hierarchies of educational achievement and peer popularity that are partially independent of their families.

The Iceland case study presents a multilevel model of these processes that was tested among Icelandic adolescents taking part in the 2006 HBSC survey. It was found that adolescents who did not live with both biological parents reported significantly poorer psychosomatic health. The presence of a step-parent in the household did not seem to diminish the negative effect of the absence of a biological parent, and other types of inequalities in economic situation, social status and social inequality did not seem to account for this effect of family structure. Both material deprivation and having parents who were not employed had a direct, significant effect on diminished psychosomatic health among children and adolescents. Lack of parental employment appeared to have a stronger effect in some communities than others.

Icelandic girls aged 10–17 suffered from significantly poorer psychosomatic health than boys. This effect persisted after other inequalities related to families, status and social support had been taken into account. The strength of this effect varied significantly across school communities.

Lack of academic achievement in school was a significant stressor that diminished psychosomatic health among young people. Similarly, a lack of social achievement in the adolescent society of school was also associated with a significant diminution in psychosomatic health. Social support had a strong main effect of psychosocial health, independent of other factors. Somewhat unexpectedly, this effect varied significantly between school communities. Measures of community-level differences did not play an important role in individual psychosomatic health status among adolescents.

Due to the small size of the country, Iceland provides a unique opportunity to study the implementation of a nationwide policy, its successes and shortcomings, and the lessons learned.

The Public Health Institute of Iceland has for several years promoted an integrated approach to adolescent public health policy. The importance of social integration in the collective well-being of adolescents is emphasized, with special attention to the potential of social and normative cohesion among parents for creating positive outcomes among adolescents. This strategy covers such diverse topics as mental and physical health, substance use, hygiene and nutrition.

Implications for future research are discussed.

Introduction

Mental and physical health is intimately related to inequality and marginalization. People with higher education and socioeconomic status tend to enjoy better health than people in lower positions (1,2). The association between inequality and poor health appears to be rooted in various social, cultural, economic and behavioural differences. Frequently cited factors

contributing to this association include differences in lifestyle and consumption patterns, increased physical and emotional strain at work, and the strain of poverty and lack of social mobility (3). Unemployment in particular appears to be related to increased psychological distress (4,5). Women experience more physical and psychological problems than men, which can in part be traced to gender inequalities in society (6,7).

Parents' socioeconomic status may influence the psychological and physical health of children in similar ways as among adults. Parental education and income can affect children's life chances in various ways (8,9), and children share the lifestyle and consumption patterns of their parents to a considerable degree. Family structure has various social and economic repercussions and the social and emotional complexities of a non-traditional family structure may be a significant stressor in the lives of children (10). At community level, adolescents living in neighbourhoods characterized by low socioeconomic status, material deprivation, regional marginalization and high levels of non-traditional families may also experience more physical, psychological and social problems than those living in more stable and affluent communities (11–13).

However, adolescents also belong to social status hierarchies independent of their families. In schools, there are two status hierarchies based on achievement: the formal education system, and the informal hierarchy of adolescent society (14,15). Inequalities in educational achievement among adolescents may cause similar strains to those caused by inequalities in socioeconomic status among adults. Adolescents can therefore be expected to suffer from doing poorly in school. Similarly, the strict social ranking of adolescents among themselves creates profound inequalities that may have a strong negative impact on “unpopular” children – those with the lowest status in adolescent society (16).

Social cohesion and social support have been found to be effective “buffers” against the negative effects of social inequalities (4). In the case of adolescents, social support from parents is the most important form of such support (17). The negative effects on psychosomatic health of lower parental socioeconomic status, non-traditional family structure, academic troubles and unpopularity in school can therefore be expected to be less serious for those adolescents enjoying strong parental support.

Iceland as a case study

Due to the small size of the country, Iceland provides a unique opportunity to study the implementation of a nationwide policy, its success and shortcomings, and the lessons learned. Icelandic schools are almost exclusively neighbourhood based and consequently provide a reasonable approximation of neighbourhood-level processes. A wealth of information exists on the situation in each school and their participation in various public health efforts as well as the communities and neighbourhoods in which they are situated.

The establishment of the Public Health Institute of Iceland on 1 July 2003 was an important step towards a more integrated Icelandic public health policy. The institute was established by merging the Tobacco Prevention Council, the Council of Alcohol and Drug Prevention, the Dental Health Council and the Nutrition Council. Later, the Mental Health Promotion Project was also merged with the Public Health Institute. Since the establishment of the institute, the Division of Research and Development and the Division of Education and Communications have been integrated with all health promotion and prevention projects.

Effective public health policy must address social determinants of health. A research strategy that addresses social determinants of health work in both national and local settings is necessary to support individual and community-based health initiatives. The Institute's research strategy includes support for Icelandic participation in the European School Survey Project on Alcohol and Other Drugs (18) and the HBSC multinational research projects and development of research on health and well-being of the Icelandic population, with special attention to social gradients in physical and mental health.

The Institute's main roles include coordination and initiation of activities in health promotion and prevention, advising the government on health policy, evaluation of health promotion projects and monitoring of major indicators of health. Many projects at the Institute aim explicitly or implicitly towards improved well-being through, for instance, improved nutrition, increased physical activity and reduced tobacco, alcohol and drug use. The goal of the project “Everything affects us, especially ourselves!”, for example, is to promote healthy lifestyles of children and their families by emphasizing increased physical activity and improved diet in schools and thereby increased general well-being.

Mental health promotion is an important aspect of the work of the Public Health Institute. This is done through active cooperation with various stakeholders in the field of mental health, with special emphasis on cooperation around World Mental Health Day. The mental health promotion project emphasizes increased awareness of mental health as being essential to good overall health and well-being and educates people about ways to improve their mental health. Additionally, the project promotes awareness of positive mental health and seeks ways to reduce prejudices towards mental health problems. The Institute also runs “Zippie’s friends”, a programme that teaches school-aged children various coping skills.

Method

Data collection

The data used in this study are drawn from the Icelandic section of the HBSC survey (19). The sample consisted of all students attending the compulsory sixth (11–12-year-olds), eighth (13–14) and tenth (15–16) grades in all Icelandic secondary schools. Anonymized questionnaires were administered to all students who were present in class on the day of administration in February 2006. Teachers and research assistants distributed the questionnaires and students sealed completed questionnaires in blank envelopes upon completion (for methodological considerations, see Bjarnason (20)).

Valid questionnaires were obtained from 86% of all Icelandic sixth, eighth and tenth grade students. In other words, every individual in these three cohorts in the country that was present in school participated in the survey. The study is therefore based on responses from most of the national population in these age groups. Due to a split-half sample in the tenth grade, however, only half of the tenth grade students in the country were eligible for the current analysis. Since each anonymous individual response can be linked to a specific school student identification number, these data provide a unique opportunity to study multilevel processes of social cohesion on mental health in adolescents.

Missing values

The proportion of missing values on each of the items used in the following analysis ranges from 0.9% to 5.3%, with an average of 2.2% missing values across all measures. Missing values on continuous independent variables were replaced by stochastic mean substitution, adding a normally distributed error term to each substituted value (see Kalton (21)). Missing values on heavily skewed dichotomous variables such as family structure and parental employment were assigned to the majority group. Cases with missing values on gender and the dependent variable were excluded from further analysis. The final sample used in the following analysis includes 8908 students in 163 schools.

Dependent variable

The dependent variable of psychosomatic well-being, shown in Table 1, is constructed from an eight-item symptom checklist (22).

Family structure

Research has consistently found that adolescents living with both biological parents are somewhat better than those living in other arrangements (23). For the purposes of this case study, responses to a checklist of individuals living in the household with the respondent were used to construct two dichotomous variables (0–1) indicating family structure:

1. single-parent family with one biological parent in the household (16%)
2. step-parent family with step-parent in the household (14%).

Families with both biological parents in the household serve as a contrast in the following analysis. At school level, the prevalence of non-traditional families is measured as the percentage of adolescents not living with both biological parents (an average of 28% across schools).

Parental employment

Student responses to questions about their parents’ employment status were used to construct two dichotomous variables (0–1) indicating:

Table 1

Descriptive statistics for multilevel models of the influence of inequalities and cohesion on psychosomatic health among 12–17-year-old students in Iceland, 2006

	Range	Mean	SD
LEVEL 2			
Unemployment	0.00–0.29	0.04	0.05
Deprivation	0.33–2.00	1.01	0.30
Non-traditional families	0.00–0.67	0.28	0.13
Capital region	0–1	0.64	0.48
Generational integration	2.71–4.00	3.36	0.22
LEVEL 1			
Family inequalities			
Single parent	0–1	0.16	0.36
Step-parent	0–1	0.14	0.35
Father not employed	0–1	0.04	0.19
Mother not employed	0–1	0.12	0.33
Material deprivation	0–6	0.98	1.02
Status inequalities			
Female	0–1	0.50	0.50
Age	10–17	13.32	1.53
School status	1–4	2.18	0.86
Peer status	3–15	5.98	2.23
Social support			
Parental support	1–4	3.40	0.73
Dependant variable			
Psychosomatic health	8–40	31.52	6.65
N (Level 2)	163		
N (Level 1)	8,908		

1. father not employed (4%)
2. mother not employed (12%).

According to Statistics Iceland (24), about 6% of 25–54-year-old males and 15% of 25–54-year-old females were not active in the labour force at the time of the survey in the first quarter of 2006. Families with both parents employed serve as a contrast in the following analysis. It should be noted that children indicating that a parent is not employed does not necessarily mean that the parent is unemployed; some parents are not in the labour market because they are, for instance, students, retired, disabled or working at home. This is particularly relevant in the case of mothers, who may be staying at home with young children.

At school level, the prevalence of unemployed parents is measured as the average of unemployed fathers (an average of 4% across schools). In comparison, the official unemployment rate in Iceland in the first quarter of 2006 was 2.2% among males and 2.4% among females (24). This use of not-employed fathers to estimate the unemployment rate in school communities is not without problems. It is nevertheless the best available proxy measure since unemployment is not recorded at the level of the school community and can be expected to be highly correlated with the actual unemployment rate on an aggregate level.

The material situation of the family is measured by a summary scale constructed from family ownership of computers and cars and family vacations in the past year. The scale was inversely coded as a measure of material deprivation so that “6” indicates none of these things and “0” indicates at least two of each. On the aggregate level, the average level of reported deprivation in each school is used as an indicator of community deprivation.

Capital region

There is a relatively sharp distinction in Iceland between the capital region, where about two thirds of the population reside, and the remaining areas of the country. The rapidly growing capital area surrounding Reykjavik offers a diversity of professional, service, government and business opportunities that cannot be matched in other areas of the country (25). In sharp contrast, occupational opportunities in many rural areas are rather limited and tend to be highly gendered (26). The aggregate-level variable capital region indicates if the school is situated in the capital region (coded “1”) or not (coded “0”).

Status hierarchies

A single item is used to measure school status as the perceived academic status of children in the eyes of their teachers. The item was recoded so that “1” indicates “below average” and “4” indicates “very well”. Peer status is the sum of three items measuring how well students get along with their classmates. The resulting measure ranges from “3” (low peer status) to “15” (high peer status).

Parental support is coded from the responses to four questions about how easy it is for the adolescent to talk about worries with mother, stepmother, father or stepfather. Under the assumption that the strength of the strongest relationship is the crucial factor rather than the average strength of all relationships, the variable parental support was coded so that “1” indicated it was very difficult to talk to everyone on the list, while “4” indicates that it is very easy to talk to at least one of these four potentially relevant persons about things that are really worrying. On the aggregate level, the average level of parental support in each school is used as an indicator of generational integration.

Statistical analysis

The following data analysis is based on multilevel modelling techniques (27,28) and was conducted by use of the HLM 6 software. This methodology allows us to address empirically several important theoretical and conceptual issues. Extending the general multiple regression model, hierarchical linear regression allows the estimation of individual-level models of the effects of inequalities and social cohesion on psychosomatic health as:

$$Y_{ij} = \beta_{0j} + \sum_{q=1}^Q \beta_{qj} X_{qij} + r_{ij}$$

where Y_{ij} is the psychosomatic health of student i in school j , β_{0j} is the individual-level intercept for each school, β_{qj} ($q=1,2,\dots,Q$) are individual-level slopes for each school j , X_{qij} is the q th individual-level predictor for student i in school j , and r_{ij} is the individual-level error term. This extends the general regression model by allowing the estimation of variable intercept models of the effects of school-level predictors on these individual-level adolescent outcomes, as well as allowing the estimation of variable slopes for individual-level predictors across school communities. In effect, each of the individual-level coefficients β_{qj} can be modelled as an outcome variable in the school-level model:

$$\beta_{qj} = \gamma_{q0} + \sum_{s=1}^S \gamma_{qs} W_{sj} + u_{qj}$$

where γ_{q0} is the school-level intercept for the individual-level slope q in school j , γ_{qs} ($s=1,2,\dots,S$) are school-level slopes associated with the individual-level slope q , W_{sj} is the s th school-level predictor for school j , and u_{qj} is the school-level error term. In other words, both the average psychosomatic health in each school and the strength of individual-level predictors (such as age and economic deprivation) in each school can be modelled as a function of school-level characteristics (proportion of single parents in the school community, for instance). All individual-level and school-level predictors are centred to the grand mean in the following analysis.

Results

The first column in Table 2 shows the results of regressing psychosomatic health on school-level characteristics. The results show that psychosomatic health is on average less in schools where there are higher levels of parents that are not employed, where more children report material deprivation and where there is less generational integration. When these factors have been taken into account, there is no net effect of the community-level proportion of non-traditional families or geographical marginalization.

Model 2 shows the effects of family inequalities on psychosomatic health at the individual level. Those living with a single parent or one parent and a step-parent experience more problems, as do those whose parents are not employed. Finally, those who report greater material deprivation also experience worse psychosomatic health.

Model 3 shows the effects of status inequalities on psychosomatic health. The results show that females and younger students report more such health problems. Those who do worse academically and have less status in adolescent society also report less psychosomatic health.

In Model 4, the variables introduced in the first three models are all included in a single model. The results show that while all the individual-level predictors continue to be statistically significant, those associated with family inequalities are substantially reduced by the inclusion of measures of status inequalities. At school level, only the measure of generational integration continues to be statistically significant.

In Model 5, parental support is introduced as a buffer against the effects of social inequalities on psychosomatic health. The results present a mixed picture. After taking parental support into account, the effect of non-traditional family structure is in fact slightly stronger than before. Some buffering effects are found for father's unemployment, age, school status and peer status. Parental support, however, appears to have a mainly direct, independent effect; the greater parental support enjoyed by children, the less psychosomatic problems they experience.

Discussion

The main objective of the welfare state is to ensure minimum standards of income, nutrition, health, housing and education for every citizen (29). In Iceland, this has primarily been achieved through universal benefits for the entire population, rather than targeted assistance to those who need it most (30). For instance, rather than advocating a free lunch programme for needy children, the Public Health Institute of Iceland has encouraged local governments to offer healthy meals free of charge to all children in elementary schools. Similarly, municipal initiatives to increase sports and social participation among children have been based on a voucher system where all children in the municipalities can participate in such activities free of charge, the organizers being refunded by local government based on participation figures.

Such universal programmes are intended to benefit the whole population and, at the same time, eliminate the stigma associated with public assistance. They are thought to lead, for instance, to better nutrition and increased participation in sports and social activities for everyone, but in particular for those who are disadvantaged. They should therefore buffer the effects of social inequalities on mental health and inhibit the formation of pockets of marginalization where community-level disadvantages negatively affect the mental health of all children.

The findings presented here confirm and extend several findings of previous literature. In line with earlier research (see McLanahan & Sandefur (10)), adolescents who do not live with both biological parents report significantly poorer psychosomatic health. The presence of a step-parent in the household does not seem to diminish the negative effect of the absence of a biological parent. Contrary to studies in other areas (see Bjarnason et al. (23)), other types of inequalities in economic situation, social status and social inequality do not seem to account for this effect of family structure. Finally, these results show that the effect of non-traditional family structure has similar effects across different school communities in Iceland.

Ross et al. (13) found that poverty and social disorder at neighbourhood level increased individual powerlessness and fear, which in turn led to psychological distress. Unemployment is also directly related to increased psychological distress among adults and young people (4,5). The results of this study show that both material deprivation and having parents who are not

Table 2

Multilevel models of the influence of inequalities and cohesion on psychosomatic health among 12–17-year-old students in Iceland, 2006 (unstandardized HLM coefficients)

	Model 1	Model 2	Model 3	Model 4	Model 5	Variance
LEVEL 2						
Unemployment	-5.31*			---	---	
Deprivation	-1.00**			---	---	
Non-traditional families	---			---	---	
Capital region	---			---	---	
Generational integration	-3.63***			-1.49***	---	
LEVEL 1						
Family inequalities						
Single parent		-1.07***		-0.77***	-0.82***	---
Step-parent		-1.16***		-0.75***	-0.90***	---
Father not employed		-1.74***		-1.28**	-1.10**	5.66***
Mother not employed		-0.63**		-0.51*	-0.49*	1.30**
Material deprivation		-0.57***		-0.26***	-0.21**	---
Status inequalities						
Female			-1.82***	-1.79***	-1.76***	0.70**
Age			-0.64***	-0.62***	-0.50***	0.11***
School status			-1.48***	-1.38***	-1.23***	---
Peer status			-0.77***	-0.74***	-0.68***	---
Social cohesion						
Parental support					1.42***	0.29**
Intercept	31.33***	31.55***	31.48***	31.43***	31.49***	0.16***
R² Level 2	84.0%	33.9%	57.1%	62.0%	66.6%	
R² Level 1	0.0%	3.7%	18.3%	19.7%	22.1%	

R² R-squared, standard notation for explained variance

* p < .05 ** p < .01 *** p < .001

employed has a similarly direct, significant effect on diminished psychosomatic health among children and adolescents. The effect of material deprivation does not vary significantly across school communities, but a lack of parental employment appears to have a stronger effect in some communities than others. Future research should seek to identify factors that increase or decrease the negative effects of having parents who are not employed.

As is the case in most other studies of sex differentials in health and mortality (see, for example, Verbrugge & Wingard (6)), Icelandic girls aged 10–17 report significantly poorer psychosomatic health than boys. This effect persists after other inequalities related to families, status and social support are taken into account. Interestingly, it was also found, however, that the strength of this effect varies significantly across school communities. Community-level factors that increase or decrease female psychosomatic health have not been studied in this context, but may represent an important direction for further research.

Inequalities in adolescent status hierarchies also affect psychosomatic health. Lack of academic achievement in school is a significant stressor that decreases psychosomatic health among young people. Similarly, a lack of social achievement in the adolescent society of school is also associated with a significant decrease in psychosomatic health. Importantly, these results suggest that the negative effects of these status inequalities are the same across different Icelandic school communities.

In line with previous research (4), parental support was expected to buffer the negative effects of inequalities on psychosomatic health among adolescents. Indeed, some evidence of this was found in the data. However, social support primarily has a strong main effect of psychosocial health, independent of other factors. Somewhat unexpectedly, this effect varies significantly between school communities. It is possible that this variation could be attributed to differences in intergenerational closure as a form of community-level social capital (31,32). This should be further examined in future studies.

These measures of community-level differences do not play an important role in individual psychosomatic health among adolescents. Higher unemployment, material deprivation and lack of generational integration at school level are associated with less psychosomatic health. However, these community-level effects vanish when individual-level predictors are added to the equation. In other words, individual-level inequalities appear to fully account for the effects of community-level inequalities. Furthermore, these community-level effects do not explain the significant variation in the strength of individual-level predictors between school communities. Identifying structural factors that may account for differences in the effects of individual-level inequalities is a major goal for future research in this area.

Lessons learned

Social disorganization and concentration of poverty can affect health and social well-being in various ways (33). Icelandic public health policy is based on the principle of diminishing the negative effects of class and socioeconomic status by universal programmes rather than targeted assistance. It is possible that one of the effects of this overall policy is to eliminate community-level variation in mental health among adolescents. It does not, however, eliminate individual-level variation, nor does it eliminate differences in the strength of individual-level predictors of mental health. In particular, the effects of parental employment on psychosomatic health vary significantly between schools, as does the beneficial effect of parental support. Similarly, the effect of age and gender on psychosomatic health varies significantly between schools.

Further work is needed to map the community and individual-level differences to support local-level policy-makers and to deliver programmes to reduce health inequalities. The effectiveness of public health policy and public health programmes rests on broad knowledge of health inequalities. Research projects such as HBSA are not only for international comparative research, but also for policy-makers and officials to identify needs and evaluate programmes' effectiveness. The Public Health Institute of Iceland will continue to use results from research at both national and local levels to develop and evaluate new and existing projects.

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Ireland: social cohesion for mental well-being in adolescence

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Executive summary

Adolescence is a relatively healthy time in life with low levels of morbidity and mortality. Yet adolescence is also the typical age for the onset of a range of mental disorders, which for some can have lifelong implications. In light of this, promoting positive health and well-being in adolescents is of high importance. The Irish case study presents the mental well-being status of Irish adolescents, determinants of mental well-being, the Irish policy framework and a description of an intervention initiative that aimed to improve adolescents' emotional well-being.

There is limited information about Irish adolescents' mental health status and the determinants associated with mental disorders. Data on well-being, positive health and resilient factors are, however, available. Based on data collected as part of the Irish 2006 HBSC survey, 76.6% of Irish children report high life satisfaction, 52.8% report they always or very often feel happy with the way they are, and 49.7% report that they are very happy with their life at present. Only 33.3%, however, report that they enjoy excellent health. The following complaints were reported as being experienced at least once a month: headaches (52%); stomach ache (45.9%); backache (34.2%); feeling low (48.4%); feeling nervous (57.3%); experiencing sleeping difficulties (44.3%); and feeling dizzy (30.1%).

Findings from the Irish 2002 HBSC survey suggest that poor mental health (feeling unhappy, reported low life satisfaction, frequent physical and emotional symptoms) is associated with food poverty, while other studies suggest that good communication with older siblings and peers, and especially parents, predict high life satisfaction, happiness and infrequent psychosomatic symptoms. Findings also suggest that more sources of support in social settings predict better mental well-being. Additional analyses indicate that positive perceptions of school and local area are also strong predictors of positive health.

The social climate in Ireland is undergoing change: the GDP has tripled over the last ten years; the number of older people has increased, changing the overall age structure of society; and the number of lone-parent families has increased and more women participate in the labour force, suggesting a possible shift in family structures. Despite economic growth, recent data illustrate that 34.4% of people in consistent poverty are children and that members of lone-parent households make up almost 15% of people in consistent poverty, despite representing less than 4% of the population. This changing climate may pose a threat for mental well-being which, in part, has provided the impetus to put mental health promotion at the forefront of policy issues. A number of policy documents set out recommendations on promoting positive mental health. Findings from HBSC surveys have been used by government bodies and nongovernmental agencies to advance and assist in the development of national social and health-related policies and have also been used as a resource for policy-makers.

An all-Ireland cross-border mental health promotion initiative, the "Getting it together" project, is described in detail in this case study. The project was carried out under the auspices of Cooperation and Working Together (CAWT), a cross-border body in Ireland that aims to improve the health and social well-being of their resident populations (1). The initiative targeted adolescents and young adults in Ireland and Northern Ireland and was designed to build participants' understanding of emotional well-being and facilitate the development of a youth-friendly, needs-led resource. The resource materials include posters, flashcards and leaflets, which are intended for use by trained peer leaders.

The participants reported an increase in confidence and improved coping, communication and facilitation skills. Positive effects on emotional and mental well-being were reported by the young people involved and by the advisory group. Opportunities for young people to pilot the resource with their peers and to support other young people to use or deliver it were identified. A comprehensive evaluation of the project was undertaken, which included examining the process of development of the resource, the impact on the participating young people and the extent to which the project achieved its aims and objectives.

Introduction

Adolescence is a relatively healthy time in life with low levels of morbidity and mortality. Yet adolescence is also the typical time for the onset of a range of mental health problems, which for some can have lifelong implications. In light of this, promoting positive health and well-being in adolescents is of high importance. This case study presents the mental well-being status of Irish adolescents, social cohesion as a predictor of mental well-being, the Irish policy context and a description of an intervention initiative that aimed to improve adolescents' emotional well-being.

The population of Ireland is 4 234 925 people (2006 figures) living in 26 counties over 43 666 km², with a population density of 96.98 people per km². Since 2002, the population in Ireland has increased by 8.1%. About 10% of the population to date is non-Irish nationals, reflecting the high net inward migration of about 46 000 a year between 2002 and 2006. The majority of the population (2.3 million) reside on the eastern province (Leinster), followed by 1.2 million in the south and south west province (Munster), 0.5 million in the western province (Connacht) and 0.27 million in the counties of north-west province (Ulster) that are part of the Republic.

The population of Ireland is relatively young (35.1 years) with about a quarter of the population being children under 18 years. Together with a large number of immigrants, the increasing divorce rate is another indicator of the changes in society. Divorces were legalized in Ireland in 1997 and, by 2002, the number of divorces had more than tripled (from 9800 to 35 100). The official languages in Ireland are Irish and English.

Mental health and well-being status among adolescents

There is limited information about Irish adolescents' mental health status and the determinants associated with mental disorders. Existing data on children's admissions to psychiatric hospitals reveal that 85.9% of adolescents admitted were aged 15–17 years. The leading reasons for admission were depressive disorders, neurosis, personality disorders, drug dependence and schizophrenia (2). A community-based regional study found that out of 4000 children who were screened for mental health problems, 10% of 6–12-year-olds and 26% of 13–18-year-olds were diagnosed positive. The figures were higher for children from deprived socioeconomic backgrounds, with 16% of 6–12-year-olds and 34% of 13–18-year-olds diagnosed with mental health problems. National data on adolescents' mental health that are regularly reviewed and updated are lacking, but data on well-being, positive health and resilient factors for mental well-being are available.

Based on data collected as part of the 2006 Irish HBSC survey, 76.6% of Irish children reported high life satisfaction, 52.8% reported they always or very often felt happy with the way they were, and 49.7% reported that they were very happy with their life at present. However, only 33.3% reported that they enjoyed excellent health: 52.0% reported that they suffered from headaches; 45.9% reported stomach ache; 34.2% reported backache; 48.4% reported feeling low; 57.3% reported feeling nervous; 44.3% reported experiencing sleeping difficulties; and 30.1% reported feeling dizzy, all at the frequency of at least once a month.

Additionally: 45.2% reported taking medication for headache; 23.6% reported taking medication for stomach ache; 5.2% reported taking medication for sleeping difficulties; and 4.3% reported taking medication for nervousness, all at the frequency of at least once in the previous month.

There were substantial differences between boys and girls in how they answered these questions, and there were also differences by age group. In general, boys reported more positive well-being than girls, and well-being was lower among older adolescents than younger ones.

Social cohesion among adolescents

It is difficult to identify adolescents' level of social cohesion. For the purpose of this case study, the following indicators of social cohesion were examined: family structure; relationships with parents; peer relationships; and perceptions of school and local area.

Findings from the 2006 Irish HBSC survey indicate that 17.4% of adolescents lived in single-parent families. This finding is consistent with data from the 2002 census, indicating that 15% of adolescents aged 10–17 years were living in a household unit with a single parent (2). Regarding relationships with parents, 80.7% of Irish children reported that they found it easy or very easy to talk to their mother and 64.1% reported that they found it easy or very easy to talk to their father. Only 3.2% of children reported that they did not have or did not see their mother, compared to 6.5% who reported that they did not have or did not see their father.

Irish schoolchildren report strong peer relationships: 77.8% of children reported having three or more close male friends; 80% reported having three or more close female friends; and 86.1% reported that they found it easy or very easy to talk to their best friend. Additionally, 40.5% reported spending time with their friends after school four times or more per week, and 42.3% reported spending time with their friends four or more evenings per week. However, 12.9% of children reported that they didn't spend time with their friends after school or in the evening on any day of the week.

The data on school perceptions can be divided into three areas: students' relationships, relationships with teachers, and general school perceptions. Overall, 74.4% of Irish children reported that the students in their class enjoyed being together; 79.8% reported that the students in their class accepted them the way they were; and 67.6% reported that the students in their class were kind and helpful. Regarding relationships with teachers, 69.5% reported that they could get extra help from teachers; 62.8% reported that their teachers encouraged students to express their own views; and 57.9% reported that their teachers treated students fairly. In addition to relationships with students and teachers, the students reported on more general school perceptions: 57.7% of children reported that school was a nice place to be; 67.8% reported that they felt they "belonged" at school; 72.1% reported that they felt safe at school; and 55% reported that the rules in their school were fair.

The last set of indicators of social cohesion examined perceptions towards the local area: 90.4% of Irish children reported that they felt safe in their local area; 75.3% reported that their local area was a good place to live; 83.4% reported that it was safe for young children to play outside; 72% reported that they trusted the people in their local area; 78.7% reported that they could ask for help or a favour from neighbours; and 42.2% reported that there were good places to spend free time in their local area.

The relationship between social cohesion and mental well-being among adolescents

The link between mental well-being and social cohesion has been explored in a number of recent analyses of the Irish HBSC data. Findings from the 2002 survey suggest that children living with both parents and having positive relationships with their parents and friends were more likely to report that they were very happy compared with children in single-parent families and those who did not have such positive relationships with their parents and friends (3). Living with both parents was also found to be correlated with less emotional and physical symptoms (4). Infrequent emotional and physical symptoms were also associated with good relationships with classmates and with good relationships with parents (5–7).

A study of food poverty found it to be associated with poor mental health (feeling unhappy, reported low life satisfaction, frequent physical and emotional symptoms). Children who report that they go to bed or to school hungry because there is not enough food in the home are more likely to report frequent physical and emotional symptoms and lower life satisfaction. Children experiencing food poverty are also more likely to be unhappy with their lives (8).

Another study suggests that across both genders and all age groups, good communication with older siblings, peers and especially parents is predictive of high life satisfaction, happiness and infrequent psychosomatic symptoms. In addition to the separate effect of each of the sources of support, it was found that the accumulation of support from all three sources is an even stronger predictor of positive health: the higher the number of sources of support, the more likely it is for children to experience positive health (9). Following the same approach to data analysis, findings from the 2006 Irish HBSC survey suggest that the higher the number of positive school perceptions and of positive local area perceptions, the more likely it is for children to report high life satisfaction (10,11).

Social and policy context

The social climate in Ireland is undergoing change. The GDP has tripled over the past ten years; the number of elderly people has increased, changing the overall age structure of the society; the number of lone-parent families has increased; and more women participate in the labour force, suggesting a possible shift in family structures (2,4). Despite economic growth, recent data illustrate that over one third of people in consistent poverty are children (34.4%) and that members of lone-parent households made up almost 15% of people in consistent poverty, despite representing less than 4% of the population (12).

This changing climate may pose a threat for mental well-being which, in part, has provided the impetus to put mental health promotion at the forefront of policy issues. A number of policy documents propose recommendations on promoting positive mental health; these documents will be reviewed below.

One of the most important policy documents is The national health promotion strategy 2000–2005 (13), which sets a broad policy framework to inform action. In relation to children and young people, the national strategy highlighted several major needs: the need to promote a holistic approach to promoting physical and mental well-being; the need to focus attention on children from lower socioeconomic backgrounds; and the need to support, promote and develop healthy lifestyle choices were prioritized. The strategy outlined several mechanisms to fulfil these needs, including the development of partnerships with families and other bodies relevant to the lives of young people.

The issue of suicide and deliberate self-harm has been of concern in recent years, with several policy initiatives put in place to address the problem. In 1993, the Criminal Law (Suicide) Act decriminalized suicide, a behaviour that up until 1993 was considered an offence. Following this development, the National Task Force on Suicide was established in 1995 by the Minister for Health and Children. The Task Force published its first report in 1998 (14). This was the first report to address the issue of suicide in Ireland and it made a number of recommendations covering service provision, primary prevention, crisis intervention and research.

More recently, the “Reach out – the national strategy for action on suicide prevention 2005-2014” (15) strategy was developed, addressing the issue of suicides and deliberate self-harm. It reveals that more people die each year by suicide than in road traffic accidents in Ireland, with youth suicide rates ranked fifth highest in the EU. In essence, the strategy aims to: prevent suicide and self-harm; reduce levels of suicide ideation in the general population; offer effective and timely support to those engaged in deliberate self-harm; and support those affected by suicide death or deliberate self-harm.

The main objective of the strategy in relation to young people is “to promote positive mental health, develop counselling services and put standard crisis response protocols in place in all primary and secondary schools”. The strategy identifies the school as an important arena for positive health promotion and prevention of mental health problems. School plays a role in building children’s resilience but also in identifying and supporting students at risk (due to, for instance, bullying, sexual orientation or low self-esteem). Schools also play an important role in the aftermath of suicide (of a student or another member of the school community), minimizing its negative impact on the school and the wider community. The strategy therefore highlights the need to include education on mental well-being and mental health problems in the school curriculum. More specifically, it states that the curriculum should address the myths and stigma surrounding mental health problems, which are barriers to seeking help.

The most recent policy document, *A vision for change: the report of the Expert Group on Mental Health Policy* (16), sets out a comprehensive model of mental health services provision in Ireland and proposes a framework for how positive mental health should be implemented. The suggested framework recognizes the need for programmes addressing risk and protective factors in young people and puts the focus on child populations that are at risk (those from poorer socioeconomic backgrounds).

One such programme is the Social Personal and Health Education (SPHE) programme. The report recommends that the SPHE programme (and other relevant programmes) be part of the school curriculum at primary and post-primary levels of education. It puts specific emphasis on the prevention of bullying behaviour as a key element in the promotion of positive mental health and emphasizes that programmes should not only address school-going children, but should also be implemented for early school leavers.

Other strategies that are cognisant of the need to promote positive mental health include the national children's strategy (17), which adopts the "whole-child" perspective. This strategy aims to advance children's quality of life and promote all aspects of their development. The national drugs strategy (18) identifies young people (school-going and early school leavers) as a risk group for substance misuse, highlights associations between substance misuse and antisocial behaviour and points out that children using drugs are at risk of finding themselves outside the scope of mainstream society. The strategy therefore aims to prepare young people to resist drugs and to handle drug-related problems through the provision of information, skills and support and through strengthening the sense of belonging and involvement in school and in the community.

Another example is the Strategic Task Force on Alcohol. In their report (19), the Task Force addresses the risks associated with early-age alcohol consumption and identifies areas for intervention through: creating alcohol-free environments at sporting events; creating and promoting parenting programmes for alcohol awareness; including programmes that offer support for celebrating special events safely in the school curriculum; and promoting responsible approaches towards alcohol use among college students.

Select intervention aiming to build social cohesion for mental well-being among adolescents

An all-Ireland cross-border mental health promotion initiative, the "Getting it together" project, is described below. This initiative was carried out under the auspices of CAWT, a cross-border body in Ireland that aims to improve the health and social well-being of their resident populations (1).

Background

CAWT is a cross-border health care initiative between Northern Ireland and Ireland, initiated in 1992. It is based on the understanding that areas around the boundary between the two regions not only share a common demographic profile, but also share the same problems of high levels of poverty, isolation and peripherality. Within the context of health and social care, it seemed best to tackle these problems through identifying and exploiting opportunities to work together to improve the health and well-being of the border population. Through the CAWT initiative, several services and programmes have been developed, including the "Getting it together" programme.

In 2003, following a cross-border conference, the CAWT Mental Health Subgroup identified the promotion of positive mental health, particularly among young people aged 16–25 years, as an important priority. In collaboration with the Health Promotion Subgroup, a proposal broadly aimed at promoting positive mental health across the border region among 16–25-year-olds and to address the legacy of the Northern Ireland conflict was developed. The proposed programme secured funding under the PEACE II programme established in 1995 to promote cross-border peace and reconciliation in the Border Counties of Ireland and Northern Ireland. It ran from 2000–2004 with an overall objective of providing a strategic framework to support cross-border cooperation strategies and projects for a variety of sectors and organizations.

A project steering group was established in late 2003 and altogether three initiatives were undertaken: a strategic review of mental health promotion across the CAWT area; the piloting of mental health first aid; and the development of a mental health promotion project targeting young people through the direct involvement of existing youth participation structures.

The initiative involving adolescents and young people aimed to develop and pilot a youth-friendly resource to promote emotional well-being in partnership with young people and to build the capacity of young people to deliver the resource. The National Children's Bureau, United Kingdom secured the contract for programme development and the Health Promotion Research Centre, National University of Ireland, Galway conducted the evaluation.

The objectives of the initiative were to:

- work with a representative group of young people already engaged in youth participation projects, build their understanding of emotional well-being and facilitate them to develop a youth-friendly, needs-led and evidence-based resource;
- identify opportunities for young people to pilot the resource with their peers and support other young people to use or deliver it;
- evaluate the process of this project and the impact of the outputs; and

- plan for dissemination of the resource.

The expected outputs of the project were:

- an evidenced-based, youth-led resource for promoting emotional well-being and a plan for dissemination;
- enhanced understanding of emotional well-being within the youth participation projects;
- a strengthened framework for and enhanced links between youth participation projects in the CAWT area; and
- increased capacity of a group of young people to influence policy and practice towards promoting their emotional well-being.

Programme development

The development of the “Getting it together” project took place over a six-month period in 2006. A project plan was agreed by the steering group and the National Children’s Bureau and the engagement of the locally based youth participation projects was established. A process to recruit the young people was decided and 12 young people agreed to become involved. Working sessions took place over a number of weekends on a residential basis. Active group work methodologies were employed for all working sessions and a clear working contract was agreed by all.

Background to the youth participation project

In 2004, the Health Service Executive West and the Western Health and Social Services Board were successful in a joint bid to the INTERREG 111, a programme of the EU, for funding for a two-year project which aimed “to improve the quality of life of young people aged 0–18 years who live in the border regions by ensuring their systematic and continuous involvement in the design and planning of health and social care services in the Western Health and Social Services Board and the Health Service Executive West in the north west of Ireland”.

The youth participation project had already recruited a number of young people who had organized themselves in terms of areas of interest. The young people had identified mental health as one of their key areas of interest and decided that mental health would be the theme for two of their subgroups. The opportunity to become involved in the “Getting it together” project complemented this development.

“Getting it together” project design

The project had a number of components designed to develop the capacity of the young people and to facilitate their process of developing the resource. In particular, the following components were considered important:

- exploring the participants’ understanding of emotional health and well-being and the aims of the project;
- identifying the emotional well-being needs of young people;
- understanding models/approaches used elsewhere and identifying their strengths, limitations and evidence base;
- recognizing and addressing the mental health impact of the civil conflict;
- determining what young people believe they can do to promote their own mental health and well-being and that of their peers;
- exploring suicide prevention;
- designing and delivering their preferred resource; and
- piloting the resource and making final modifications if necessary.

The graphic design company which was granted the design and printing contract worked directly with the young people during a number of the working sessions. The young people informed the design and layout of the final resource as well as its actual content.

The “Getting it together” resource pack

The resource pack includes a variety of leaflets, posters, pamphlets and two sets of peer-led interactive cards targeting young people, parents and service providers, among others. The group’s definition of emotional well-being is outlined throughout the pack as:

- how you feel inside
- balancing emotions and having control of them
- self-esteem and confidence
- being comfortable with who you are
- coping with feelings and building up resilience and “bounce-backability”.

Apart from providing information on emotional health and well-being, the pack also includes an interactive element designed to get young people talking about various elements of positive mental health and seeking help and advice. The interactive elements are used to raise difficult issues and initiate discussions. The resource pack could be used with individuals or groups, using vignettes with questions for discussions or “true or false” cards that give facts and beliefs which are then discussed with the individual or the group. Guidance on facilitating this interactive element is provided in the pack.

Evaluation

A comprehensive evaluation of the project, including an examination of the process of development of the resource, the impact of participation on the young people involved and the extent to which the project achieved its aims and objectives, was undertaken (20). This section will summarize the findings of the evaluation.

The evaluation was conducted using qualitative participatory approaches as an integral part of the programme development and, later, in the assessment of its impact. Systematic information was collected about the different activities, characteristics and outcomes. At the pre-intervention phase, focus groups were used to determine the perceptions and expectations of young people. Observational methodology was utilized for the evaluation of the process of project development and partnership working. The impact of the project was evaluated using workshops, peer interviews, buzz groups, graffiti sticker sheets and a written evaluation questionnaire. Overall, 12 young people aged 15–20 from Ireland and Northern Ireland participated in the project. This group was compared with two groups totalling 20 young people who did not take part in the project, one group from Ireland and one group from Northern Ireland.

The results of the pre-intervention evaluation show that the understanding of emotional well-being was similar in both the project group and the comparison groups. All groups saw well-being as being centred on self-esteem, confidence and feelings. All groups mentioned family, friends, self-confidence, achievements and engagement in activities as determinants of well-being. Outcomes from the process evaluation revealed that the young people participating in the project were very engaged with it and found it to be an enjoyable, useful and important project. The majority of the participants (90%) participated in the discussions and 70% did not miss any residential weekend meeting. However, 20% thought the project was too long and 30% thought it was too short.

In the evaluation of the impact of the project, it was found that the participating group reported an increase in confidence and improved coping, communication and facilitation skills. Positive effects on emotional and mental well-being were reported by the young people involved. Opportunities for participants to pilot the resource with their peers and support other young people to use or deliver it were also identified.

Overall, the “Getting it together” project was viewed as a success by the participating young people. They found that participating in the project was intense, powerful and productive. Participants were very satisfied with the final product, acknowledging its strength in being designed by young people, for young people. For them, the experience was educational, worthwhile and interesting. Young people rated the project process extremely positively and were hopeful that the resource pack would work well for people of their age. Their reflection on the training they received to pilot the resource pack and of the pilot itself was also very positive.

Dissemination of “Getting it together”

The “Getting it together” pack has a number of target audiences, and dissemination has to take account of this. The pack is designed as a collection of resources, all of which can be ordered separately or as a whole for distribution through a range of settings such as schools, families, youth services and health services. The integration of the various resources into existing health promotion programmes, along with training in their use, will maximize their impact. The interactive cards are designed as peer education resources and require the training of young people as peer facilitators, so a supportive context is essential. The countrywide roll out of Social Personal and Health Education, a mandatory syllabus in all Irish post-primary schools, provides an opportunity for the dissemination of the “Getting it together” pack.

Lessons learned

The work with the advisory group and the designer resulted in a colourful and youth-friendly resource. Yet funding for the project ended at the stage of the final resource pack and no resources were allocated to the dissemination plan. While the participants volunteered to take the pack forward and use it, no national or systematic dissemination plan was drafted or funded, resulting in poor dissemination to date. This situation underlines, once again, the need to plan and fund not just the intervention tool, but also the means for dissemination.

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Lithuania: youth mental health – from research to policies, practice and partnerships

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Executive summary

Lithuania is situated on the eastern shore of the Baltic Sea. It was part of the former Soviet Union for 50 years (1940–1990) and followed typical eastern European economic, education, welfare and health care models. Lithuania regained its independence in March 1990, became a Member State of NATO in March 2004 and joined the EU in May 2004.

The country is now in a complex transition phase as it moves from being a centralized economy to a democratic society with a market economy. Lithuanian citizens have basic human rights, there is an independent and strong media sector and many nongovernmental organizations have been established in different fields. But privatization, a perceived lack of transparency in redistributing former state property and other social transformations are causing disagreements and creating social inequalities within the country. These social inequalities may be contributing to the significant health inequalities (which include mental health) found in Lithuania.

In 2006, 21 per 1000 children aged 0–17 years had a disability of some kind, with mental illness-related disability accounting for 56% of the total. The incidence (diagnosed new cases) and prevalence (total number of individuals) of mental illness among children were 118.6 and 1293.5 per 100 000 respectively.

HBSC surveys carried out in Lithuania in 1994, 1998, 2002 and 2006 served as a basis for the development of a dynamic database for the analysis and evaluation of young people's health behaviour. The data demonstrate the wide range of mental health problems young people face, the main ones being: a relatively low rating of subjective health and well-being; growing prevalence of smoking, alcohol and drug use; high prevalence of bullying in schools; and high rate of suicides.

Like many other countries in eastern Europe, Lithuania's system of mental health care is largely based on hospitalization of mentally ill patients in large institutions, backed by significant funding for medication. According to the 2000 statistics, Lithuania had three segregated long-term institutions for intellectually disabled children.

Reforms now aim to bring mental health care closer to communities through the establishment of mental health care centres within municipalities and the creation of an effective community-level network of social psychiatric structures, with NGOs included in service provision. The implementation of the reforms raises many challenges, however, particularly in relation to the younger population.

Most preventive mental health programmes for young people are implemented with the involvement of NGOs. Campaigns such as "Childline" and "Stop bullying" are examples of such successful initiatives. They aim to create safer school environments for children and promote friendly and respectful communication that does not involve humiliation and bullying. Other projects like "Teenagers in action" are aimed at encouraging involvement of youth volunteers to provide crisis interventions and education for peers. "One-day centres against risk behaviour" have been set up to reach the teenagers at greatest risk of self-destructive behaviour. There is no system of state funding, however, to guarantee sustainability of these preventive programmes.

Mental health and well-being status among adolescents

Official statistics on youth mental health

There are no reliable statistics on the population prevalence of mental and behavioural disorders in Lithuania because no epidemiological surveys have been carried out among the young or adult populations. Data collected by the State Mental

Table 1

Trends of several mental health indicators of 10–24-year-old males and females between 1999 and 2005 (4)

		Average values per 100 000 of 10–24-year-olds						
		1999	2000	2001	2002	2003	2004	2005
Mortality due to suicides	Males	33.0	34.6	32.2	40.0	31.1	30.6	26.1
	Females	6.2	6.6	5.0	4.2	3.4	5.3	3.2
Incidence of mental disorders	Males	264.0	254.9	185.2	181.5	189.8	175.5	152.0
	Females	188.5	225.4	188.8	165.8	169.7	160.1	126.2
Incidence of disorders related to dependence	Males	103.3	97.5	125.1	91.0	59.9	63.9	54.8
	Females	14.9	15.6	23.2	22.5	13.3	11.6	14.4
Incidence of drug addiction and substance misuse	Males	45.0	66.2	92.4	63.9	39.6	46.2	30.5
	Females	10.7	13.7	19.0	18.5	11.2	10.3	11.5

Health Centre and Lithuanian Health Information Centre are only available on cases registered by the state mental health institutions.

In 2006, according to the report of the Controller for Protection of the Rights of the Child of the Republic (1), 15 667 children aged 0–17 years (2.7% of all children, or 21 per 1000 children) had various kinds of disability. Mental disease-related disability accounted for 56% of all disabilities (2). The State Mental Health Centre of Lithuania claimed that the incidence (diagnosed new cases) and prevalence (total number of diseased individuals) of 0–17-year-old children due to mental disorders were 118.6 and 1293.5 per 100 000 respectively (3).

Data from Table 1 show trends of several mental health indicators among 10–24-year-old males and females from 1999 to 2005. It seems that mental health problems occur more often among males than females in the studied age group. Over the six years of monitoring, several mental health-related problems (such as incidence of mental disorders among people of both genders, incidence of diseases related to dependence and incidence of drug addictions and substance misuse among males) have shown a tendency to decrease, while others have remained static (4).

General health and well-being

The HBSC surveys in 1994 (n = 5428), 1998 (n = 4513), 2002 (n = 5645) and 2006 (n = 5632) in Lithuania have created a valuable dynamic database for the analysis and evaluation of young people's health behaviour. Country representative samples of 11-, 13- and 15-year-old schoolchildren were questioned using an anonymized questionnaire. The database enables increased analysis of the lifestyle and habits of Lithuanian young people (5–9).

The HBSC study cross-national comparisons in 1993/1994 and in later survey years placed Lithuanian schoolchildren in the lowest position in terms of happiness. Levels of reported happiness have, however, increased in both boys and girls since 1994. A significantly higher proportion of Lithuanian boys than girls reported that they are happy (Fig. 1), and happiness declined significantly for both genders with age.

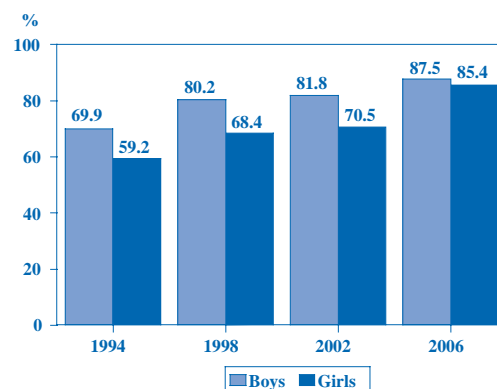
Feeling low or depressed, irritable or bad tempered and nervous were the main complaints in all four surveys. Girls suffered from these and other complaints more often than boys. Frequent irritability or bad temper among Lithuanian students has significantly decreased during the last 12 years (Fig. 2). Otherwise, the number of Lithuanian students who felt low or depressed once a week or more has significantly increased (Fig. 3). The prevalence of other subjective health complaints has no noticeable changes over the study period.

Addiction and risk behaviour

The prevalence of smoking among Lithuanian students has increased significantly from 1994 to 2002, but in 2006 it was noticeably lower than in 2002. Currently, 34.7% of boys and 27.4% of girls aged 15 years consider themselves as smokers (Fig. 4).

Fig. 1

Happiness of Lithuanian students: proportion of 11–15-year-olds who felt very happy or quite happy, 1994–2006



According to the HBSC survey, almost all 15-year-old boys and girls had experimented with alcohol (more than a small amount). Consumption of beer has become more popular during recent years. In 1994, 13% of boys drank beer at least once a week, but by 2006, the percentage of boys drinking beer once a week had increased to 18%. The most recent survey has also demonstrated that beverages with low concentrations of alcohol (alcopops) are popular among adolescents: 14% of boys and 16% of girls reported drinking these beverages at least weekly.

Fig. 2

Lithuanian students who were irritable or bad tempered once a week or more, 1994–2006

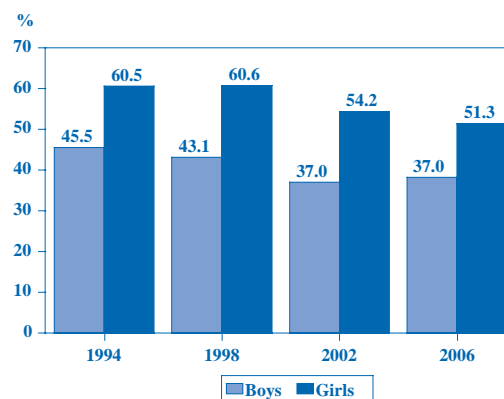
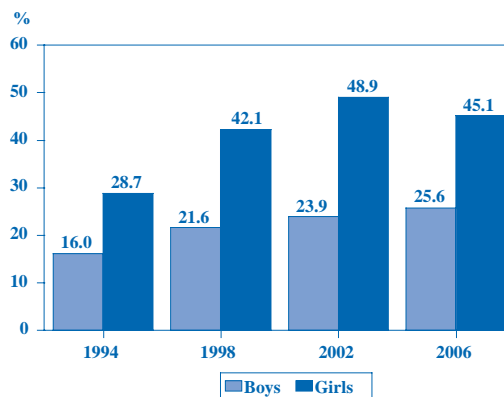


Fig. 3

Lithuanian students who felt low or depressed once a week or more, 1994–2006



The proportion of students who have been drunk two, three or more times increased significantly between 1994 and 2006 (Fig. 5). It can be concluded that Lithuanian students now drink more frequently than they did twelve years ago.

According to the HBSC data in 2002 and 2006, the use of cannabis and other illegal substances is becoming more prevalent.

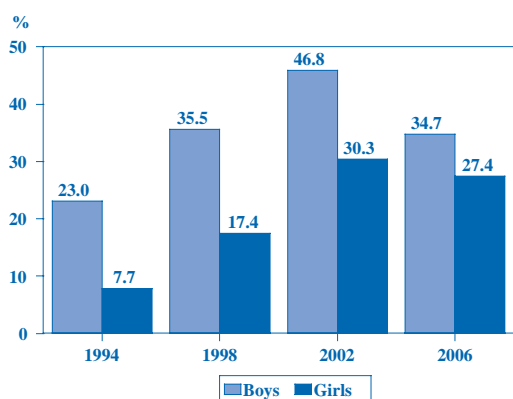


Fig. 4

Smoking prevalence among Lithuanian students aged 15 years, 1994–2006

For instance, the rates of ever having used cannabis among 15-year-olds have almost doubled during the last four years (from 11.2% to 19.7% among boys and 4.5% to 9.7% among girls).

Violence, abuse and bullying

Violence, abuse and bullying rates are also mental health indicators of the population. According to data from the Children Support Centre (10), one in three children in Lithuania has experienced abuse. The HBSC survey revealed a high rate of bullying in Lithuanian schools. In 2006, 27.2% of 11–15-year-old students reported that they had been bullied by others at least 2–3 times in the past couple of months. Approximately the same proportion of students reported bullying outside school. There is positive news in that the rate of bullying in Lithuanian schools seems to be decreasing (Fig. 6), but a cross-national comparison shows that the prevalence of bullying at school in Lithuania remains the highest (11). This fact might be the leading cause for 13% of students reporting that they do not feel safe at school.

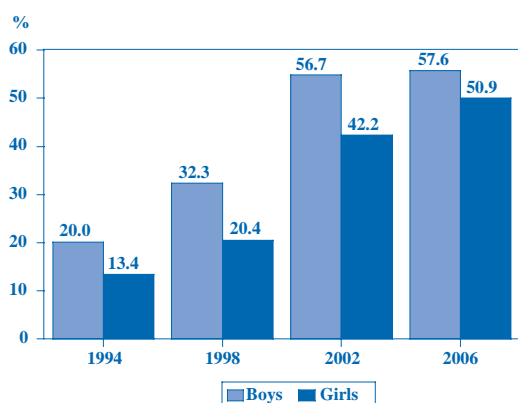


Fig. 5

Lithuanian students aged 15 years who have been drunk two or more times, 1994–2006

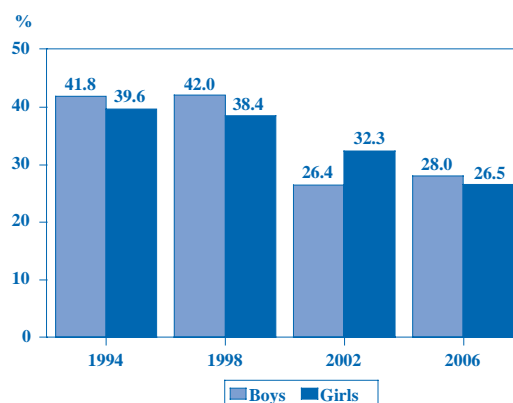
Suicidal behaviour

Suicidal behaviour is increasingly becoming a phenomenon associated with young people. The rise in overall suicide rates in many countries is, to a large extent, due to the increase in suicides in younger age groups. Lithuania has been among the countries with higher suicide rates for more than ten years. It is extremely disturbing that this problem is becoming increasingly associated with the youngest inhabitants of the country.

Over the last 10 years, mortality due to suicide in the youngest age group (0–19 years) has increased by more than 55%, with suicide sitting in third place of external causes of death (12). According to recent statistical data, about 15–25 young people aged 10–24 years die because of suicides annually. Suicide mortality in this age group in 2005 was 14.9 per 100 000 of the population (26.1 in males and 3.2 in females) (Table 1). The incidence rate of young people's suicides is less in neighbouring countries.

Fig. 6

Lithuanian students who have been bullied by others 2–3 times or more in the past couple of months, 1994–2006



The HBSC survey, which started in Lithuania in 1994, represented one of the first attempts to estimate prevalence of suicidal tendencies among Lithuanian adolescents, which is now an ongoing activity (13). Over the study period of 12 years, the percentage of adolescents who reported occasional suicidal ideation has decreased, but the percentage of adolescents who presented serious suicidal behaviour remained at the same high level (Fig. 7).

These data show that suicidal ideation is closely related with the student's attitude towards suicide. Suicide appears to be a more acceptable option in 2006 than it was in 1994; more and more respondents have answered that they agree with a person's freedom to make a choice between life and suicide (Fig. 8).

Fig. 7

The rate of high risk for suicide among Lithuanian adolescents aged 11–15 years, 1994–2006

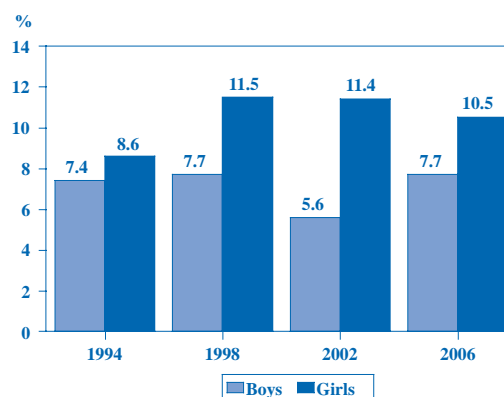
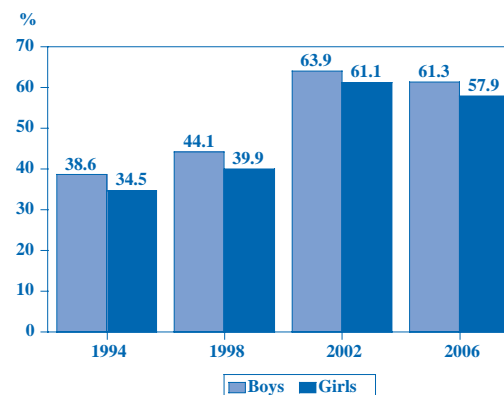


Fig. 8

Approval towards suicide among Lithuanian adolescents aged 11–15 years, 1994–2006



Social and policy context

Lithuania is located on the eastern shore of the Baltic Sea. It has a population of 3.4 million, with 828 000 below the age of 18 years (2002 figures). According to census data from 2001, 87.5% of children were Lithuanian, almost 6% were Poles, 4% were Russians and 2.5% were other nationalities (14).

The country was part of the former Soviet Union for 50 years (1940–1990) and followed typical eastern European economic, education, welfare and health care models. Lithuania regained its independence in March 1990, became a Member State of NATO in March 2004 and joined the EU in May 2004.

The country is now in a complex transition phase as it moves from being a centralized economy to a democratic society with a market economy. Lithuanian citizens have basic human rights, there is an independent and strong media sector and many NGOs have been established in different fields. But privatization, a perceived lack of transparency in redistributing former state property and other social transformations are causing disagreements and creating social inequalities within the country. These social inequalities may be contributing to the significant health inequalities (which include mental health) found in Lithuania.

A poverty analysis completed by the Statistics Department of Lithuania (14) discovered that 16.4% of households in the country live in poverty. The percentage of such households was strongly associated with the number of minors in the family:

- households with one child had a 15.2% poverty rate
- households with two children had a 17.2% poverty rate
- households with two, three or more children had a 32.5% poverty rate (average 16.4%).

There is therefore clear evidence that families with many children are at greatest risk of falling into poverty.

The age composition of the population of Lithuania has changed over the past decade. From 1990 to 2005, the proportion of children (aged 0–14) decreased from 22.6% to 16.4%. The birth rate decreased almost twofold – from 15.2 live births per 1000 in 1990 to 9.94 in 2005 – and the natural increment of the population has become negative since 1994. The family model that has been developed for many years under strong Catholic Church traditions is now changing to a model more typical of western countries. Between 1992 and 2005, the proportion of extramarital births increased more than threefold, from 7% to 25.4%, and there is evidence of growing sexual activity outside marriage among young people.

The transition process presents huge challenges and reforms for education of young people (15). Upon successful completion of the 10 grades of basic education, young people in Lithuania now have two ways to continue schooling. They can either enter:

- general secondary schools or gymnasia (gymnasia streams begin upon completion of the eighth grade of basic education) – these schools provide the main route to higher education; or
- vocational schools, providing training for employment in specialized occupations.

Higher or tertiary education beyond secondary school includes programmes leading to a diploma or first university degree (bachelors), or a diploma of non-university higher education granted by colleges.

There are many promising signs of greater awareness among young people of the importance of education. This is particularly relevant for both secondary and tertiary enrolments, which have risen in Lithuania and are now approaching average levels in the EU (16).

The quality of education young people receive is important for their future as well as for their current well-being. Many schools are trying to respond to this by, for instance, striving to put computers and the Internet into classrooms, although there is a “digital divide” among schools.

Schools also have a function in ensuring that young people are able to protect their present and future health. This role involves creating safe and healthy environments for students and imparting knowledge and skills that promote healthy lifestyles. The ENHPS is an innovative WHO initiative that was implemented in 18 schools in Lithuania. National networks of “Healthy schools” and “Healthy kindergartens” have also been developed (18).

Resources

Lithuania, as many other countries in eastern Europe, has a system of mental health care that is dependent on hospitalization of mentally ill patients in large institutions and increasing funding for medication (18). Statistics for 2000 recorded that Lithuania had three segregated long-term institutions for intellectually disabled children, housing a total of 638 residents. Analysis of existing data about resources invested in the mental health care system raises questions for policy-makers about the effectiveness of this traditional route of investment.

Community-based child mental health services are not yet developed in Lithuania (19). Consequently, only a small number of services are provided at community level. There is, however, a system of pedagogical–psychological centres under the Ministry of Education which serve children with pre-clinical mental health problems. Most preventive mental health programmes for the young population are implemented by NGOs, but there is no system of state funding to underpin preventive mental health services for children and sustainability and reimbursement mechanisms for NGO ventures have not been defined, with apparent lack of agreement between the health, social welfare and education sectors about which of them will cover the costs of these services. Intersectoral collaboration is encouraged by the above-mentioned state programmes, but no single institution has defined responsibility for mental health care development for Lithuanian young people.

Strategies

The data demonstrate that the young people of Lithuania are at particular risk of developing mental health problems. This challenge requires new understanding and innovative approaches towards youth mental health care and promotion.

The concept of public mental health as an integrated component of public health is rather new to Lithuania. This is nevertheless being achieved through innovative mental health promotion/prevention activities implemented through several state programmes (19):

- National Health Programme, 1996
- State Programme on the Prevention of Mental Disorders, 1999
- National Drug Control and Drug Addiction Prevention Programme, 1999
- National Alcohol Control Programme, 1999
- National Suicide Prevention Strategy, 2002.

The key factors as stated in these programmes are community involvement and multidisciplinary approaches. Young people have been recognized as trustworthy partners in youth-orientated preventive activities. Mental health policy covers all components of mental health care, including promotion, prevention, treatment and rehabilitation.

The Lithuanian mental health programmes set out a goal of decreasing disabilities due to mental illness, reducing the number of suicides and reducing substance misuse and alcohol consumption. Prevention strategies target children and adolescents and/or their caregivers. Using youth-orientated approaches, they support a range of initiatives aimed at:

- promoting young people's well-being;
- preventing mental health problems;
- intervening early when young people develop mental health problems;
- supporting young people in crisis;
- providing a framework for secondary schools to assist with mental health promotion and suicide prevention; and
- supporting the ongoing management of young people with mental health problems.

Intervention

The State Programme on the Prevention of Mental Disorders aims to bring mental health care closer to communities through the establishment of mental health care centres within municipalities and to create an effective community-level network of social psychiatric structures by including NGOs in service provision.

The programme emphasizes that these reform steps should be evaluated using scientifically based methods, but it does not set out any mechanisms for assessment of efficacy or quality. Consequently, modern assessment of outcomes of services, programmes and policies, especially in the young population, are lacking. The experience gathered by several NGOs in developing and implementing modern mental health promotion approaches in young Lithuanians are nevertheless noteworthy and may be very useful in informing the development of modern mental health policies in the countries of eastern and central Europe.

This section describes several exemplary interventions that focus on enhancing mental health and preventing behaviour problems and mental disorders among the young population.

Campaigns – “Childline” and “Stop bullying” (Box 1)

Box 1. Campaigns – “Childline” and “Stop bullying”

The main goal is to facilitate the creation of safer schools for children and promote friendly and respectful communication without humiliation and bullying.

Objectives are:

- raising awareness in society about the problem of bullying;
- teaching basic principles of effective bullying prevention to school staff;
- publishing educational material about bullying for parents, children, teachers and broader society;
- striving for higher political recognition of the bullying problem to ensure it is tackled with modern and effective preventive approaches; and
- striving to transfer internationally recognized and proven methods of preventing bullying and antisocial behaviour to the Lithuanian context.

“Childline” (20) started operating in 1997 in Vilnius, offering anonymous and confidential counselling and psychological support to children and adolescents via telephone. It has now expanded its service to offer three forms of help – support by telephone, by Internet and by post – nationally and toll-free, with three centres in Vilnius, Kaunas and Klaipeda.

The current demand for the service unfortunately exceeds the supply. In 2004, there were approximately 1.2 million attempts to reach the service by phone, and only approximately 49 000 calls were answered. The number of attempted calls reached almost 4 million in 2006 and the answered calls increased to 87 000, but the proportion of answered calls is only 3–4%.¹

Besides offering direct support to children and adolescents, “Childline” raises important children’s issues for public debate. Childline launched the campaign “Stop bullying” in 2004 (21). This bullying-prevention programme is being implemented in three schools in Vilnius and is based on modern principles to create a school environment that will not permit bullying to take place. The programme includes assessment of the prevalence of bullying, sensitizing all school staff (including non-teaching staff) through seminars, training on appropriate responses to bullying situations, periodical sessions for pupils about

¹ “Childline” periodically issues press releases and raises the issue of unmet need to policy-makers, professionals and the general community. Currently, the Ministry of Social Welfare and Labour is looking at ways of increasing funding to services provided by telephone.

bullying and related behaviour, development of the school's anti-bullying strategy, organization of a school conference on bullying, and involvement of the whole school community in preventive activities – administration, teachers, non-teaching staff, parents and pupils.

The main achievements have been the following:

- close cooperation with the mass media: many well known and popular celebrities take part in campaign activity and several shows have been organized to raise awareness about bullying and to dissipate myths about the “normality” of bullying behaviour;
- training seminars for school communities (school administration, teachers, parents and children) about the prevention of bullying in schools;
- the first book in Lithuanian about bullying prevention published in 2006 (22);
- a special seminar at the Parliament of Lithuania held on 31 January 2007 and at the President's House on 17 April 2007 (the Prime Minister of Lithuania formed a task force to prepare an action plan for prevention of school violence in May 2007. Representatives of foreign institutions – the Nordic Council of Ministers Office in Lithuania and embassies of the United Kingdom and the Netherlands – and socially responsible corporations have been supporting the bullying prevention initiative); and
- agreement from the Ministry of Education and Science to start implementation of the Olweus Bullying Prevention Program (23). This was developed in Norway and has become recognized as one of the 12 model programmes for prevention of violence used by the Center for the Study and Prevention of Violence, University of Colorado at Boulder, United States, after a review of over 600 violence-prevention programmes. Preparatory activities, including planning activities and adaptation of the educational material, are under way.

Child Abuse Prevention Programme (Box 2)

Box 2. Child Abuse Prevention Programme

The aim of the programme is to offer a range of services to ensure effective and professional assistance for children who have experienced abuse and families at risk. This is achieved by implementing psychological aid, training and prevention programmes.

Objectives are:

- increasing public awareness about child abuse, its causes and consequences;
- providing information about child abuse and methods and opportunities for prevention to intervention specialists of various professions who work with children;
- helping children overcome psychological crises and consequences of abuse; and
- implementing principles of effective family cooperation and child rearing

This programme was initiated by the NGO Children Support Centre in 2001 (10). The main activities of the programme involve training and psychological counselling.

Training includes the following:

- “School without violence” – seminars for teachers and juvenile police officers, with the goal of decreasing the occurrence of aggressive behaviour and violence in school and society by providing teachers with information about the causes of violence in schools and its manifestation, helping teachers become conscious of their own attitudes to violence, and promoting active school participation in the prevention movement;

- “Building psychological resilience” – seminars for teachers and parents to provide teachers and parents with knowledge about children’s psychological safety and effective ways of building resilience, understanding adolescents and helping them to overcome psychological crises;
- “Family in social psychological crises” – seminars for psychologists and social workers that analyse characteristics of the development of relationships between the caregiver and child;
- “Parenting school” – courses for parents who want to understand their child’s behaviour and psychological condition better and to find effective ways to deal with problems that arise; and
- “A safe child” – an activity to teach children personal safety if abusive or violent situations are encountered, how to recognize inappropriate behaviour and effectively take advantage of accessible assistance in instances of abuse, bullying and ridiculing.

Psychological counselling looks at:

- psychological activity groups for adolescents experiencing psychological crises;
- play therapy groups for children age 6–8 with behavioural and emotional problems;
- therapy groups for children age 10–12 with psychological problems;
- individual therapy for children and adults who have experienced abuse and/or are in psychological crisis; and
- family counselling.

Youth health centres (Box 3)

Box 3. Kaunas Youth Health Centre

The general aim of the programme is to promote youth health by organizing and coordinating preventive and educational activities involving the community and networking institutions and providing professional and volunteer services for young people.

Objectives are:

- providing free-of-charge psychological, social and medical help for young people;
- involving youth volunteers to provide crisis intervention and education among peers;
- reaching teenagers at great risk of self-destructive behaviour (suicide prevention and postvention programmes); and
- spreading a net of community collaboration orientated towards the most vulnerable young people, encouraging them to participate in preventive activity.

NGOs are taking an active part in youth health promotion activities. They provide psychological, social and medical help free of charge for young inhabitants of Lithuania. The first youth health centre was established in 1998 in Kaunas. Since its establishment, it has implemented lots of successful projects and initiatives at local and national levels, including “Teenagers in action”, which aimed to involve youth volunteers in providing crisis interventions and education to peers, and “One-day centres against youth risk behaviour”, which targeted teenagers at great risk of self-destructive behaviour.

The youth health centre started integrating postvention activities into the complex youth-suicide prevention approach in schools in 2000. The established multiprofessional youth suicide postvention response team:

- prepared and published guidelines for postvention activities in schools after a case of suicide
- established and trained crisis management groups in all secondary schools of Kaunas
- provided (and are still providing) professional help for schools communities after suicide.

With the aim of broadening youth suicide prevention and postvention possibilities by implementing new training approaches, professionals at the youth health centre presented the first visual training material for youth suicide prevention in 2005. The film “Choose life!” aims to increase young people’s abilities in evaluating suicidal intent, providing adequate personal support and using professional help resources. The new training experience was discussed and evaluated by mental health professionals, researchers and representatives of schools.

The youth health centre is now focusing on empowering schools to deal with suicide risk among young people by training schools crisis management groups, organizing suicide prevention training sessions for members of school communities and spreading best practice in the different regions of Lithuania.

The “One-day centres against youth risk behaviour” project stands as a good example of community networking activity in youth health centres. The aim of the project was to spread a net of community collaboration orientated towards the most vulnerable young people, encouraging them to participate in preventive activity.

Implementation of the project started with the establishment of five multiprofessional teams from community institutions in district police departments, consisting of an inspector of district adolescent problems, psychologists, teachers, parents and social workers. They primarily asked the question: “Why have the police departments been chosen as a place for one-day centres?” There are three main answers to this question:

- the police are well informed and in close contact with adolescents at risk
- they have a lot of experience in different prevention activities
- they will promote a picture of themselves as providers of help.

Adolescent risk-takers often have contacts with district police departments, which they see as institutions of punishment. Naturally, many such adolescents have a negative attitude towards the police. This project therefore aimed not only to promote health among risk-taking teenagers, but also tried to emphasize the education role of the police.

The establishment of one-day centres in police departments passed several stages:

- establishing multiprofessional teams of youth moderators
- setting up training circles for team members
- preparing guidelines for preventive activities and action planning
- promoting independent activities with supervision.

The training provided for teams highlighted adolescents’ risk behaviours from psychological, social and medical points of view and underlined the necessity of networking within community agencies. Experience showed that multidisciplinary teams acted more effectively when they were supported by continuing training sessions based on the academic background and qualification of participants. A second training cycle for multiprofessional team members focused on leadership, group dynamics, preventive and recreational methods and conflict-resolution strategies.

People attending the centres comprised not only young people at risk but also youth health centre volunteers who were strong, positive leaders for their peers. The majority of centres’ participants were 11–16-year-old teenagers. Each centre was free to include different elements in their schedule and to define their own criteria for success, but the common and key issue was health promotion. All the centres networked among themselves and with other community institutions. This approach was essential in connecting hard-to-reach young people with the health education and social support they needed.

The effectiveness of the programme was evaluated using qualitative and quantitative methods. Outcomes demonstrated positive impacts on adolescents who were having family difficulties and social problems. The evaluation showed that:

- one-day centres satisfied adolescents’ needs fully or partly;
- leisure and training activities and group experiences were evaluated positively;

- young people at risk were becoming better integrated, with more than 85% finding new friends in the centres; and
- one third of young people questioned (32.5%) stated that they preferred centre friends to their courtyard mates.

At the beginning of the project, adolescents attending one-day centres lacked initiative and tended to wait for suggestions for discussions or other activities. The majority of them had low self-esteem and were passive. In most cases, they were among the outsiders at school. At the end of the project, police departments were recognized as a suitable place for preventive activities by two thirds of respondents. Their main arguments were:

- the police department environment encourages adolescents to be more responsible and disciplined
- common activities and close communication diminishes adolescents' fear of the police
- teenagers learn to communicate with adults on equal terms
- preventive activities involve wider strata of the community and are not concentrated just in schools.

The police officers claimed this work was an enjoyable activity that allowed them to acquire a better understanding of adolescents.

Lessons learned

Youth-oriented approaches positively addressed the most challenging issue – keeping adolescents' motivation strong. It is important to note that to keep young people motivated, the results of their activities must be evident as soon as possible. Above all, it is necessary to make results available to significant adults (parents, teachers and community representatives, for instance).

The experience of running school-based preventive programmes has demonstrated that groups of youth volunteers can make a positive impact on the common psychological “atmosphere” at schools. In addition to providing positive role models, youth volunteers allowed teenagers to gain self-confidence and to feel safe through peer-group experiences. As a result, they became able to work out comprehensive and reasonable action plans and to find the most youth-appropriate solutions.

To sum up, the main advantages were:

- financial sustainability – the main activities were performed by volunteers
- accessibility to the wide strata of the community.

This experience could be particularly useful for schools located in rural areas. These schools are often left out of health promotion activities, as most initiatives are run in cities.

Public and political awareness about violence in schools has become very strong. Actions taken by the President, parliament members, the Ministry of Education and Science and the Prime Minister clearly indicate that the problem of violence is acknowledged and that there is an increasing understanding that serious responses are needed. Results of the HBSC study were one of the strongest arguments in the process of raising awareness about the violence and bullying among children.

The above-mentioned experience produced several valuable lessons and highlighted the main guidelines for developing youth health promotion within the community. It became evident that:

- the initiative must be “given back” to implementers
- the team should be formed with local resources
- the key role should be devolved to the team
- team members should be well prepared and have wide experience.

Research findings have indicated a strong relationship between student attitudes (self-esteem, locus of control) and education behaviours (school attendance, participation in school activities, disciplinary issues) (24). Attendance at the “One-day centres

against youth risk behaviour” helped teenagers to become more open, friendly, active and self-confident. Specialists also commented that these adolescents had become more disciplined and caused less crimes and disturbance. Police officers claimed the work was a pleasant activity which let them acquire a better understanding of adolescents.

The initiatives showed that adolescents are trustworthy partners in youth-orientated preventive activities and are potentially able to solve youth health problems even more successfully than adults. Programmes prepared and performed by youngsters are more attractive to peers. Community involvement and multidisciplinary approaches are the key factors in the effectiveness of youth health promotion. Consolidation of different resources enables communities to deal with youth health problems more effectively, increases public spirit and develops active communities.

In conclusion, the Lithuanian experience clearly demonstrates that child and youth health must remain high on the political agenda. A comprehensive approach that integrates the state, parents, school, NGOs, youth organizations, mass media and various initiatives to promote child and youth health is the way to address the problem. Data from various studies carried out in Lithuania over the past two decades point to the necessity of more intensive international collaboration for a country in transition. Due to increases in access to risky information through the fast expansion of information technologies, there is a need to develop carefully planned education programmes tailored to the interests of children and young people which are supported by the entire social, economic, political and educational environment.

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Portugal: from research to practice – promoting positive health for adolescents in schools

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Executive summary

Compared with other countries within the HBSC survey, young people in Portugal report higher levels of stress associated with school homework and have lower perceptions of academic achievement. Perceptions of school did not change significantly between HBSC surveys carried out in 1998, 2002 and 2006.

Trends from the three HBSC surveys suggest that tobacco use is decreasing and alcohol and drug use are stable, although episodes of alcohol misuse (“getting drunk”) may be increasing. Violent episodes in schools (bullying) have been decreasing slowly but steadily since the 1998 HBSC survey. Students are tending to perceive their health as better and are reporting fewer psychological symptoms. The general picture suggests a decrease in sense of well-being between 1998 and 2002, and a recovery between 2002 and 2006.

The 2002 HBSC survey revealed that adolescents with nationalities other than Portuguese did not perform as well academically as their Portuguese peers and were not as extensively involved in the life of schools. Their communication with parents was not as strong and they were more likely to engage in sexual intercourse, involving unprotected sex and sex associated with alcohol and drugs use. Further analysis suggested that the association of migrant status to a poor sense of well-being, lack of achievement at school and weaker family relationships was mediated by poverty.

Results from the 2002 and 2006 HBSC surveys were further analysed (a total sample of 11 008 young people in the sixth, eighth and tenth grades). Students who came from Portuguese-speaking countries but who did not have Portuguese nationality (amounting to 3% of the total sample) reported higher frequencies of feeling depressed or low and being irritable or bad tempered on a weekly basis. In general, foreign adolescents tended to feel more unsatisfied with their lives than Portuguese adolescents. Focus groups were held with migrant adolescents, professionals (teachers, psychologists, nurses and social assistants) and parents.

Addressing the health problems of young people in Portugal requires a vigorous examination of school organization within the country. The Ministry of Education in Portugal created the Grupo de Trabalho para a Educação Sexual/Educação para a Saúde (GTES, working group on sexual education and health education) in 2005 to come up with proposals to ensure health education was in the curricula of all schools throughout the country by 2007.

The group stated that health education should be part of all school activities. In parallel, they looked at the national curricula within the “areas curriculares não disciplinares” [“non-disciplinary curricular areas”] and decided that at least one of the three areas (“project area”, “tutored study” and “civic education”) would be devoted to health education, with one hour a month being focused on sexual education. Four priority interventions were identified: substance use; sexuality/sexually transmitted infection and HIV prevention; nutrition and physical activity; and violence prevention and well-being/mental health. Each school nominates a teacher to coordinate health education and health promotion and to liaise with families and local health centres.

A comparison of results from the school principals’ survey held in January 2006, the 2006 HBSC survey and the last national survey held by GTES in May 2007 strongly suggests health promotion is now a regular practice in the majority of Portuguese schools.

Introduction

Adolescence can be understood as a natural and normal process of development, accompanied by physical, emotional and social changes. Assessment of adolescent mental health is of great importance. Several psychopathological/psychiatric conditions begin in adolescence, and the normal development process is linked with a degree of turbulence. A correct assessment must include the history of individual development, relationship with parents and peers and the evolution of issues such as identity and autonomy. Since most adolescents in Portugal attend school, a careful analysis of school organization and how it can contribute to promoting good mental health and preventing mental ill health is relevant.

HBSC Portuguese data

Data used in this case study are from the Portuguese HBSC 1998, 2002 and 2006 studies (1–3). A cluster sample was used in the sixth (35.3%), eighth (36.3%) and tenth (28.3%) grades to provide a national representative sample of 17 911 students from three waves – the first wave in 1998 (n = 6903), second in 2002 (n = 6131) and third in 2006 (n = 4877).

Subjects were 48% male and 52% female, from 10 to 25 years old (M =14 years, SD = 1.81 years). Subjects less than 14 years old were categorized in the youngest group (51%), and those more than 14 years in the oldest group (49%). Measured by father's socioeconomic status, 35% were in the high SES group (categories 1–3 of the Graffar Scale) and 65% in the low SES group (categories 4 and 5 of Graffar Scale (1–3)).

Contingency tables and chi-square tests were used. Psychological symptoms and life satisfaction (Cantril ladder) were categorized in three groups. Feeling depressed or low was significantly associated with gender, age group and father's SES. Girls, adolescents in the older group and those whose fathers had low SES referred more frequently to feeling depressed or low than boys, the youngest adolescents and adolescents whose fathers had high SES (Table 1).

Table 1

Feeling depressed or low

Differences between genders (%)		
	Boys (n = 8 333)	Girls (n = 9 090)
At least once a week	10.2	18.9
Every week/every month	22.3	27.5
Rarely/never	67.6	53.6
$(\chi^2= 411.11; g.l. = 2, p<. 001), n=17\ 423$		
Differences between age group (%)		
	Youngest (n = 8 796)	Oldest (n = 8 545)
At least once a week	12.6	16.8
Every week/every month	19.7	30.4
Rarely/never	67.6	52.8
$(\chi^2= 407.26; g.l. = 2, p<. 001), n=17\ 341$		
Differences between father's SES (%)		
	High (n = 5 115)	Low (n = 9 391)
At least once a week	12.5	15.1
Every week/every month	27.4	24.2
Rarely/never	60.1	60.8
$(\chi^2= 29.28; g.l. = 2, p<. 001), n=14\ 506$		

Feeling irritable or bad tempered was significantly associated with gender, age group and father's SES. Girls and the oldest adolescents reported feeling irritated more often than boys and the youngest adolescents. More adolescents with low SES than those with high SES reported feeling irritated at least once a week (16% compared to 13.9%), but also more adolescents with low SES reported that they rarely or never felt irritated (53.6% compared to 50.2%) (Table 2).

Table 2

Feeling irritable or bad tempered

Differences between genders (%)		
	Boys (n = 8 369)	Girl (n = 9 072)
At least once a week	13.1	18.3
Every week/every month	31.4	32.5
Rarely/never	55.5	49.2
$(\chi^2= 110.88; g.l. = 2, p<. 001). n=17 441$		
Differences between age group (%)		
	Youngest (n = 8 791)	Oldest (n = 8 569)
At least once a week	14.9	16.8
Every week/every month	27.1	36.9
Rarely/never	58.1	46.3
$(\chi^2= 257.03; g.l. = 2, p<. 001). n=17 360$		
Differences between father's SES (%)		
	High (n = 5 116)	Low (n = 9 392)
At least once a week	13.9	16.0
Every week/every month	35.9	30.4
Rarely/never	50.2	53.6
$(\chi^2= 49.38; g.l. = 2, p<. 001). n=14 508$		

Feeling nervous was also significantly associated with gender, age group and father's SES. Girls and oldest adolescents reported feeling nervous more often than boys and the youngest adolescents. Adolescents with low SES reported feeling nervous at least once a week more frequently than those with high SES, but simultaneously reported more frequently that they rarely or never felt nervous. Adolescents with high SES reported more often feeling nervous every week or at least every month (Table 3).

Life satisfaction was significantly associated with gender, age group and father's SES. Girls reported more frequently that they were unsatisfied with their lives compared to boys. The youngest adolescents were most likely to be very satisfied with their lives, and adolescents with high SES reported more frequently being very satisfied with their lives when compared to those with low SES (Table 4).

Results from the HBSC survey suggest that the majority of school-aged Portuguese adolescents (sixth, eighth and tenth grades) were satisfied with their lives and rarely or never experienced psychological symptoms. Nevertheless, there were relevant differences based on gender, age and father's SES. In general, boys, younger adolescents and adolescents with higher SES had higher life satisfaction. Girls, older adolescents and adolescents with low SES more frequently reported psychological symptoms such as feeling depressed or low, feeling irritable or bad tempered, and feeling nervous. It therefore seems that gender, age and father's SES can act as either risk or protective factors in mental health-related issues.

Table 3

Feeling nervous

Differences between genders (%)		
	Boys (n = 8 395)	Girls (n = 9 122)
At least once a week	19.2	29.6
Every week/every month	35.0	36.3
Rarely/never	45.8	34.1
$(\chi^2= 345.56; \text{g.l.} = 2, p<.001). n=17\ 517$		
Differences between age group (%)		
	Youngest (n = 8 841)	Oldest (n = 8 593)
At least once a week	22.7	26.5
Every week/every month	32.3	39.1
Rarely/never	45.0	34.4
$(\chi^2= 206.09; \text{g.l.} = 2, p<.001). n=17\ 434$		
Differences between father's SES (%)		
	High (n = 5 141)	Low (n = 9 437)
At least once a week	22.5	25.0
Every week/every month	40.2	34.8
Rarely/never	37.3	40.3
$(\chi^2= 42.98; \text{g.l.} = 2, p<.001). n=14\ 578$		

Table 4

Life satisfaction

Differences between genders (%)		
	Boys (n = 5 245)	Girls (n = 5 525)
Unsatisfied	2.3	3.6
Satisfied	44.6	44.7
Very satisfied	53.1	51.7
$(\chi^2= 16.21; \text{g.l.} = 2, p<.001). n=10\ 770$		
Differences between age group (%)		
	Youngest (n = 5 642)	Oldest (n = 5 128)
Unsatisfied	2.4	3.6
Satisfied	38.0	51.9
Very satisfied	59.6	44.4
$(\chi^2= 247.99; \text{g.l.} = 2, p<.001). n=10\ 770$		
Differences between father's SES (%)		
	High (n = 3 065)	Low (n = 5 740)
Unsatisfied	2.4	2.7
Satisfied	38.6	46.1
Very satisfied	59.0	51.2
$(\chi^2= 49.14; \text{g.l.} = 2, p<.001). n=8\ 805$		

Mental well-being and physical health are interrelated. Adolescents who report higher life satisfaction also have a better perception of their physical health (4). A number of personal and social issues besides gender, age and father's SES seem to be associated with health and happiness perceptions. Personal issues such as health-related behaviours, physical activity, food intake and risk behaviours seem to have more impact on health perceptions and physical complaints, while social issues like social relationships in significant life contexts, family, friends, classmates and school seem to have more impact on perceptions of happiness. Family affluence has a significant impact on feeling happy and on health perceptions (4). Several studies highlight the importance of these issues, which are described as protective factors (5,6).

Migrant adolescents living in Portugal

Portugal is a country with historical relationships with some African nations and Brazil, countries that use Portuguese as the official language – the Comunidade dos Países de Língua Portuguesa (CPLP) [Community of Portuguese Language Countries]. Many migrants from those countries live in Portugal, most of them in very bad socioeconomic conditions and in specific neighbourhoods with poor hygiene, health and social conditions. Migrants are more prone to social and racial discrimination in several contexts, including school, workplace and community situations, and this often leads to mental and psychosocial problems.

Two waves of HBSC data (1–3) from 2002 (n = 6131) and 2006 (n = 4877), a total sample of 11 008 sixth, eighth and tenth grade students were looked at, to analyse migrant adolescents' positive health and health behaviours. Three per cent of adolescents living in Portugal come from Portuguese-speaking countries (African countries and Brazil) but do not hold Portuguese nationality. Bivariate analysis and simple associations were carried out between nationality and a set of positive health variables.

For all psychological symptoms (feeling depressed or low, feeling irritable or bad tempered and feeling nervous), statistically significant differences were found between Portuguese-nationality adolescents and adolescents who had come to Portugal from African countries or Brazil. Foreign adolescents also tended to feel more dissatisfied with their lives than Portuguese adolescents (Table 5).

Focus groups

Focus groups were arranged to get a better insight into migrant adolescents', professionals' (teachers, psychologists, nurses and social assistants) and parents' perspectives. The groups explored people's opinions, attitudes and understandings about adolescents' positive health and health behaviours and the influence of personal, social and economic issues.

A total of 26 migrant Portuguese-speaking adolescents (African) aged between 13 and 19 years, 22 professionals (health and education professionals working with migrant (African) adolescents) and six parents (one mother and five fathers of migrants from African Portuguese-speaking countries) were included in this in-depth qualitative study. Nine groups were held (four adolescent groups, one parent group and four professional groups) in four areas of Lisbon. Taped focus group interviews were analysed, with categories defined and codification carried out. Illustrative examples of comments from each category are presented in Box 1.

Belonging to an ethnic minority group, specifically migrant adolescents coming from an African Portuguese-speaking country or Brazil, and having low socioeconomic status were factors linked with mental health problems and adopting risky behaviours. These are fundamental elements to address in health promotion research and interventions. At the current time, there is no specific intervention based on skills development, prevention of risky behaviours and health promotion with migrant adolescents (7–9).

Another health survey based on HBSC questions (10) included adolescents from severely deprived areas in the suburbs of Lisbon. A global sample of 1037 adolescents, mean age 15 years, participated in the survey: 24.3% were foreigners from African Portuguese-speaking countries.

Results confirmed what was suggested during the national surveys: migrant status and low social and economic status were associated and often coexist. Adolescents in the survey had higher levels of adopting risky behaviours and reported that they felt socially unsupported and unhappy. Other in-depth studies (11,12) have suggested the coexistence of poor physical health, risky behaviours (substance use) and poor mental health and have stressed the importance of social settings, school ethos and family–school links.

Table 5

Differences between Portuguese and foreign adolescents (CPLP)

Feeling depressed or low (%)		
	Portuguese (n = 9 771)	CPLP (n = 309)
Once a week	15.2	20.1
Every week/every month	25.5	18.8
Rarely/never	59.3	61.2
$(\chi^2= 10.21; g.l. = 2, p<. 006). n=10\ 080$		
Feeling irritable or bad tempered (%)		
	Portuguese (n = 9 789)	CPLP (n = 313)
Once a week	16.4	21.7
Every week/every month	33.5	28.8
Rarely/never	50.0	49.5
$(\chi^2= 7.17; g.l. = 2, p<. 028). n=10\ 102$		
Feeling nervous (%)		
	Portuguese (n = 9 811)	CPLP (n = 312)
Once a week	23.1	21.5
Every week/every month	36.4	28.5
Rarely/never	40.5	50.0
$(\chi^2= 12.13; g.l. = 2, p<. 002). n=10\ 123$		
Life satisfaction		
	Portuguese (n = 9 856)	CPLP (n = 314)
Unsatisfied	2.8	5.1
Satisfied	44.7	44.6
Very satisfied	52.5	50.3
$(\chi^2= 5.72; g.l. = 2, p=. 057). n=10\ 170$		

Box 1. Examples from focus groups**Family**

- “My mother works a lot, she leaves home at 6 am and arrives home at night but she cares about us.” (Adolescent)
- “Most of them have single-parent families, mothers work a lot, and an older sister often takes care of the younger ones.” (Professional)
- “They tend to have large families, lots of kids, grandmothers, uncles, stepfathers ...” (Professional)
- “I cannot talk to my daughter; we have different concepts. I try to communicate with her and she always says that I am old-fashioned.” (Parent)

School

- “At school, we feel discriminated [against]. When we say that we live in this neighbourhood, everything goes wrong.” (Adolescent)

- “School it is not a protective factor. ... On the contrary, school seems to work like an exclusion factor, they tend to leave school too soon; it is a big problem.” (Professional)

- “Many times teachers build barriers against pupils, because they just don’t know what to do.” (Professional)

- “Violence is a big problem, not just in the street but inside the school.” (Parent)

Peer group

- “Friends are not important, I don’t have friends, I just have some people that I know.” (Adolescent)

- “They see the older ones breaking the social rules and they admire them. They want to be like them in order to be accepted, to feel integrated.” (Professional)

- “She always spends her leisure time with one friend or alone in her room.” (Parent)

Well-being

- “First they should take care of the younger ones, giving them places to play, to be happy, to feel good instead of engaging in violence, substance use, and other risky things.” (Adolescent)

- “The discrimination reinforces the negative image that they have about themselves ... they lose the hope that their life will ever be different.” (Professional)

- “Our children know that they have ‘broken legs’ since the beginning. ... They become very stressed because they do not have documents, first they don’t exist, and then they become delinquents.” (Parent)

Leisure time

- “The worst thing is when we do not have anything to do.” (Adolescent)

- “We do not have adequate structures for physical activities or leisure in the neighbourhood.” (Professional)

- “Our children became more and more connected with Internet, TV ... they are ‘addicted’ to the street.” (Parent)

Substance use

- “I feel more comfortable. It’s better to dance, and it’s better to talk with the girls.” (Adolescent)

- “Alcohol use is common ... many people abuse alcoholic drinks at home and in the community. That is the adolescent’s example.” (Professional)

- “Some adolescents left school, they have nothing to do. They traffic drugs, it is easy money ... but most of them do not use drugs.” (Professional)

- “We are always worried about our children. The problem is not the people from the neighbourhood; the problem is those who come from other neighbourhoods and want to buy or sell drugs.” (Parent)

Violence

- “Some boys ruin everything, break everything. They do not understand that it is important to have a good image.” (Adolescent)

- “They are aggressive among them, with the teachers, with parents and with themselves. It is difficult to understand and control them.” (Professional)

- “A black adolescent is kind of condemned. Many adolescents feel anger. We are raising delinquents, and we do not know what to do, or where to find help.” (Parent)

Sexual behaviours/HIV

- “We get information from friends and on the Internet, never from our parents. ... I feel ashamed if my parents talk about that. ... If we cannot learn at home, we should have sex education at school.” (Adolescent)

- “They start their sexual activity too young ... we have many pregnant adolescents ... pregnancy is kind of an alternative to poor schooling and poor school expectations.” (Professional)

- “All parents realize that HIV is a big problem, we and all society have to fight against that huge problem.” (Parent)

- “Sexuality is a taboo ... it is something that we cannot talk about ... but we should break down this wall.” (Parent)

Trends from HBSC national surveys

Trends from the three waves of HBSC national surveys of school-aged children suggest that tobacco use is decreasing and alcohol (except for “getting drunk”) and drug use are stable. Youngsters seem to eat less healthily, diet more frequently and seem unhappier about their physical appearance. Physical activity seems to be increasing among youngsters in parallel with an increase in sedentary behaviours, such as “surfing” on the Internet, playing video games on TV and using live “chat” web sites.

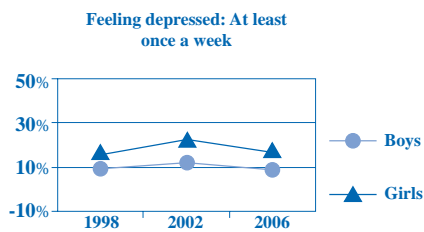
Violent episodes in schools (bullying) have tended to decrease slowly but steadily since the HBSC 1998 survey, especially among those with “victim” status. Students tended to perceive their health as being better and reported fewer psychological symptoms.

Analysis of the graphics in Fig. 1 distinguishes trends from the three HBSC Portuguese surveys in relation to gender and age group differences. Three items related to mental health were considered: feeling depressed/low; feeling irritable; and feeling nervous. The general profile indicates an increase in poor sense of well-being from 1998 to 2002, with a recovery in 2006.

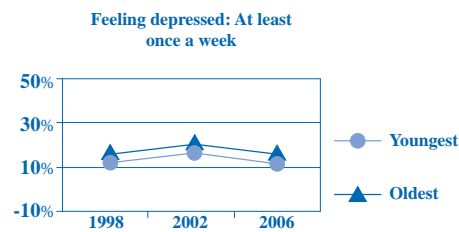
According to data from the 2006 survey (3), about half of the adolescents reported having professional health resources available within their schools (specific teachers, psychologists or other health professionals). The national aim is to ensure this number reaches 100% by the end of the current academic year.

Fig. 1

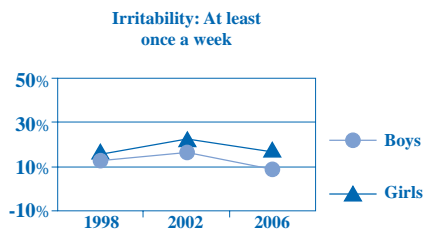
Trends in three HBSC Portuguese surveys by gender and age



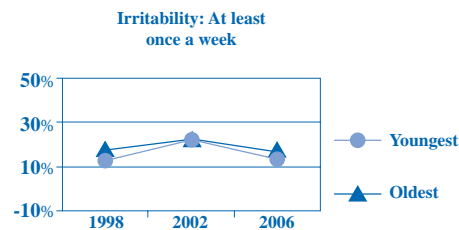
Boys: ($\chi^2 = 47,57$; g.l. = 4, $p < .001$). n=8 333
Girls: ($\chi^2 = 48,79$; g.l. = 4, $p < .001$). n=9 090



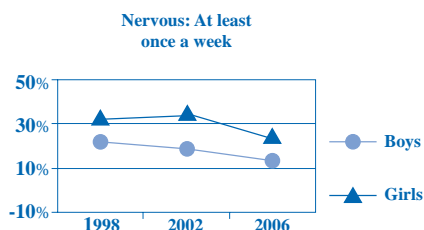
Youngest ($\chi^2 = 53,09$; g.l. = 4, $p < .001$). n=8 796
Oldest: ($\chi^2 = 45,68$; g.l. = 4, $p < .001$). n=8 545



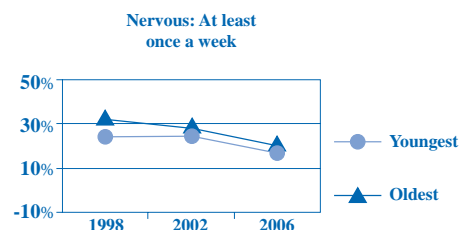
Boys: ($\chi^2 = 83,64$; g.l. = 4, $p < .001$). n=8 369
Girls: ($\chi^2 = 105,43$; g.l. = 4, $p < .001$). n=9 072



Youngest ($\chi^2 = 140,07$; g.l. = 4, $p < .001$). n=8 791
Oldest: ($\chi^2 = 65,31$; g.l. = 4, $p < .001$). n=8 569



Boys: ($\chi^2 = 92,22$; g.l. = 4, $p < .001$). n=8 395
Girls: ($\chi^2 = 65,91$; g.l. = 4, $p < .001$). n=9 122



Youngest ($\chi^2 = 92,95$; g.l. = 4, $p < .001$). n=8 841
Oldest: ($\chi^2 = 72,82$; g.l. = 4, $p < .001$). n=8 593

Policy context and intervention

Portuguese studies (13) suggest the need for a global community intervention within adolescents' contexts (family, school, community) to promote the health knowledge and personal and social skills that will lead to healthy choices and lifestyles. The specific case of poor adolescents with mainly ethnic minority backgrounds who lack Portuguese language skills and face social exclusion and social problems should be addressed not only from the point of view of preventing risk behaviours, but also of promoting well-being, a sense of belonging, social support and inclusion (4–6,10–13).

Hobbies and leisure activities such as music, sports, drama, arts and dance are important parts of living and learning, emphasizing the importance of leisure to adolescents. Leisure-time activities have partly taken over the educational role formerly provided by schools and parents (14) and provide enriching opportunities for children to interact with peers (15). This suggests the relevance of a selective preventive intervention aimed at creating alternatives for young people to help them respond to issues such as social exclusion, feeling unhappy and poor interpersonal relationships in a positive way and enhance their search for well-being, personal competence and social participation.

National health promotion proposal by GTES

The Ministry of Education created the GTES in 2005 to come up with proposals to ensure health education was included in the curricula of all schools in Portugal by 2007. The group had three senior researchers and university professors (one psychiatrist who coordinates the group, one health psychologist and a gynaecologist) and a career high-school teacher.

The preliminary GTES report was presented in October 2005, prescribing that health education would be compulsory across all schools and calling for students' and parents' active participation. The report stated that health education should be offered from first to ninth grade in all school subjects. It should be included within "areas curriculares não disciplinares" ["non-disciplinary curricular areas"], which consist of three elements: "project area", "tutored study", and "civic education". It was proposed that at least one of those areas should be devoted to health education and at least one hour monthly would focus on sexual education.

The report prescribed that health education should involve all students in an active way and should aim to develop their knowledge, autonomy, responsibility, ability to make sound individual choices and propensity for social participation. Four main priority intervention areas were identified:

- substance use
- sexuality, sexually transmitted infection (STIs) and HIV prevention
- nutrition and physical activity
- violence prevention and well-being/mental health.

Each school was asked to nominate a teacher to coordinate health education and promotion and liaise with parents and local health centres. It was recommended that all schools develop health committees in which pupils could voice their opinions while being supported by a teacher or health professional from the local health centre. This measure was made mandatory for all secondary schools. The 2006 HBSC survey reported 31% of schools having a health committee.

GTES has recommended that schools should develop strategies to promote inclusion to involve all pupils regardless of gender, age, special needs, social and economic status and ethnicity. This will help to prevent academic maladjustment and school failure and reduce school drop-out rates. One of the suggested strategies is to introduce workshops or school clubs to help pupils develop personal and social competencies and increase their sense of autonomy and participation.

Peer education and tutoring in health-relevant areas was recommended for twelfth-grade and university students. A significant example of how this recommendation has been enacted can be found in an initiative with a group of fourth-year Lisbon University medical students who were trained in sexual education and AIDS prevention during 2001. The idea now is to extend this strategy among adolescents in school settings; it is already in operation throughout the five regions of Portugal

through an association (the *Comunidade contra a SIDA* [Community against AIDS]) created to progress the strategy. GTES visits to local projects in schools throughout Portugal have found that several are implementing the model of supporting twelfth-grade pupils to peer-tutor younger peers, a model GTES has now adopted as good practice (16).

The Portuguese Institute for Sports, the National Agency against HIV/AIDS and the National Agency against Drugs and Dependencies are close partners in the current GTES proposal, adding their institutional efforts to promoting this new national policy.

National Agency against Drugs and Drug Addiction

The National Agency against Drugs and Dependencies has a solid history of collaboration with the Ministry of Education and believes that partnership and coordinated policies lead to better results.

National Agency against Drugs and Dependencies guidelines complement GTES guidelines. They target 11–14-year-olds and focus on increasing academic achievement, strengthening links between students and schools, reducing the probability of school failure and increasing family and community involvement. The Agency also collaborated with GTES on developing a manual for teachers and pupils dealing with substance use and well-being.

National Agency against HIV/AIDS

The National Agency against HIV/AIDS, in coordination with GTES policy, developed a competition, “Learning to prevent HIV/AIDS”, which challenged students and teachers from basic and high schools to develop materials promoting HIV/AIDS prevention. The challenge of healthy competition and the incentive of winning a school or class prize encouraged 189 submissions from 87 different schools, involving 2227 pupils, during 2006. A judging panel (which included the GTES National Coordinator) selected 24 works to go on to a second phase. Those successful groups were asked to make a ten-minute presentation to the judges and fellow competitors during a public session. Evaluation of submissions was based on their originality, content, communicative efficiency and applicability.

Physical education promoting positive health and mental health

Physical education, as defined in the official curriculum, not only influences physical health, but also affects quality of life and general sense of well-being. A Portuguese Institute for Sports project specifically designed for Portuguese schools aims to change lifestyles and promote health through increased physical activity and sports participation. The Institute and the *Faculdade de Motricidade Humana* [Faculty of Human Movement] are working with GTES to provide every school with a fitness-assessment tool (the *Fitnessgram* (17)) with instructions on use and guidelines on evaluating interventions.

Call for new projects and new synergies: the GTES proposal

A call was put out in 2006 for schools to apply to GTES for budgetary support to act as models for health education and promotion in schools. Successful applicants agreed to comply with guidelines issued by GTES, the National Agency against Drugs and Dependencies, the Portuguese Institute for Sports and the National Agency against HIV/AIDS and to be supervised and evaluated by GTES. One-hundred and eighty six *agrupamentos* [groups of schools] applied and were supervised for one academic year. The number of schools in each *agrupamento* varied between 5 and 40, depending on population density.

The ministries of education and health signed a protocol on better interaction between schools and local health centres after the first GTES report was published in 2005 (16), with a responsible person (a medical doctor) appointed by the Ministry of Health to oversee implementation. GTES provided planning support, supervision and evaluations in schools through national and regional teachers’ meetings, regional education directorate meetings and a series of visits to schools throughout the country. A survey was carried out in May 2007 to fully evaluate the process.

Evaluations of health interventions in schools (2004, 2006 and 2007) (18–20)

Evaluation of the actions in basic schools (EB2, 3) in promotion of health and well-being, previous to GTES intervention (2004) (20)

Schools and subjects

Two-hundred and fifteen schools were involved (37%), but the actual percentage was considerably higher (83%) as some were in fact groups of schools. Among the schools, 120 (63%) were involved in the ENHPS project. Students were the main target group within health promoting projects (82%); the remaining 18% involved adults (parents and teachers) or a combination of adults and students.

The number of students involved in the projects varied between 9 and 600; the higher the student participation, the higher the percentage of respondents (the average respondent rate being 49%).¹ Schools reported that students were involved in defining project aims and specifying actions in most of the projects (60%).

Methodology

A pre-diagnostic evaluation was used in 69% of the schools (157), mostly based on a previous report (55%). Of evaluation approaches used, 42% had adopted a quantitative evaluation and 89% a qualitative one. Most projects were carried out over 31 or 32 weeks, corresponding to the academic year. The projects focused on activity in the classroom (87%), during breaks (34%) or after school (52%) and, less frequently, during holidays or weekends (13%).

Types of intervention

Different kinds of intervention were used in the projects, including health workshops (56%), thematic workshops (85%), clubs (31%), personal and social competencies promotion (31%), sports activities (26%) and health committees (13%). Schools reported that 53% of teachers had previous training in these areas and 32% had supervision.

The content areas for health promotion interventions are set out in Table 6.

Table 6

Content areas for health promotion interventions

Substance use	57%
Food, hygiene, oral hygiene, body shape	56%
Well-being, sports	21%
Sex, HIV/AIDS and others	66%
Violence, social exclusion and safety	28%
Mental health	15%

Results

Between 2000 and 2003, 20% of the schools reported involvement in projects related to promoting positive health; 50% were involved in the ENHPS project, and half of teachers involved had had health promotion training.

¹ Eighty-nine schools did not answer this question.

The schools reported positive results related to their evaluation criteria. Risk behaviours had reduced (36%), pupils' participation had increased (56%), there was better communication among pupils (23%) and increasing levels of self-esteem and autonomy (17%) were noted.

There were also some negative results, however. These related to teachers being overloaded (4%), lack of specific support (21%), timetable incompatibility (14%), lack of ministry guidelines (4%), lack of motivation of pupils (16%) and lack of specific training for teachers (4%).

Evaluation of health promoting actions in basic and secondary schools (EB2, 3+ secondary)² included in the 2006 HBSC national survey one year after the GTES intervention and two years after the former evaluation

The 2006 HBSC survey included 125 randomly selected schools (more than 10% of the total number of schools). Of those, 78 (63%) answered a specific questionnaire aimed at identifying school health promoting practices.

Forty-four per cent of schools were grouped. These *agrupamentos* had, on average, 14 schools, with a maximum 55, and included all grades from kindergarten to secondary level. The average rate of school failure was 18.5%, with a maximum of 48%. Health promoting facilities in the schools included canteens (94%), sports facilities (74%), a health committee (31%) and clubs (73%).

Teachers (91%), pupils (97%) and parents (62%) had a “good” to “excellent” perception of health promotion activities. Contents of health promotion projects included substance use (64%), nutrition (87%), physical activity (67%), hygiene/body image (58%) and sexuality/HIV prevention (86%). Strategies employed included active methodologies (63%), classes (62%), projects (37%), lectures from external guests (89%) and online programmes (49%). Some schools reported regular disciplines in which health topics were a key feature, such as physical education (65%) and natural sciences/biology (90%).

“Non-disciplinary curricular areas” were used to promote interventions in the area of health promotion (69% civic education, 65% project area and 27% tutored study). Thirteen per cent of schools reported participation of families and forty-four per cent that all pupils got information and training in health promotion. Only 4% of the schools reported a specific budget for health promotion activities, with 28% having a psychologist, 1% a nurse and 6% other therapists or social workers.

Overall, there was reported growth in the use of non-disciplinary curricular activities and increases in numbers of health rooms. Teacher training was not a major reported difficulty, but resource optimization, management and sustainability were identified as problematic.

Evaluation of health promoting actions in basic and secondary schools (EB2, 3+ Sec)² included in the 2006 HBSC national survey two years after the GTES intervention and three years after the former evaluation

The GTES team completed their activities on 31 August 2007, after the final evaluation of the health education programme. The Ministry of Education proceeded to decide on guidelines and recommend a national structure to implement the programme.

The evaluation methodology was based on previous international experience in Canada and Australia (21–28) and covered the implementation process of the national programme for each of the four selected areas: physical activity/nutrition; sexual behaviour and sexually transmitted infection prevention; substance use; and violence/mental health. A final instrument was distributed to all Portuguese schools (basic and secondary in continental Portugal) in May 2007.

School principals sent responses to an online questionnaire to the Ministry of Education/Direcção-Geral de Inovação e de Desenvolvimento Curricular (DGIDC) [Director-General of Innovation and Curricular Development] and Gabinete de Informação e Avaliação do Sistema Educativo (GIASE) [Bureau for Information and Evaluation of the Education System]. A data set was produced using the statistical analysis software SPSS and analysed; the procedure used by GIASE considered “missing values” as a separated category, which explains why lines do not add up to 100%.

² Pupils aged between 10 and 18 years who attend the basic school levels 2 and 3 and secondary schools.

Table 7

State of art of health education and promotion in Portuguese schools

Priority intervention areas of health promotion	
Physical activity/nutrition	86%
Substance use	20%
Sexual education	76%
Violence/mental health	9%
Other	3%
Discipline(s) in which health promotion content was presented	
Portuguese language	24%
Foreign language	20%
Physical education	81%
Physics and natural sciences/biology	92%
Others	47%
Non-disciplinary curricular areas and health education and promotion	
1. Project area	89%
2. Tutored study	31%
3. Civic education	92%
School facilities	
Sports facilities	81%
Canteen	95%
Health committee	41%
Clubs	83%
Schools' general functioning (current practice)	
School liaises with the community	61%
School is a safe, pleasant and sheltering place	90%
School values pupils' and parents' participation	89%
Teachers get adequate training on health promotion issues	56%
Pupils' comprehension adequate to their age and culture (current practice)	
Nutrition	82%
Physical activity and leisure	87%
Mental health	23%
Sexual health and sexual behaviour	62%%
Substance use	77%
Friendships and social support	50%
Personal and cultural identity	45%
Bullying	18%
Non-teaching staff have specific training in:	
Bullying	54%
Nutrition	49%
Alcohol use	32%
Tobacco use	34%
Drug use	25%
Risky sexual behaviour	23%
Indiscipline	52%
No specific training	15%

Sample

The total for Portuguese basic and secondary schools (B2+3 and secondary) was 1219. The online response rate was 96% (1166 schools), producing a final valid sample of 1086 (corresponding to 89% of the initial sample).

Seventy-nine per cent of schools reported that their “school project” included health promotion. Pupils’ adherence to the projects was either “good” or “very good” in 71% of schools, and teachers’ adherence was “good” or “very good” in 61%. Parents’ adherence was lower at 13% “good” or “very good”. Physical activity contents were regularly addressed in 83% of schools, nutrition in 94%, substance use in 72%, and sexual education in 87%. Other findings are presented in Table 7.

Preliminary highlights

A rough comparison can be made between the results of the School Principals’ Survey held in January 2006, the HBSC survey carried on by the Portuguese HBSC team in 2006 (3) and the last nationwide survey by GTES on behalf of the Ministry of Education in May 2007. Analysis reveals that:

- 13% of parents were involved in school life (no change from 2006);
- sports facilities increased from 74% to 81%;
- canteen provision increased from 94% to 95%;
- “health rooms” provision increased from 13% in 2001, to 31% in 2006, and to 41% in 2007;
- physical activity content of curricula increased from 67% to 83%, with school sports in 88% of all schools;
- nutrition element of curricula increased from 87% to 94%;
- sexual education, sexually transmitted infection and HIV prevention curricular contents increased from 86% to 87%, with 93% of all pupils reported to have been included in training activities in school;
- substance use contents increased from 64% to 72%, with 87% of all pupils included in preventive actions on drug use and 90% included in preventive actions on alcohol and tobacco;
- health education in physical activity classes increased from 65% to 81%;
- health education in biology classes increased from 90% to 92%;
- health education in “project area” increased from 69% to 89%;
- health education in “tutored study” increased from 27% to 31%; and
- health education in “civic education” increased from 69% to 92%.

Large increases were seen not only in facilities to promote pupils’ health (such as the provision of health rooms), but also in initiatives designed to present and discuss health issues with pupils. Significantly, the increases have been achieved within the regular school curricula (physical education and biology classes) and also in the non-disciplinary curricular areas (project area, tutored study and civic education), which increases the chances of the changes becoming fundamental parts of school culture and being sustainable over the longer term.

Lessons learned

Promotion of protective factors should be the essence of health promotion. Preventive work must focus on individual life contexts to achieve an effective decrease in risk-taking behaviours, making best use of available resources and promoting the development of personal and social competencies. Individuals with these kinds of abilities have a greater capacity to adapt to different situations and to deal with adversity (5,6,13).

Having special needs or living with a chronic disease are factors potentially linked with mental health problems and greater risk-taking behaviours. Research confirmed that healthy lifestyles can be a protective factor against chronic disease in relation to conditions such as type 2 diabetes in adulthood, and there is evidence that it can have a similar effect among adolescents (29).

Belonging to an ethnic minority, specifically migrant adolescents coming from an African Portuguese-speaking country and Brazil, and having low socioeconomic status are also linked to mental health problems and greater risk-taking behaviours. Low socioeconomic status among young people from ethnic minority communities is a fundamental factor to address in health promotion research and interventions. It is believed that this issue must be tackled mainly from the perspective of promoting and assuring school success as the only way to stop a typical pattern of “poverty→social exclusion→school failure→health-compromising behaviours→school dropout→under or unemployment→social exclusion→poverty” (7–10,13).

Finally, it must be stressed that holding qualitative focus groups with young people is very important in giving them a platform from which to air their views and concerns.

The authors are now in a position to make the following recommendations.

1. School and leisure time are good starting-points for cross-cultural and intercultural health promotion. Adolescents, parents, schools, peer groups and the wider community must be involved in the process.
2. Social and personal skills promotion programmes have a place in building on positive aspects of health and lifestyle as a way to help adolescents to:
 - identify and solve problems
 - manage interpersonal conflicts
 - identify and manage emotions
 - develop interpersonal communication skills
 - assert personal rights
 - resist peer pressure
 - choose and maintain a healthy lifestyle.
3. There is a need for global community interventions within adolescents’ life contexts (family, school, community) to promote personal and social skills. The final aims of interventions should be the promotion of well-being, competence and autonomy, a personal sense of responsibility, belonging and personal achievement, and social participation and commitment. Attention should be paid to developing partnerships between schools and families (the research suggests weak family involvement in their children’s school life).
4. Particular attention has to be paid to adolescents living in poor neighbourhoods and who come from ethnic minorities, as there is a greater danger that they will suffer social exclusion, discrimination, stigmatization and challenging social problems, all of which are related to the development of mental health problems. The same was stressed for pupils with chronic diseases, special education needs or special health needs.
5. All professionals involved need adequate skills and training to be aware of and to meet the specific needs of target populations.
6. Biology and physical education teachers, psychologists, nurses, social workers and school doctors seem to have been selected to join efforts to meet pupils’ needs and promote their health and well-being. But every teacher and school-related professional should have a specific training that includes health issues, either during undergraduate or postgraduate studies or as part of lifelong learning.
7. Networking and reorganization of services and resources are necessary. A permanent grant is to be awarded to every school annually; its use will be systematically evaluated through cost–benefit analysis.
8. The evaluation carried out in Portuguese schools in May 2007, from which only preliminary results have been presented, is strongly recommended to be repeated yearly to properly address school needs in the area of health promotion and to monitor interventions.

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Republic of Moldova: adolescent mental well-being – current situation and future trends

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Executive summary

The purpose of the study from the Republic of Moldova is to describe the current state of affairs in relation to mental health and well-being of teenagers and interventions that address their health and development needs.

The general objectives were to:

- estimate the social, psychological and demographic risk factors that influence teenagers' mental health and well-being, including their accessibility to services;
- describe the sociopolitical context of the problem and highlight the basic policies and strategies that promote adolescent mental well-being and reduce mental disorders among this population group; and
- develop recommendations to consolidate mental well-being among adolescents.

Results have been informed by the development of a range of projects by the National Scientific Applied Centre of Preventive Medicine and European Youth Exchange, including “Youth health and development” (2005), “Republic of Moldova demographic and health survey” (2005) and “Young people evaluate participation” (2004).

The study contains important data about teenagers' mental health and well-being in the Republic of Moldova and also about the sociopolitical situation, socioeconomic status of young people and level of social cohesion among young people. It also describes health sector approaches to adolescents' mental health, including policy and health promotion initiatives that identify a range of measures.

A section of the study provides examples of policies and interventions that promote teenagers' mental health and well-being at national and regional levels, based on recommendations made by European and national policy frameworks such as: the *Mental Health Action Plan for Europe and Mental Health Declaration for Europe*, both launched at the WHO European Ministerial Conference on Mental Health, Helsinki, January 2005; the *WHO European strategy for child and adolescent health and development*, approved by the WHO Regional Committee for Europe in September 2005; the Law on Psychiatric Assistance (nr.1402-XII); and the “National programme on mental health for 2007–2011”, approved by the Government in March 2007.

Health and health behaviours of adolescents

Almost one fifth (19%) of the population of the Republic of Moldova are teenagers (1), and children and young people comprise more than a quarter (28%) (1). Official statistics and recent studies underline a complex range of problems that affect the general health and developmental potential of teenagers in the society.

HIV infection is spread most commonly among young people, with teenagers (11–19 years) constituting 6.5% of the number of HIV-infected people (2).

Addictive behaviours of young people (drug abuse, smoking, alcohol misuse) constitute a medicosocial problem of increasing importance. Statistical data for 2001–2007 on drug use among young people aged 0–17 years are shown in Table 1.

Table 1

Drug misuse among adolescents in absolute numbers (3)
Source: National Narcological Centre

Year	Drug addicted		Drug consumers	Total
	Adolescents	Children		
2001	54		259	313
2002	28	11	194	233
2003	18	18	226	262
2004	9		279	288
2005	14		293	307
2006	15		244	259
2007	12		161	173

Recent data suggest that half of young people started smoking before the age of 10 years. More than half of Moldovan adolescents (13–15-year-olds) have tried to smoke, and one seventh of them have remained smokers. These data show that the high rate of tobacco use among young people has not changed in recent years (4).

According to a National Scientific Applied Centre of Preventive Medicine survey, 30.1% of schoolchildren between 10 and 18 years consume alcohol (33.5% of boys and 27.3% of girls), including 3.3% who consume alcohol several times a week or daily, which means systematically (5).

An evaluation study of young people's knowledge, attitudes and practices with regard to their health and development showed that 22.8% of young people (age range 10–24 years) indicated that they had had sexual relationships, with the average age of first contact at 16 years (6). At the same time, only 8.3% of young people answered correctly all questions about ways of transmitting and preventing sexually transmitted infections and HIV (7). There is very limited use of protection methods among young people: only one third of young people who had sexual relations used a condom at each sexual act (8). As a result, young people face serious problems such as sexually transmitted infections and unwanted pregnancies.

Mental health of adolescents

According to statistical data, there were 26 active paediatric psychiatric outpatient departments in the Republic of Moldova on 1 January 2007, including six within the children's outpatients services of psychiatric hospitals and three psychotherapy clinics for children and adolescents in Chisinau. Thirty-six paediatric psychiatrists work within the children's dispensary of psychiatric hospitals in twenty regions of the country, with two children's departments with seventy-five beds and two community centres. Fifteen country regions and m.Balti do not have these specialists. Chisinau has a community centre ("Buiucani") and a centre for behaviour correction of children and adolescents in which psychologists, social assistants and speech therapists work.

There was an increased incidence of mental and behaviour disorders among young people under 18 years old between 2005 (485.6 per 100 000) and 2006 (602.86 per 100 000). Approximately 74.2% of the disorders were non-psychotic disturbances such as neuroses and organic cerebral and behaviour disorders. The prevalence of mental and behaviour disorders at the end of 2006 was 2404.23 per 100 000 young people, of which 1273.66 per 100 000 were non-psychotic disturbances. Teams of community-based psychologists, social assistants, speech therapists and psychiatrists are needed to provide services for the proportion of young people who do not have psychotic disturbances.

Table 2 shows the incidence and prevalence of mental and behaviour disorders among children under 18 years in 2006.

In 2006, 2811 disabled children were under the observation of paediatric psychiatrists (22.2% of the total). Of these, 329 children had a primary diagnosis of disability, most of them suffering from mental deficiency (also known as learning disabilities in some countries) (Table 3).

Table 2

Incidence and prevalence of mental and behaviour disorders among children under 18 years, Republic of Moldova, 2006 (9)

Type of indicator	Absolute cases	Indicator (per 100 000 young people)
Total incidence	5 102	602.86
Psychoses incidence	92	10.87
Non-psychoses incidence	3 787	447.48
Mental deficiency incidence	1 223	144.51
Total prevalence	20 347	2 404.23
Non-psychoses prevalence	10 779	1 273.66
Psychoses prevalence	496	58.61
Mental deficiency prevalence	9 072	1 071.96

Table 3

Disability of children and adolescents under 15 years with mental illness or incapacity (9)

Type of indicator	Absolute cases	Indicator (per 100 000)
Primary disability, new case (total)	329	46.35
Primary disability, schizophrenia – new case	7	0.99
Primary disability, mental deficiency – new case	212	29.87
Primary disability, epilepsy – new case	87	12.26
Indicator of patients with total incapacity grade	2 811	396.02

The disability status of children is determined before they are 15 years, and disabled adolescents between 16–18 years are included in adult statistics. For children with mental deficiency (learning disabilities), various rehabilitation projects based on progressive methods of social rehabilitation have been implemented, such as those in the Centre “Orfeu” (Swiss programme) and the Centre “Hope and health”.

Successful practice in this area includes:

- implementation of obligatory medical assistance through insurance of children aged 0–18 years;
- opening of 11 health centres for young people;
- development and approval in November 2005 of the national concept of friendly health services;
- development of activity guidelines for managers, consultants and volunteers in mental health services (including an “organizer’s guide”, a “consultant’s guide” and a “volunteer’s guide”);
- inauguration of the family planning consulting room within the national medical association “Buiucani” and women’s health centre in Camenca in September 2005 in Chisinau, with the support of the United Nations Population Fund (these offices will increase the quality of medical, counselling and information services delivered to the population, including young people and adolescents);
- registration of 31 types of community services during 2005 for older and disabled people and for children and young people experiencing problems;
- annual provision of social rehabilitation services for 44 children by the Centre “Hope and health” (175 children have visited this centre over the last six years, 75% of whom have been integrated into the mainstream education process);

- provision of a complex system of psychopedagogic assistance (entailing adequate social environment, positive interpersonal relations, a sense of security and psychological comfort for children with special education requirements); and
- the organization “Woman and child – protection and support”, which has become a leader in the field and has the important mission of solving social problems faced by women and children.

Social and policy context

The transformational processes initiated in the Republic of Moldova in the early 1990s have been affected by a prolonged economic crisis and significant social problems. GDP for 2005 was US\$ 812 per capita, but there were also crises in relation to family values with increasing family disintegration and higher numbers of homeless children whose parents had emigrated.

Various social and economic factors pose risk factors to the mental health and well-being of teenagers. These include emigration and poverty. In the Republic of Moldova, as in other post-Soviet countries, the emigration of the labour force phenomenon had a substantial negative influence not only on the growth of the population, but also on the social and economic structure of society. Seventeen per cent of families from the Republic of Moldova have at least one family member who has emigrated (10). More than 42% of emigrants (men and women) have left children in the Republic of Moldova. About 37% of emigrants in urban areas and 45% in rural areas have left at least one child at home (10).

The data on poverty among children are also alarming, as Table 4 demonstrates (11).

Table 4

Percentage of Child poverty rate compared to adults and total population, 2006

Source: *Child poverty in the Republic of Moldova* (11)

Environment	Children (0–17)		Adults (over 18)		Total population	
	Absolute poverty	Extreme poverty	Absolute poverty	Extreme poverty	Absolute poverty	Extreme poverty
Cities	21.6	4.5	20.3	3.2	20.6	3.5
Towns	30.2	5.8	30.0	4.7	30.1	5.0
Villages	37.0	5.5	33.0	4.4	34.1	4.7
Total	32.8	5.4	29.3	4.2	30.2	4.5

According to statistical data presented by the international centre “La Strada”, approximately 25% of assisted human traffic victims are persons under the age of 18. The disorders that appear in children after being trafficked leave a mark on their system of values and on their physical and psychological development. The trauma they suffer generates personality changes that may lead to the development of antisocial behaviour and consequent social exclusion. Besides direct influences, this traumatic situation may also have long-lasting indirect consequences that will influence the child’s entire life, putting in place the preconditions for the development of difficult relationships with family members.

Children’s rights are recognized in national legislation, strategies and programmes developed by the Moldovan Government in relation to the protection of children and families. The law concerning young people has been in place since 1999, and the government approved the “Strategy for youth” in February 2004, which contains a concrete action plan for implementation between 2004 and 2006. According to this plan, the Ministry of Health has responsibility for developing accessible services for young people within the framework of existing medical institutions. The legislative framework for children’s social protection is regulated by the Social Assistance Law, which was approved in 2003.

To implement Moldovan Government Decision nr.1514 of 22 December 2003 regarding the “Strategy for youth”, the Ministry of Health approved an action plan (Order nr. 22 of 20 January 2004) that includes the following provisions:

- the creation and development of accessible and young person-friendly services for young people through the reorientation of family planning consulting-room activities;

- the development of public systems of information and education for young people to prevent HIV/AIDS, sexually transmitted infections, drug and alcohol misuse, violence and human trafficking;
- training on health education and family planning issues for family doctors, teachers and young people;
- contributions to preparing supportive methodological materials for teachers and informative materials for children; and
- cooperation between medical institutions, international organizations and NGOs to increase awareness among the population (especially young people) of the consequences of human trafficking.

Strategies and interventions to improve the mental health of children and adolescents

Mental health strategies are aimed at creating a community-centre network and governmental and nongovernmental services for children and adolescents. NGOs commonly lack finance because of short-term fundraising, so it is necessary to create an infrastructure for well-organized and financially assured support to develop mental health policy for adolescents.

In this respect, with the support of international organizations such as UNICEF and WHO, the Ministry of Health developed the “National health policy” (approved through Moldovan Governmental Decision nr. 886 of 6 August 2007) and the “Long-term strategy for health system development”. These documents provide strategic direction for adolescent mental health services and will assure their sustainability. The legislative framework will also be adjusted to reflect WHO’s recommendations and European standards.

The “National programme on mental health for 2007–2011”, approved by the government, has been developed according to the *Mental Health Action Plan for Europe (12)* and the *Mental Health Declaration for Europe*, both presented at the WHO European Ministerial Conference on Mental Health in Helsinki, January 2005, and also the *WHO European strategy for adolescent and child health and development*, (13) adopted by the WHO European Regional Committee in September 2005.

The “National programme on mental health for 2007–2011”, based on human (child) rights, provides direction for achieving reductions in morbidity, mortality and incapacity from mental disorders and for gaining increases in the accessibility and efficiency of psychiatric assistance and family integration. It also provides for training and specialization of personnel in the field in connection with other systems such as:

- the general medical system
- university education and scientific research
- the education system
- correction and prevention institutes for antisocial behaviour
- the mass media
- the social community system
- the social protection system and patients’ rights protection.

The creation of a community services network across the whole country is also one of the national programme priorities. Community centres for mental health (CCMH) are public institutions with a medicopsychosocial profile that offer a range of therapies and interventions for people with mental health problems and their families, regardless of age. The main purpose of CCMH is to assure the provision of preventative, diagnostic, health promoting, rehabilitative and protective interventions for patients with mental health problems.

Lessons learned

Barriers and obstacles in improving adolescent mental health and well-being include:

- imperfect database and information systems in the field

- existing stereotypes leading to social stigma of mental health problems
- the problem of human resources.

Outcomes of existing measures and further opportunities include:

- advocating for increased action to address mental disorders and the promotion of mental well-being among adolescents;
- organizing educational and awareness measures for the population to prevent mental health problems among children and adolescents;
- personnel training in the field;
- developing friendly mental health services for young people, including deinstitutionalization and social inclusion of children with mental health problems;
- strengthening the psychosocial rehabilitation of adolescents with post-traumatic stress and depressive disorders as well as behavioural problems;
- implementing monitoring and data-collecting programmes, including the development of an epidemiological case study on adolescent mental disorders in three areas in the country to identify measures to be undertaken;
- assessing the well-being and mental health among adolescents who are left by their emigrant parents to plan necessary measures to improve their condition; and
- embedding the position of psychologist in hospitals and education institutions.

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Romania: facing the challenge of translating research into practice – policy and partnerships to promote mental health among adolescents

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Executive summary

The Romanian case study presents data on the mental health and well-being of Romanian youth from the 2006 HBSC survey, describes the socioeconomic context of public policies and intervention programmes, provides information on the “Health education in Romanian schools” programme and reveals lessons learned following its implementation.

Having to negotiate a period of political and economic transition and to adapt to its new status as an EU country has left a mark on the social context of Romania. Economic instability has contributed to the development of health inequalities, marginalization of vulnerable groups and a decline in the mental health and well-being of the general population. This creates the need to intervene at an early age to prevent psychological problems and promote mental health.

The 2006 HBSC survey showed that Romanian teenagers reported average mental health, with the majority being satisfied with their lives and considering themselves healthy. Social capital and socioeconomic differences emerged, however, reflecting the existence of mental health inequalities. Adolescents from a poorer socioeconomic background had the worst positive health as indicated by lower levels of mental health, self-perceived health and life satisfaction. Possessing high social capital, on the other hand, produced a protective factor, meaning that young people who had more social capital also enjoyed better mental health.

Following WHO recommendations, the Ministry of Public Health decided to prioritize prevention interventions in the field of mental health. This included the adoption of laws and the planning of implementation strategies that targeted children and adolescents. In the case study, it is described the present policy aimed at improving adolescent health and mental well-being. “Health education in Romanian schools” represents a successful example of intersectoral collaboration involving: the Ministry of Education, Research and Youth; the Ministry of Public Health; local authorities; NGOs; and universities and schools. It reflects their joint effort to organize a programme designed to help children and young people to grow up healthy, prevent mental health problems and promote social inclusion.

The partnership proved efficient in developing curricular, training and financing mechanisms, but effective process and outcome evaluation programmes need to be developed to measure the impact of this kind of educational intervention on the mental health of children and adolescents. Adequate financial and human resources need to be provided to help Romania face the challenge of translating research into practice.

Drawing on data from the HBSC study regarding mental health and its determinants can contribute to effective policy and programme development. This issue can be addressed through the development of interventions that help build bonding, bridging and linking social capital to promote social inclusion and augment mental well-being among adolescents.

Introduction

During the last 16 years, Romania has been facing the challenge of changing from a communist regime to democracy and a market economy and is currently adapting to its new status as an EU country. Despite a rapidly growing economy, poverty remains a problem for many Romanians, with 14% of the population surviving on less than US\$ 2.5 per day. The GDP per capita in 2007 was US\$ 10 152, which represents an improvement from 2003 when it was US\$ 7140 (1). The World Bank estimated in 2002 that the Gini Index for Romania was 30.3, which placed it higher than other eastern European countries. Social disparities induce health inequalities reflected by the high incidence of tuberculosis, high number of children with low birth weight and the high rate of child and maternal anaemia found among low socioeconomic groups (2).

Of the population of 21.7 million (2002 census), 17.95% is comprised of children aged 0–14 years (2 million males and 1.96 million females). In 2004, 24.4% of Romanian children lived in poverty, while 8.2% were living in very poor households (3). Child poverty is most apparent in single-parent or extended households, in families where parents are unemployed, in rural areas and in Roma communities.

The Roma ethnic group is particularly subjected to the consequences of health inequality. Romania is estimated to have one of the largest Roma populations in Europe, with around 2 million (representing 9.21% of the total country population) (4). Among the factors that explain Roma people's poor health are high poverty (in 2002 it was estimated that almost 50% of the Roma population live in poverty), lack of proper living conditions, low level of education, poor nutrition and poor communication with health professionals. Moreover, due to a lack of identity cards, the majority of the Roma are denied the right to benefits from the health insurance fund and access to health services. Consequently, Roma life expectancy is 10 years shorter than for the general population and infant mortality is 40% higher than that of Romanian children (5). Levels of illiteracy and school drop-out rates are highest among this ethnic group.

Romania has a legacy of more than 10 000 HIV-positive children, representing the largest child population living with HIV in Europe (6). Most of these children were infected between 1986 and 1991 in health institutions and orphanages through contaminated needles and unscreened blood transfusions. Having survived with the help of antiretroviral therapy – Romania being the first eastern European country to provide general access to this treatment – they are considered “miracle children”. Unfortunately, this has not been accompanied by an effort to fight the stigma against them. In Romania, HIV-positive children and adolescents are facing social exclusion that takes the form of denied access to education (less than 60% attend any form of schooling) and lack of professional integration (7).

Other groups who are prone to social exclusion and health inequalities in Romania are children with mental and physical disabilities. In addition, children who are currently inside or exiting the social protection system are facing difficulties in the process of social and professional integration.

Mental health and well-being status among Romanian adolescents

In the following section, adolescent mental and physical health data collected from a national representative adolescent sample (n = 4654) are presented as part of the 2006 Romanian HBSC survey. Emerging social capital, gender and socioeconomic differences are discussed.

Social cohesion

Social cohesion was measured by using a social capital index calculated from computing the following: social networks and social support; local identity; power and control thorough engagement; and perception of local areas.

The majority of Romanian adolescents enjoy strong social support networks. On average, communication within their peer group was perceived as being better than inside the family, with boys reporting slightly better peer communication than girls. In relation to social network structures (number of friends), more than two thirds of Romanian teenagers have three or more close friends. Gender differences concerning free time spent with friends appear only at age 15 and favour boys ($p < 0.05$). These findings are confirmed by data from interviews with adolescents. Girls report more frequently that parents restrict their ways of spending leisure time with friends.

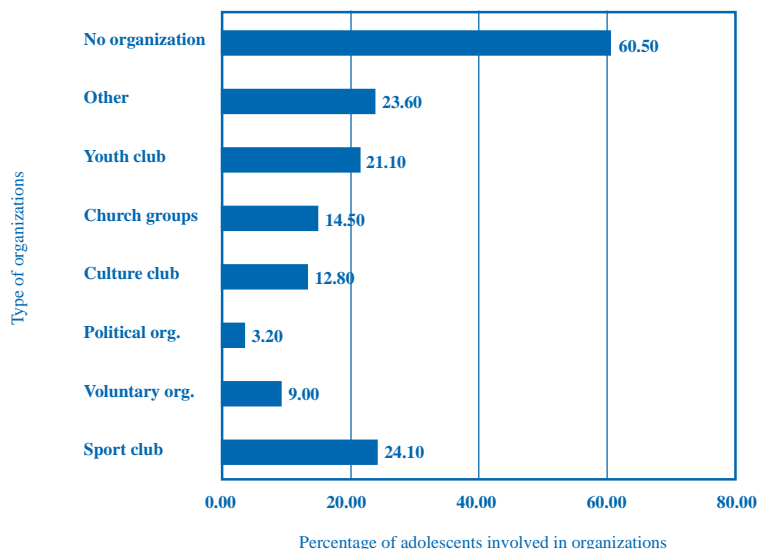
Social support within the school setting was measured by computing scores from three items: the extent to which classmates like to spend time together; the amount of extra help students receive from teachers; and the degree of interest that teachers show for their pupils as individuals. Fifteen-year-old girls perceived a higher amount of social support within the school setting than boys. This could be explained by the fact that girls were more often perceived as “good students” and consequently were rewarded with more social support from teachers.

Most Romanian adolescents did not participate in any organizations, which can negatively influence their capacity to develop social networks and the amount of social support they receive (Fig. 1). Among the barriers to joining organizations, clubs or extracurricular activities that were most frequently mentioned in interviews were interference with school work and lack of

attractive affiliation opportunities. Among those who got involved in organizations, girls chose voluntary activities, political organizations, church groups and youth clubs, while boys preferred sports clubs.

Fig. 1

Involvement of Romanian adolescents in organizations



Local identity was meant to reflect feelings of belonging and identification within the school setting. Two thirds of the sample felt integrated in the school setting, but gender differences emerged. More boys considered school a nice place to be, while more girls perceived school as a safe place. The percentage of adolescents who felt their classmates were nice or were involved in organizing school events dropped with age, reflecting a decline in feelings of belonging and received social support.

Perception of local area comprised feelings about safety, level of trust and leisure-time resources. Positive perception of one’s local area decreased with age, with only about half of the 15-year-olds reporting that they liked their neighbourhood, felt safe and trusted their neighbours. Significant gender differences ($p<0.01$) emerged, as boys tended to have a more flattering perception of their neighbourhood.

Positive health

Positive health was measured by using the following indicators: life satisfaction; self-perceived health; health complaints; mental health index; and level of self-esteem and self-efficacy. Life satisfaction was measured on a 1–10 scale, where “1” represents the worst possible life and “10” the best possible life. Romanian adolescents reported an above-average life satisfaction (Table 1).

Table 1

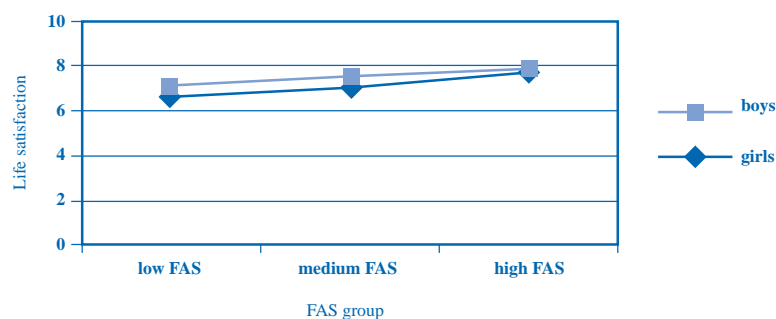
Young people with scores above the middle (>6) of the life satisfaction scale (%)

	11-year-olds (N = 1 625)		13-year-olds (N = 1 429)		15-year-olds (N = 1 600)	
	Boys	Girls	Boys	Girls	Boys	Girls
Life satisfaction (>6)	80.3%	75.5%	86.2%	79%	83.2%	71.4%

There were significant gender differences ($p<0.01$), with girls reporting slightly lower satisfaction than boys (Fig. 2). Young people with a better financial situation (measured with the FAS) reported being more satisfied with their lives ($p<0.01$).

Fig. 2

Mean life satisfaction scores by FAS



Self-perceived health was measured on a four-range scale (“1” represents excellent health and “4” poor health). Most teenagers considered themselves healthy, with only a small number reporting fair and poor health, but “excellent” and “good” perceived health decreased with age. For each age group, girls reported poorer health than boys, as can be seen in Table 2.

Table 2

Self-reported health by age and gender (%)

Self-reported health	11-year-olds		13-year-olds		15-year-olds	
	Boys	Girls	Boys	Girls	Boys	Girls
Fair and poor	12.1%	18.8%	8.6%	17.7%	12.9%	25.5%

Adolescents who enjoyed higher economic status reported better health, with a slight advantage in the case of boys. Having social capital only made a significant difference ($p < 0.01$) in the case of girls, those with more social capital considering themselves to be healthier (Table 3). Regression analysis results showed that having good communication within the family and peer group, possessing a local identity and perceiving one’s local area as being safe and nice to live in represented predictors of good self-perceived health ($p < 0.01$). These social capital factors explained 7% of the variance in self-perceived health.

Table 3

Mean self-perceived health differences by social capital

	Self-perceived health	
	Boys (M, SD)	Girls (M, SD)
Low social capital	1.75 (0.67)	1.98 (0.64)*
High social capital	1.84 (0.67)	2.21 (0.71)*

* mean differences in self-perceived health as a function of social capital at $p < 0.01$

A standard symptom checklist was used to measure physical and psychological *health complaints* experienced in the last six months, on a scale from 1 to 5 (“1” means having symptoms almost every day and “5” rarely or never). Frequently experienced symptoms (almost every day, more than once a week and almost every week) are shown in Table 4. Health complaints increased with age and there were significant gender differences, with girls reporting more symptoms than boys. In general, psychological health complaints were more frequent than physical ones, with “feeling low” being the most commonly mentioned symptom. Among physical complaints, headache was the most recurrent.

There were no significant differences in the number of reported health complaints as a function of perceived affluence (measured with FAS), but there were significant differences in the case of social capital ($p < 0.01$), with girls with more social capital reporting fewer health complaints ($m = 25.54$; $SD = 6.93$) than those with low social capital ($m = 27.75$; $SD = 7.81$).

Table 4

The frequency of experienced symptoms by age and gender (%)

Symptoms	11-year-olds		13-year-olds		15-year-olds	
	Girls	Boys	Girls	Boys	Girls	Boys
Headache	25.6	38.6	29.4	45.7	25.6	53.1
Stomach ache	19.4	28.4	20	28.4	13.9	29.8
Backache	17.5	22.4	23.1	32.5	22.6	31.3
Feeling low	44.6	47.8	47.4	59.9	51.2	73.8
Irritability	30.5	29.9	40.5	47.8	51.7	67.8
Feeling nervous	27.6	31.1	36.6	45.7	44.8	66.1
Sleep difficulties	19.2	24.4	21.8	26.7	26.1	36.4
Feeling dizzy	17	19.9	20.8	25	15.9	26.9

The *mental health index* was measured by a ten-item scale, with scores ranging from 1 to 50. It included questions about the emotional state (such as “*last week, did you feel sad?*”), cognitive state (“*last week, were you able to concentrate?*”) and behaviours (“*last week, did you have fun with your friends?*”). The majority of adolescents had an average mental health (m 34; SD 6.61). Overall, girls had significantly ($p<0.05$) poorer mental health (m 32.98; SD 6.09) compared to boys (m 35.78; SD 7.08). High socioeconomic status and high social capital represented predictors ($p<0.01$) of superior mental health, perceived family affluence accounting for 8% of mental health variation while social capital explained 20% of mental health variance. Among teenagers, those who possessed a large network of friends, enjoyed good peer communication, were involved in organizations and in making decisions that affected their lives perceived themselves as having better mental health ($p<0.01$).

Self-esteem represents the evaluative dimension that reflects how much you value yourself. It has been shown to be an important determinant of health (8). Self-efficacy has been defined as the belief people have in being able to influence their environment by making use of their cognitive and motivational resources (9) and is also recognized as an important determinant of healthy behaviours (8). Most adolescents reported above-average self-esteem and self-efficacy. Significant gender differences ($p<0.01$) emerged for self-efficacy, with girls (m 32.77; SD 4.52) considering themselves less self-efficacious than boys (m 33; SD 5.55). Regression analysis showed social capital to be a predictor for both self-esteem and self-efficacy ($p<0.01$).

Violence and bullying

Violent behaviour among teenagers has been measured by using three items from the HBSC questionnaire: number of times one has been involved in a physical fight; number of times one has bullied others; and number of times one has been bullied. On average, boys (m 4.4; SD 2.23) were significantly ($p<0.01$) more aggressive than girls (m 3.37; SD 1.66), being involved frequently in *physical fights or bullying* of others.

Differences in relation to perceived family affluence emerged. Boys who had a better socioeconomic situation tended to be more aggressive towards others, while girls’ aggression decreased with perceived family affluence. On the other hand, both boys and girls who scored lower on FAS tended to be more bullied by others ($p<0.01$). On average, young people who possessed higher social capital were also significantly ($p<0.01$) less aggressive (Table 5).

Risk behaviour

Several risk behaviours were measured within the HBSC questionnaire: smoking frequency (1–5 scale, with “1” meaning smoking daily and “5” no smoking); number of times being drunk (1–5 scale) and condom use (yes/no answer scale). Scores

Table 5

Mean differences in aggressive behaviour by social capital

	Aggressive behaviour	
	Boys (M, SD)	Girls (M, SD)
High social capital	4 (2.05) *	3.13 (1.49)*
Low social capital	4.70 (2.34)*	3.58 (1.77)*

* mean differences in aggressive behaviour by social capital at $p < 0.01$

from these items were used to compute a *risk behaviour index* and explore the relation between risk behaviour and social capital. A *risk behaviour debut index* has been computed for 15-year-olds by including the following items: the age of first sexual intercourse; the age one started smoking; age at which one started drinking; and the age of first drunkenness. The lower the score on this index, the higher the risk behaviour, as it stands for an early debut of risk behaviour adoption.

Generally, more boys reported smoking and drunkenness compared to girls. There were no significant differences in risk behaviour in relation to perceived family affluence. Nevertheless, adolescents with superior perceived wealth tended to smoke and drink more, probably as they could afford the material costs of these risk behaviours.

Young people with low social capital were more prone to engage in risk behaviour (Table 6). In relation to the debut of risk behaviour, 15-year-old girls with high social capital tended to start adopting risk behaviours earlier than boys ($p < 0.01$). This can be interpreted as a negative consequence of high-bonding social capital, as being involved in a peer group that has norms which encourage risk behaviour is more dangerous for girls than boys. Other possible explanations could be that boys have more self-efficacy than girls in believing they can resist temptations, or that girls tend to conform more to the norms of the peer group even when these are damaging to their health.

Results from this first wave of HBSC data collection will be disseminated through a variety of channels to inform key policy decision-makers from the Ministry of Public Health, the Ministry of Education, Research and Youth, local school

Table 6

Risk behaviour index as a function of social capital

	Risk behaviour index			
	13-year-olds		15-year-olds	
	Boys (M, SD)	Girls (M, SD)	Boys (M, SD)	Girls (M, SD)
Low social capital	5.67 (1.15)	5.30* (0.81)	4.67* (2.50)	3.41* (1.86)
High social capital	5.61 (0.12)	5.11* (0.78)	4.26* (2.18)	2.70* (1.39)

* differences in risk behaviour as a function of social capital, sig. at $p < 0.01$

inspectors, NGOs, mass-media representatives and teachers and parents. Strategies for translating research into practice and encouraging intersectoral collaboration will be explored and implemented.

Policy context: national mental health strategies

Following WHO recommendations, the commitment to improve health has become one of the government's priorities, leading to the adoption of the following laws and policies:

- the National Anti-Poverty and Social Inclusion Plan (2002)

- the National Action Plan for the Reform of the Health Sector (2004)
- the Mental Health Strategy of the Ministry of Public Health (2002).

The last on this list comprises a legislative module that includes law for the promotion of mental health and the protection of people with mental illness, developed in accordance with the “Principles for the protection of people with mental illness and the improvement of mental health care” adopted through Resolution 46/119 by the United Nations National Assembly in 1991. Other policy measures consist of:

- national programmes for the prevention of psychiatric and psychosocial disorders
- education policies that favour the insertion of mental health in the health education school curricula
- education programmes targeted at vulnerable groups such as the Roma population
- national campaigns for violence prevention.

Several institutions are involved in making sure that the right to health is exercised in conformity with Article 34 of the Romanian Constitution: the Romanian Government, the Ministry of Public Health, the Ministry of Education, Research and Youth, the Ministry of Finance, the Ministry of Justice and the Ministry of Environment. Local authorities and several NGOs were also drawn into this process to help engage the community in decisions related to its health.

Mental health represents one of the six priorities of the national public health strategy developed by the Ministry of Public Health and approved by means of the Minister of Public Health Order No. 923/06/16/2004, published in the OJ No. 662 of 07/22/2004. According to the action plan for the implementation of the mental health strategy, the Ministry of Public Health is prioritizing prevention modules, programmes and actions targeting adolescent and child mental health, including the following.

Primary prevention

This consists of actions designed to promote positive mental health and to reduce the incidence of mental health problems or, if risk is already present, to help adolescents and their parents to develop their coping abilities. The module includes:

- stress management, crisis and conflict management programmes
- parent education programmes regarding adolescents’ substance use
- child abuse prevention programmes
- mass-media campaigns that promote healthy lifestyles
- assistance programmes for crisis situations (disasters).

Secondary prevention

These interventions target the detection and treatment of problems in their early stages to reduce their prevalence. Measures in this area focus on:

- programmes for institutionalized children
- programmes for children and adolescents who have alcoholic parents
- programmes for the inclusion of children/teenagers with HIV/AIDS.

Interventions

These target positive mental health promotion by creating the necessary conditions to ensure an optimum psychosocial environment:

- creating prenatal counselling centres;
- creating counselling centres for families with children in difficulty (such as those with disabilities, risk behaviours, low socioeconomic status and risk of abandonment);
- introducing programmes for the mental health of schoolchildren by matching work demands with the cognitive and emotional potential of pupils;
- training primary health care physicians to offer information and counselling on mental health; and
- promoting mental health in schools in collaboration with the Ministry of Education, Research and Youth.

Despite the great number of mental health promotion initiatives, these have not yet become real government priorities. Following the *Mental Health Action Plan for Europe (10)*, the “Twinning light” programme was developed between the ministries of health of Romania and the Netherlands with the purpose of supporting the mental health strategy of the Romanian Ministry of Public Health.

The Romanian League for Mental Health, an NGO founded in 1990 with the aim of shaping government policy and promoting alternative mental health practices, has assumed an active role in the promotion of mental health in schools and has developed several programmes:

- “Now you know why you have to care”, the first national campaign on mental health developed in collaboration with the Estuar Foundation and other local NGOs;
- “Stop violence in schools”, developed by UNICEF and the National Institute for Science and Education; and
- “Early intervention and education”, developed by UNICEF and the Step-by-Step Foundation.

Health promotion policy: the national programme of “Health education in Romanian schools”

Following prioritization of health promotion in schools, the “Health education in Romanian schools” programme was developed in 2003 by the Ministry of Education, Research and Youth and the Ministry of Public Health. Its main objective is to introduce health education in all Romanian schools as an optional subject or as an extracurricular activity aiming to develop responsible attitudes towards one’s own health and the health of others. The main objectives of the programme are the following:

1. well-being and health promotion among Romanian pupils through:
 - ensuring an optimal somatic, emotional, social and spiritual functioning;
 - developing a healthy lifestyle;
2. individual growth and development through:
 - building a positive self-image;
 - developing responsible decision-making skills;
 - developing stress-management skills;
 - developing a personal career plan;
3. illness prevention through:
 - preventing accidents and reducing risk behaviour;
 - preventing negative attitudes towards self, others and life;
 - preventing interpersonal conflicts, social inadequacy and crisis situations.

The health education curriculum for grades I-XII was approved by Education Minister Ordinance 4496/2004. It is structured in six modules, designed for the three distinct educational cycles (primary, secondary and high school). The health education curriculum includes the following major themes:

- human anatomy and physiology
- stages of physical, mental and emotional development
- personal hygiene
- physical activity and relaxation
- healthy nutrition
- environmental health
- mental health
- reproductive health
- risk behaviour and substance misuse
- accidents, violence and abuse prevention.

In relation to *mental health*, the curricula include:

- communication and interpersonal knowledge
- stress management
- developing tolerance for difference
- building social cohesion.

Educational materials for health education in Romanian schools (textbook, video, CD, booklets) were created between 2003–2005 by the Ministry of Education, Research and Youth, Ministry of Public Health and NGOs. Financing of the “Health education in Romanian schools” programme was provided in the period 2002–2005 by the Ministry of Education, Research and Youth, Ministry of Public Health, NGOs, international donations (including from organizations such as UNICEF, the United Nations Development Programme (UNDP) and the United States Agency for International Development (USAID) and sponsorships.

“Health education in Romanian schools” sets an example of effective intersectoral collaboration (see Fig. 3). A national partners’ committee was formed and includes: the Ministry of Education, Research and Youth; Ministry of Public Health; Ministry of Youth and Sports; Ministry of National Defence; the National Authority for the Protection of Consumers; NGOs; international donors; and private companies. The committee had the task of designing and coordinating the “Health education in Romanian schools” programme and the extracurricular health education activities. Several partners were responsible for programme implementation in schools: the district school inspectorates, district directorates for youth and sports, district directorates for health and local NGOs.

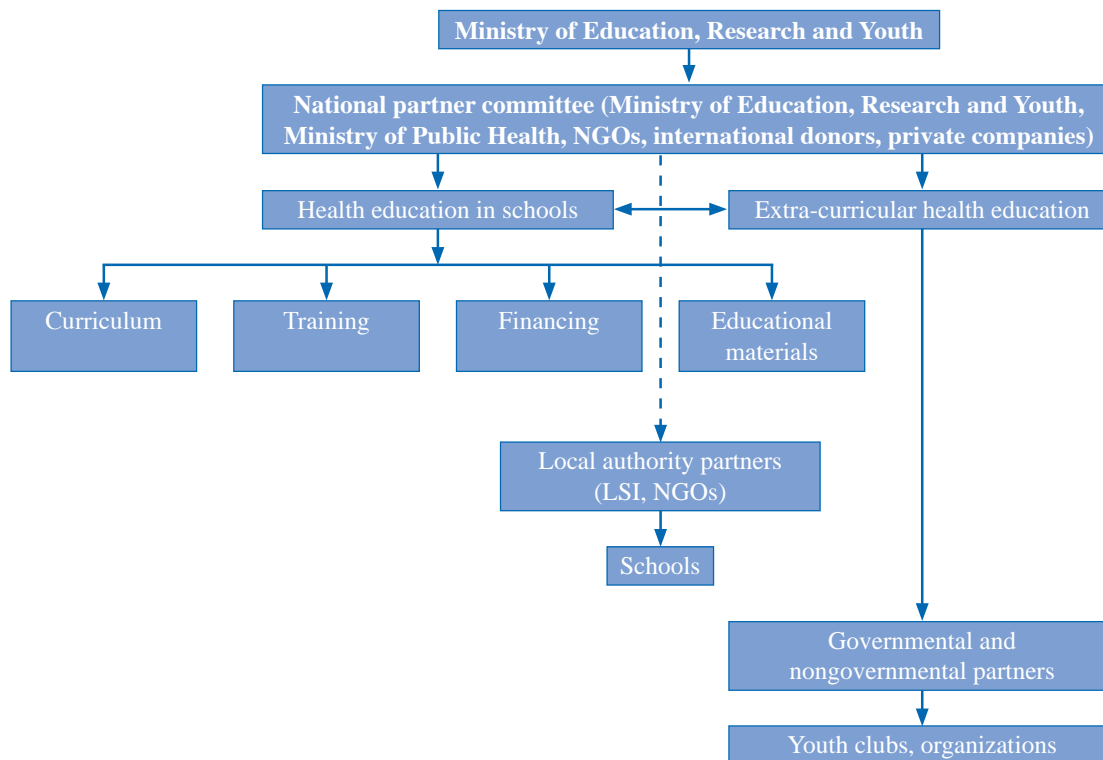
Last but not least, the schools were partners in the project and were directly involved in health education activities. Extracurricular health education activities were developed and provided by several governmental and nongovernmental partners. Youth organizations and authorities in charge of adolescent summer camps took part in the implementation process.

The training of health educators started before the development of “Health education in Romanian schools”, creating the necessary human resources for the implementation of a national health education programme. Several NGOs were actively involved in training teachers to teach health education: the Open Society Foundation; Youth for Youth; Romanian Health Psychology Association; and Save the Children. Their training programmes were accredited and supported by the Ministry of Education, Research and Youth.

One of the first NGOs involved in training health educators was the Open Society Foundation, which trained more than 500 school teachers within the Project “Education 2000+”. The main focus of the health education programme was risk behaviour prevention and positive health promotion. Another important outcome of this programme was the development and national dissemination of a teacher guide for health counselling (11).

Fig. 3

The structure of health education in schools, adapted from the Ministry of Education, Research and Youth



Another NGO actively involved in school health education is “Youth for Youth”, which mainly focuses on adolescent reproductive health and developing family life skills. In addition to its training activities, a school textbook, *Education for family life*, was published in 2001 for use by teachers (12).

Another successful intersectoral cooperation example between the Ministry of Education, Research and Youth and local education institutions (the psychology department from Babes-Bolyai University, Cluj-Napoca) is the “MAGISTER” programme, which was developed as a training course for school teachers and kindergarten educators. Several county school inspectorates are involved as partners in the implementation of the project. The programme was accredited by the Ministry of Education, Research and Youth in June 2003; since then, 6000 teachers from all regions of Romania have been trained.

“MAGISTER” is being financed by the Ministry of Education, Research and Youth and funds are being administered through the county school inspectorates. Several topics relevant to the mental health of schoolchildren are included: socioemotional development; communication skills development; stress management; risk behaviour prevention; and positive health promotion. These are included in a published textbook (13).

An important further step of all the above-described health education programmes is the development and implementation of process and outcome evaluation, which would monitor the effectiveness of the intervention.

In accordance with the *Mental Health Action Plan for Europe* (10) and the recommendations of Chapter 6.1.1. from the Green Paper *Improving mental health of the population: towards a strategy on mental health for the European Union* (14), the “Health education in Romanian schools” programme focuses on building mental health in children and adolescents. In addition to fostering the training of human resources necessary to teach students on health-related topics, it also covers parity of funding based on intersectoral collaboration.

Lessons learned

Effective health education needs to be based on scientific research and theories which confirm its value. Taking into consideration the lack of process and outcome evaluation data on the impact of school health education on Romanian teenagers, the development of evidence-based health education programmes in Romanian schools is recommended. In addition, research results on child and adolescent mental health, such as HBSC data, can be used to inform the further improvement of the health education curriculum and the design of useful process evaluation and outcome evaluation measures.

Based on results from the 2006 Romanian HBSC survey, public policy concerning adolescent mental health should focus on three broad objectives:

- preventing social exclusion of vulnerable groups (children and adolescents from low socioeconomic backgrounds, Roma ethnicity, teenagers with disabilities or with delinquent behaviour) by offering information, promoting acceptance of individual and group differences, encouraging interaction and providing equal opportunities;
- providing help to support major life transitions (all the physical and psychological changes that are characteristic of adolescence, entering high school and deciding on a future career) by making prevention and counselling services available; and
- sustaining community development efforts to create friendlier neighbourhoods.

As Romanian HBSC data show, teenagers who possess more social capital report having better mental health and fewer health complaints (both physical and psychological); actions should therefore be taken to build social capital to promote adolescent mental health and reduce health inequalities. This can be achieved by developing policies to help adolescents develop bonding, bridging and linking social capital.

An increase of bonding social capital can be encouraged by:

- stimulating the development of social networks (within the family, the peer group and school setting) and providing spaces where families or peer groups can spend time and socialize as a group (for instance, within community parks, cultural centres and sport centres); and
- building self-esteem and self-efficacy among teenage groups, as these represent predictors of social capital and of mental health; this can be achieved through education and counselling interventions.

The development of bridging social capital can be influenced by:

- encouraging teenagers to involve themselves in clubs and organizations; and
- offering the possibility of joining clubs and organizations within schools or the community.

The growth of *linking* social capital can be stimulated by offering opportunities for adolescents to involve themselves in decisions made within the school setting (such as consulting them regarding health education curricula and offering career orientation classes).

Previous reports on the mental health of Romanian youth have pointed to the lack of available data on this issue. The 2006 HBSC survey represents an improvement, as it can be used as a means of strengthening the evidence base on child and adolescent mental well-being and providing a base for mental health promotion development.

At the moment, Romania has a suitable set of policies and strategies regarding mental health in general and youth mental well-being in particular. To achieve the effective adoption of these guidelines and the development of high-quality infrastructures, however, adequate human and financial resources are necessary.

One of the strengths of the “Health education in Romanian schools” programme is that it helped build a network of trained professionals who can teach health education in schools. It also provides an example of effective intersectoral collaboration between the Ministry of Education, Research and Youth, Ministry of Public Health, local authorities, NGOs and schools and universities which helps guarantee quality training in the domains of health education and mental well-being promotion.

The WHO assessment of mental health in Romania revealed that most progress in mental health promotion has been achieved by involving NGOs. The lack of cooperation and involvement of public authorities formed barriers to effective mental health promotion which resulted in the development of only a small number of programmes and little continuity within activities. Collaboration with local and international NGOs could provide a solution to the problem of shortage of financial resources. In addition, a good partnership between ministries can help raise the necessary finances through joint budgeting to implement existing mental health strategies. A good example is represented by the “Twinning light” programme, an alliance between the health ministries of Romania and the Netherlands created with the purpose of facilitating the implementation of the Ministry of Public Health mental health strategy.

Even if mental health promotion and health education have only recently become governmental priorities in post-Communist Romania, joint intersectoral efforts have been made towards the implementation of a national school health education policy. But to certify its effectiveness, the challenges of improving financial mechanisms and conducting evidence-based interventions still have to be faced.

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Slovenia: mental health and well-being for all children

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Executive summary

The level of care of children and adolescents in Slovenia is adequate, but examination of the evidence, including HBSC survey results, reveals specific needs for this vulnerable population. There are many good programmes in the country, but they are not all connected or firmly integrated into the system. The key challenges that emerge are ensuring the integration of good practice and building a supportive policy framework for mental health of children and adolescents in Slovenia.

Slovenia has a population of approximately 2 million, with 22% being children and adolescents younger than 19 years. The birth rate is negative at 8.7, the number of live births has increased slightly over the past four years (in 2007, there were 19 585 deliveries) and the infant mortality rate is 3.8. A high proportion of women are in employment (60.5% of those aged 15–64 years), so many children attend high-quality public nurseries and kindergartens.

Health insurance coverage for children and adolescents is universal in Slovenia. Health care services are delivered at primary care level and cover preventive health care. Prescribed systematic checkups that consist of a staged approach to child and adolescent health are part of the fundamental elements of health care services. The programme of health education included in systematic checkups is currently being revised.

Counselling services for children, adolescents and parents are provided in every elementary and secondary school and the provision of diagnostic and therapeutic services is ensured through an additional network of public counselling centres.

Existing strategies that encompass mental health and well-being of children and adolescents are considered in the case study, as there is currently no specific national programme dedicated exclusively to mental health. The comprehensive “Programme for children and youth 2006–2016” lists priority areas concerning the health of this population and also deals with psychosocial development and mental health. Specific national policies and social and health care services have been developed for children and adolescents with developmental and mental disabilities.

A short review of regional and national policies impacting on disadvantaged and marginalized young people is offered in the case study, targeting social skills training of young people who leave school with few or no qualifications to increase their capacity for social inclusion. Health promotion based on web communication such as the “Youth web” counselling web site, which provides adolescents with fast, simple access to free expert psychosocial advice, is described.

The HBSC survey was carried out for the second time in Slovenia in 2006. Other surveys relating to the health of children and adolescents are also routinely conducted. These include a mental health and well-being perspective and are addressed in the case study.

Some of the key results regarding self-rated health/subjective indicators of health, psychosomatic symptoms, emotional problems/well-being and communication across age, gender and socioeconomic status are highlighted. Results reveal significant gender and socioeconomic differences regarding self-reported health status, life satisfaction, psychosomatic symptoms, satisfaction with weight and communication with significant others.

Mental health and well-being status among adolescents

Mental health and well-being status of children and adolescents in Slovenia was assessed and explored in two main surveys (the HBSC surveys, performed for the second time in 2006), and in research from 1998 called “Risk factors among Slovene high-school children” (1).

“Risk factors among Slovene high-school children” study

The “Risk factors among Slovene high-school children” study was carried out in 1998 on a representative sample of Slovene high-school students (n = 4706) aged between 14 and 20.

Findings according to gender revealed:

- more girls (42%) than boys (21%) reported signs of depression (Zung Self-rating Depression Scale);
- girls had lower self-respect than boys (medium value on Rosenberg’s Self-esteem Scale – 6.9 for boys and 6.3 for girls);
- girls were more often in conflict with their parents than boys (never or seldom – 49% of boys and 37% of girls);
- girls had fewer good girlfriends and boyfriends than boys (5% of girls and 22% of boys answered they had “nine”);
- boys were more often victims of bullying, threats and physical violence than girls (never – 69% of boys and 83% of girls);
- girls more often had problems than boys (none or very little – 38% of boys and 22% of girls); and
- girls were less satisfied with their looks than boys (13% of boys were unsatisfied with their looks and 30% of girls – on a five-point scale).

Taking into account the suicide rate in the country, researchers were also interested in whether young people had ever thought of taking their life. Adolescents did indeed report suicidal ideation and some had contemplated (para)suicide.

HBSC survey

The main findings of the “Risk factors among Slovene high-school children” study relating to mental health were consistent with some of the findings from the HBSC survey. In Slovenia, the HBSC research was conducted in the spring of 2006 for the second time. It included 5130 children aged 11, 13 and 15. Some of the key results on self-rated health/subjective indicators of health, psychosomatic symptoms, emotional problems/well-being and communication across ages, gender and socioeconomic status (by FAS) are highlighted.

The results on self-reported health show that girls in all age periods (11, 13 and 15 years) were more critical of their own health than boys. Only 39% of the girls estimated their health as excellent, while the percentage among boys was much higher – 53% of boys considered their health as excellent. More girls than boys estimated their health as fair or even poor – 15% of girls and 10% of boys. Girls who perceived themselves as less healthy were also less satisfied with their life and their weight and experienced more psychosomatic symptoms.

Life satisfaction was measured with the help of the Cantril ladder. Girls in all age categories (except for 11-year-olds) were less satisfied with their life than boys. Among all participants, 84% of girls and 88% of boys were satisfied with their lives. The least satisfied were 15-year-olds, with 77% of 15-year-old girls satisfied with their lives.

The comparison between genders regarding psychosomatic symptoms showed more girls than boys having these symptoms. As a result, at least once a week, girls reported the following:

- headache (22%)
- stomach ache (17%)
- feeling low (23%)
- irritable or bad tempered (32%)
- feeling nervous (31%)
- difficulties in getting to sleep (31%)
- feeling dizzy (10%).

Regarding *satisfaction with weight*, gender comparison showed that girls were less satisfied with their weight than boys: 46% of girls and 61% of boys said their weight was fine, while almost 18% of girls were on a diet at the time of the survey and 30% believed they were overweight.

The Strengths and Difficulties Questionnaire was used only with 15-year-olds. Results show that girls had more emotional problems in comparison to boys – 14% of the girls were placed within the “problematic” category. Girls had fewer problems in relating with others, however: 2% of girls and 5% of boys had troubles in relationships with others. In the categories of hyperactivity and behaviour, there were no statistically significant differences between boys and girls.

Boys of all age categories *fought* more often and also *bullied or were victims of bullying* more often than girls. In the months prior to the survey, 46% of respondents had been fighting at least once – 62% of boys and 29% of girls. Almost 25% of those questioned had been bullied in recent months, of which 27% were boys and almost 22% girls. Almost 28% of young people answered that they had cooperated in bullying of others at least once in the past few months. The differences between genders are statistically significant: substantially more boys answered that they had cooperated in bullying (34%) than girls (21.2%). Frequent victims of bullying and those who bullied others characteristically report higher frequency of suffering from psychosomatic symptoms more than once a week or even every day, such as headache, stomach ache, backache and pain in the neck. They feel low, irritable or bad tempered, nervous, dizzy and tired, and have difficulties falling asleep more often than others.

In *communication with their mother*, there were no statistically significant differences between genders, but there were differences in *communication with the father*, as boys found it easier to communicate with their fathers than girls. Only 28% of girls and 46% of boys thought that they communicated with their fathers easily. Boys were also more likely to socialize with their peers after school or in the evenings; 66% of boys and 58% of girls socialized with their peers at least once a week in the evenings. Some 9% of young people had no really *good friends* (2% of boys and 17% of girls), while 62% had three or more really good friends. Boys had statistically significantly more often three or more really good friends (79%) than girls (44%).

Socioeconomic inequalities are also an important determinant; results revealed that their impact on mental health was very strong. Children and adolescents with higher socioeconomic status (measured by the FAS) tended to perceive themselves as healthier (49% of those with higher FAS perceived their health as excellent and 40% with lower FAS), were more satisfied with their lives (89% with higher FAS, 80% with lower FAS) and their body weight, and had fewer psychosomatic problems/symptoms (feeling low, restless and nervous less frequently) than those with middle and lower status.

In addition, children and adolescents from families with higher socioeconomic status found it easier to communicate with their mothers and fathers about their interests. Parents were more willing to help them with school problems and homework, were more encouraging regarding school work, more interested in school activities and were more willing to talk to teachers. Children and adolescents from families with higher socioeconomic status also had more friends compared to those with middle and low FAS (64% with higher FAS had three or more friends, against 56% with lower FAS). The frequency of physical fighting was also associated with socioeconomic status of the adolescent’s family, in particular higher FAS. Most adolescents who had not engaged in physical fights in the previous twelve months came from families with low socioeconomic status, and most of those who had been fighting in the past year four times or more came from families with high socioeconomic status (9%).

Children and adolescents with a stronger social network (with more friends and good relationships with parents) were more satisfied with their life and also perceived themselves as healthier.

Briefly, the key issues or questions that emerge from these data are:

- how to address the existing gender and socioeconomic differences;
- how to address the association between bullying and psychosomatic symptoms;
- the importance of a social support network (relationships with friends and family) for mental well-being; and
- socioeconomic inequalities as an important determinant of mental health behaviour.

The presented data are valuable in shaping and planning health education programmes. HBSC data also represent an indicator of children's and adolescents' health and are a possible indicator of health promoting programmes and political measurements. It is therefore imperative that these findings reach those responsible for young people's health.

Following each survey, the results are disseminated through the preparation of press conferences, conferences, reports and publications. In March 2007 (2), the National Institute of Public Health prepared a national conference on the health of children and adolescents in which three ministries (health; education and sport; and labour, family and social affairs) were actively involved. The ministers signed a statement declaring the health of children and adolescents a national priority and promising that in the following two years, all three ministries would prepare a collective action plan on the basis of the national programme for children and adolescents 2006–2016 (3), with a special emphasis on mental health.

Social and policy context

The social and economic context of Slovenia reveals accelerated economic growth, improved standards of living and generally positive labour market trends. At the same time, the rates of people at risk of poverty and income inequality are decreasing, but a relatively high youth unemployment rate emerges as an important determinant (4).

The health care service

The health care service has an essential role in promoting children's health and development. The public primary health care system in Slovenia delivers free preventive health care to all children and adolescents until the age of 19. The personal physician for children younger than six years is a paediatrician; for school-aged children and adolescents, it is a school medicine specialist. This ensures comprehensive care for this vulnerable population.

Primary health care for children and adolescents includes preventive programmes for preschool children and schoolchildren and health promotion for children and adolescents. These preventive programmes for children are regulated by legislation and include:

- preventive well-child visits for preschool children at 1, 3, 6, 9, 12 and 18 months and 3 and 5 years; and
- preventive well-child visits for schoolchildren before school entry, in the first, third, fifth and seventh grade of elementary school and first and third grade of secondary school.

All three-year-old toddlers also have a psychological examination and all five-year-olds are assessed by a speech and language therapist. All of the mentioned examinations consist of a medical examination, obligatory immunization in accordance with the immunization programme and health education (which is currently in revision).

National health strategies

Existing strategies that focus on mental health and well-being of children and adolescents will be briefly described below, but there is as yet no specific national programme dedicated to mental health. The Mental Health Act is in preparation. It addresses key issues regarding human rights, advocacy and community work for people with mental disorders. The act also foresees the development of a national programme for mental health which will also have a focus on mental health aspects of adolescence.

In the current situation, mental health issues are defined in the national plan of social care (5). The main contributions for mental health and deinstitutionalization in this plan are definitions of:

- criteria for enlargement of the public social care network
- the range of programmes for people with long-term mental health problems.

During the time of preparation of its own national programme for children and adolescents, Slovenia collaborated in a pilot exercise in testing the *WHO European strategy for child and adolescent health and development* with assessment tools (6).

The exercise was useful, as it offered an opportunity to reflect on data collection, policy issues, future action steps and the need for the development of a comprehensive strategy.

The most comprehensive document for children and adolescents is the *Programme for children and youth 2006–2016* (2). It lists priority areas concerning the health of this population in a specific chapter on health policy and also deals with psychosocial development and mental health. Valuable input from the pilot exercise was included in this chapter.

The principal aims concerning health outlined in the *Programme for children and youth 2006–2016* are:

- meeting the conditions for healthy life of children and young people;
- improving mental health in all periods of childhood and youth and preventing the most common causes of mortality in children and young people; and
- ensuring quality health care.

Children and adolescents are also addressed in other strategies such as the *Resolution on the national programme of food and nutrition policy (2005–2010)* (7) and its action plan. It plays an important guiding role in the implementation of tasks and activities in the field of healthy food and nutrition, physical activity and overall health of children and adolescents in Slovenia.

Slovenia has also adopted and is implementing a document complementary to the nutrition policy, the *National strategy on health-enhancing physical activity 2007 to 2012* (8), which defines priorities in terms of providing a healthier and safer environment for physical activity for children. The strategy is an important policy framework that emphasizes environmental conditions, health promotion, role of transport, land-use policy, urban planning, urban traffic policies and the development of an infrastructure in urban environments for walking and cycling.

Another key document is the *Resolution on the national programme in the area of drugs (2004–2009)* (9). It includes preventive activities in education and varied approaches to preventing drug use, reducing risks and controlling supply.

Protecting children against environmental threats has also become a priority and the National Institute for Public Health is preparing the *Children's environment and health action plan* and the *Children and chemical safety national action plan*.

Policy and interventions

A variety of policies and interventions at national and subnational level will be briefly introduced. They attempt to cover the key issues highlighted in the first section.

Children and adolescent health care services

According to the Health Care Act, the Health Insurance Act and the Health Services Act, children and adolescents in Slovenia have the right to preventive health care such as systematic checkups. The right to preventive health care applies to all children and adolescents as family members of an insured person until the completion of their regular education period (students are also included).

Since compulsory health insurance in Slovenia is tied to residence, every child and adolescent, even the most socioeconomically vulnerable, can access this service. There is a special dispensary for curative and preventive health care in the capital of Slovenia for refugees and homeless people, which is currently financed by the municipality.

The Instructions for the implementation of preventive health protection at the primary level (10) determine that even those children and adolescents who are no longer in the school system (“drop-outs”, or those who finished school early) have the right to a systematic checkup at 18 years of age. In case they are already employed, preventive medical health care is regulated by a labour law that prescribes a medical checkup before starting the first job.

Systematic checkups include: medical examination; compulsory free-of-charge and recommended vaccination; and health

education planned according to the typical risks of individual development periods. According to the *Instructions for the implementation of preventive health protection at the primary level*, every systematic checkup should include health education and discussions with a nurse (or doctor-paediatrician) about current topics in the mental health area (well-being, development, social and emotional problems, social relations, leisure time activities and stress, for instance).

Health education during systematic checkups

The programme of health education during systematic checkups is currently being revised. In 2005, the National Institute of Public Health of Slovenia, together with nine regional institutes of public health, carried out an overview of health education programmes for children and adolescents in Slovene health care centres and schools. Results have shown that there are substantial regional and local differences in programmes of health education. The aim of the overview was to find examples of best practice and transfer them to national level. Recommendations from experts were also taken into consideration, results from various studies and statistics on the health of children and adolescents.

Regional and local differences in programmes of health education led the National Institute of Public Health of Slovenia to prepare an action plan for health education of children and adolescents in health care centres and schools. The plan includes education on communication skills, developmental psychology and health education topics for all medical personnel (mostly medical nurses) and pedagogues who are carrying out health education.

Counselling services for children, adolescents and parents

Every elementary and secondary school in Slovenia has a school counselling office employing a professional in mental health (psychologist, social worker or (social) pedagogue). They specialize in learning issues and preventive services in the school environment and also offer counselling and referral to children, adolescents and parents.

In addition, a network of public institutions established as early as 1955 provides diagnostic, counselling and therapeutic services. These are counselling centres for children, adolescents and parents, and are situated in four Slovene cities. The counselling centres integrate the fields of health care, education and social welfare and are professional institutions bringing together a wide variety of experts. The role of these centres is the provision of counselling activities (including assessment, interventions, consultation, supervision, training, prevention and psychological education) and therapy for children, adolescents and parents.

These centres are founded and financed primarily by the municipality and by health insurance. All children and adolescents (from 3 to 29 years) have access to the centres, but because of local financing, children and young people from the cities have priority. Usually schools (teachers or advisers) suggest the idea of attendance to parents, but young people sometimes attend on their own volition. Specialists in the centres assess their problems and work with them, their parents and their communities.

The Slovene Network of Health Promoting Schools

The Slovene Network of Health Promoting Schools (SNHPS) has existed since 1993, when it was launched in 12 institutions. By 1998, the network had extended to 130 schools out of approximately 600. In 2008, the gradual inclusion of other schools will start and will be coordinated by the regional institutes of public health.

The notion of health in the framework of health promoting schools is holistic – physical, mental and social health are all regarded as being equally important. Twelve aims of the ENHPS serve as an instrument for setting tasks, programmes and projects. Health promoting schools strive to enhance healthy lifestyles of all people in the school setting. It is a matter of great importance that schools incorporate health promotion into all aspects of everyday life – into the formal curriculum as well as the hidden curriculum. Special emphasis is given to cooperation with parents, health care and other specialist services and with the local community.

One of the bases of health promotion in school settings is the education of teachers. In response to their wishes and needs, many seminars have been focused specifically on health promotion and mental health.

Social skills training for school drop-outs

Policies impacting on disadvantaged and marginalized young people address intraregional inequalities by supporting these vulnerable groups. Several national and regional programmes and services are provided for school drop-outs in a variety of settings.

The National and Regional Employment Service offers occupational counselling for young people who discontinue compulsory education and are aged between 15 and 19 years. There are also information and occupational counselling centres offering individual counselling in three Slovene cities. At the moment, these are dealing with financial problems. An especially successful project of the employment services and information and occupational counselling centres was “Counselling and social skills and knowledge for reinclusion in education”; while workshop based, a part of the project also involved street work with adolescents.

In the underprivileged region of Pomurje, a project targeting social skills training of school drop-outs to increase their capacity for social inclusion is under way. Pomurje is located in the north eastern part of the country, which is the least economically developed region of Slovenia and has the poorest health indicators. Intraregional health inequalities also exist and there are many people in risk groups, such as individuals with a lower level of education, the unemployed, older people and ethnic minorities. The unemployment rate in the Pomurje region in 2003 was 17%, which is higher than the country average, and the risk of suicide is almost double among people who have lost their jobs.

A health promotion strategy and action plan for tackling health inequalities in the Pomurje region (11) has been in place since 2005. It has a special focus on vulnerable groups, among them children, mothers and pregnant women, with the aim of increasing utilization of prenatal services, encouraging healthy nutrition in pregnancy and childhood and increasing social and coping skills of school drop-outs and unemployed young people.

The project targeting school drop-outs has been developed in accordance with the health promotion strategy and action plan for tackling health inequalities in Pomurje. It aims primarily to motivate these young people to continue their education. Each participant in the programme has access to an individual mentor who will guide them through the learning process. Each student starts by setting out her or his individual learning plan that has to be completed during the programme. This plan is the foundation for all his or her activities in the programme.

The programme aims to:

- prevent harmful consequences of social isolation of young people
- reintegrate young people into the cultural environment of peer groups
- reduce social problems in the environment
- change the environment’s negative response to them
- facilitate establishment of mutual links and self-help among young people
- develop motivational mechanisms for returning to school
- help them to improve some of their everyday habits
- help them learn about learning.

Specifically, the curriculum covers:

- enhancing social and coping skills
- finding supportive social contacts
- training for positive self-image and healthy behaviour
- vocational development and career counselling workshops.

In addition, there are other programmes in Slovenia that address social inequalities with interdisciplinary actions. These include the “Production school” and “Learning for young adults” projects. They target social skills training of school drop-outs to increase their capacities for social inclusion.

The “Learning for young adults” project is a publicly verified, non-formal education programme for unemployed young people aged 15 to 25 who have discontinued their schooling. Programme evaluation reveals that the programme has a positive long-term impact on social integration.

A very similar programme for school drop-out is the “Production school” project, which runs only in the capital of Slovenia, Ljubljana. It is designed for adolescents between 15 and 18 who have finished compulsory schooling and who have dropped out of the secondary school because of learning and behavioural difficulties. The purpose of this programme is not to obtain formal education but to acquire good working habits, gain a sense of responsibility and to develop the young people’s confidence in their own abilities to get the job they need.

Youth web counselling site

The Regional Institute of Public Health Celje developed an online health promotion project titled “This is me” (12) in 2001. The web site has quickly become a popular tool for adolescents all over Slovenia. The approach is based on web communication, providing adolescents with fast, simple access to free expert advice. The aim of the site is to promote self-esteem and a positive sense of personal identity and to help young people set goals, develop self-efficacy and gain a sense of social responsibility. The objective is to stress not only the prevention of behaviours harmful to health, but also to emphasize positive life skills such as decision-making, managing emotional reactions of anger and fear, overcoming boredom, resolving conflict, dealing with peer pressure and enjoying leisure time.

The guiding principles are: anonymity (reduces the effect of stress on the individual and increases honesty); direct and quick access to experts (no referral forms, waiting periods and queues); and the interdisciplinary nature of counsellors’ expertise and approaches (psychologists, physician specialists and experts from social work, social education and sports education). A broad counselling network has been developed. On the web counselling site, young users have access to 30 counsellors: 12 psychologists, 9 physician specialists and 9 experts from other fields (social worker, social educator and sports educator).

As many as 111 000 different users were recorded over a five-year period and approximately one fifth of questions are related to mental health issues. Every month, there are approximately 14 000 visits and almost 80 000 pages read.

Web counselling cannot replace personal counselling, but by offering understanding and prompt expert advice within the framework of the web intervention, the counsellor may be able to help in a crisis and direct young people towards considering constructive strategies for solving problems. The youth web counselling site is an additional form of support, complementing existing sources of help.

Another advantage of web counselling and communication (besides anonymity, quick access and the interdisciplinary nature of counsellors’ expertise) is the usefulness of a single reply which can offer insight to numerous users into the experience of others and their problem-solving approaches. Web counselling also poses some disadvantages, such as lack of personal contact, reduced opportunities to set up a meaningful therapeutic relationship, lack of information about the seeker of help, insufficient description of a problem and the dilemma of authenticity of the virtual identity.

The web site is regularly and meticulously moderated. It has an editorial staff, all of whom are experts; the web counsellors are volunteers. The Institute of Public Health Celje sponsors the project with support from the Ministry of Health. The project has also received the Izidor 2005 award (a Slovene award for web projects in the health field) for web excellence. For “This is me”, web communication has proved to be an efficient tool in the field of health promotion for young people.

Parental involvement

Health care of children and adolescents in Slovenia encourages active parental involvement. Free health education is provided for future parents in health care centres and maternity hospitals. Education for healthy parenting represents one of the basic

elements of health education. Childbirth classes are aimed at all pregnant women and future fathers or companions of pregnant women. Health education covers:

- information and preparation for delivery and parenthood (infant care, physical relaxation and breathing exercises, legal rights, social care and labour rights, breastfeeding, nutrition and injury prevention);
- psychological issues (parental role, understanding the infant's messages, communication, setting boundaries, separation); and
- education about important health topics.

As not every future parent is involved in this kind of education, some other health education programmes are needed, especially for at-risk groups of pregnant women (pregnant women with certain health risks, those who are underage and the socioeconomically vulnerable). Parents are also actively involved in their child's health care from the first child's systematic checkup.

Lessons learned

The level of care of children and adolescents in Slovenia is adequate and in many aspects satisfactory. The main strengths are:

- universal health insurance coverage for all children and adolescents as a central pillar of the health care system;
- a well-developed and organized system of public primary health care centres;
- good projects for school drop-outs (the challenge is how to integrate all of them);
- current work on linking primary health care with health education and school curricula;
- formation of a health education programme with operationalized standards of implementation;
- systematic implementation of a comprehensive health education programme which includes the school environment and health service staff;
- a strong Slovene network of health promoting schools, transferring to regional level and the inclusion of all (interested) schools; and
- examples of intersectoral collaboration.

The following concerns and needs of children and adolescents in Slovenia emerged from the data and the evaluation of policies and interventions examined in the case study:

- how to address specific issues such as the connection between bullying and mental health;
- the dilemma of whether existing gender and socioeconomic differences are addressed appropriately (population-based approach), or whether special programmes for at-risk groups are needed;
- formation of a supportive (student-friendly) school environment;
- psychosocial aspects of development – respectively, the problems of youth (heavy workload, achievement orientated and competitive atmosphere at schools, levels of depression), which are especially pronounced in the high-school population;
- greater involvement in promotion of health by mental health departments located in children's dispensaries and school counselling offices;
- greater emphasis on multidisciplinary training and communication strategies;
- the need for human resource development;
- the need for a national programme of mental health; and
- regular financing.

Possible explanations and conclusions

The area of mental health and well-being is very wide and complex. The consequence of this is that it is difficult to define which sectors are responsible for establishing the conditions and circumstances that affect mental well-being. The question of accountability for the area of mental well-being is only one of the difficulties and obstacles for financing, re-establishing and implementing existing interventions, as well as new ones. Consequently, certain activities, such as counselling centres for children and adolescents and various associations, have no regular financing assured and are going through a crisis.

Another problem is how to measure the effectiveness of these kinds of interventions. There is a lack of studies which would provide evidence of improvement in mental health among children and adolescents.

People of all political persuasions should see that health is above political categories and concerns all sectors, and that health is everyone's business.

Legislation on mental health has not as yet been adopted. Slowly, however, public and political awareness about mental health issues is improving. As is evident from this case study, there are many good programmes and interventions, even though they might not be connected and firmly integrated into the system. A more unified and holistic approach is therefore needed.

The modernization of programmes of health promotion and health education for children and adolescents will link the school and health sector even more and provide for unified implementation of preventive health care at primary level. Until now, these programmes have not been integrated, so certain regions and health centres prepared their own programmes to varying degrees. Continuous evaluation will enable measurements of their effectiveness and will provide the groundwork for further progress.

The special needs of the population of drop-outs or unemployed young people should be addressed to a greater degree, since all of the described programmes are not available in all Slovene regions. All youth, whether unemployed or those who have stopped attending school, should be invited to join one of the above-mentioned projects. It would also be beneficial to extend these activities throughout Slovenia. Local communities should ensure they play a role in financing the measures. Young people should be enabled to enter regular schooling and visit the "Learning for young adults" project at the same time, and not have to choose between one or the other, as is the case at the present time.

Continual support of research in this area gives insight into the healthy and unhealthy habits and behaviours of all age groups, especially of children and adolescents, through, for example, HBSC, the European School Survey Project on Alcohol and other Drugs (ESPAD) and qualitative research in focus groups.

The development of an overview of research findings is necessary. Ministries have begun publishing reports and findings of projects they are financing on the Internet over the past few years, which contributes to a greater overview of the work in this area. It would also be useful to set up a web portal holding findings of research and examples of successful practice.

In its attempt to establish effective mental health prevention and promotion, Slovenia, under the leadership of the Ministry of Health, is striving to integrate the themes of a multiagency approach, prevention programmes for some high-risk groups and active parental involvement. Various good projects encouraging mental health of adolescents are underway, but there are still many challenges in this area. The national programme of mental health has to be prepared, different sectors working in the field of mental health of adolescents have to consolidate their policies and activities, and a more systematic and holistic approach in this area has to be adopted.

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Editorial note

Two case studies were presented by Spain through the WHO/HBSC Forum 2007 process: from the Autonomous Community of Andalusia; and from Alcalá de Henares, Autonomous Community of Madrid. These are preceded by an introductory section that focuses on analysis of HBSC data and describes the national policy context. Editors wish to acknowledge Begoña Merino Merino, Chief, Department of Health Promotion, Ministry of Health and Consumer Affairs, Spain, for her collaboration in enabling Spain's contribution to the Forum process.

Spain: social contexts and psychological adjustment in Spanish adolescents

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Executive summary

The HBSC survey carried out in the spring of 2006 had access to 21 811 adolescent schoolboys and schoolgirls between 11 and 18 years of age. They came from various regions, belonged to families with a range of purchasing power and attended schools in both the private and public sectors. This study presents the most significant results regarding adolescent social relationships and mental health.

The results clearly demonstrate that there is a relationship between adjustment changes and age in adolescence. As adolescents mature, fights decrease, accompanied by decreases in ease of communication with their father and mother, parental supervision, enjoyment of school, school performance and satisfaction with life. Increases are seen in difficulties associated with psychological adjustment.

In addition, the variable of gender indisputably produces social inequalities. Girls are more likely to be closely supervised by parents (especially mothers), to be successful academically and enjoy secondary school. Girls are also more likely to have support from a close relationship with a special friend (usually a girlfriend) and are less likely to be involved in fights or abuse (as either victims or aggressors). It is also true, however, that girls are more likely to have problems in communicating with their father, are less satisfied with their relationships in the family, demonstrate lower levels of self-esteem and satisfaction with life and, in general, have more problems in terms of emotional adjustment.

The data demonstrate that, within the population of adolescent schoolchildren in Spain, there is one group that is particularly vulnerable: *immigrants*. More problems were found in the emotional development of this group (less satisfaction with life and more problems of psychological adjustment) and a significant number of immigrants have problems in their relationships with peers (a particularly important finding due to the importance at this age of feeling accepted and belonging). It is also more probable that they do not have a special friend (someone who acts as a confidant and a key support) and are more involved in fights and abuse (as both victims and aggressors). A significant finding, however, was their evaluation of school. Immigrants have a very positive perception of their academic performance and are also the group that most enjoys being at school. This latter finding calls attention to the need for schools to actively work to improve the social integration of immigrants.

The data also demonstrate that a significant proportion of differences in adolescent mental well-being are associated with *socioeconomic status*. Adolescents of families with lower purchasing power are, for example, more likely to have self-perceptions of problems in communicating with both parents, have less parental supervision and report less satisfaction with relationships within their family. It is these same adolescents who also indicate that they have lower academic achievement, more problems having a best friend, less satisfaction in their relationships with peers, less satisfaction with life and lower self-esteem, in addition to experiencing more difficulties in emotional adjustment in general.

Differences by *region* were not particularly significant. Nevertheless adolescents in the region of Madrid tended to be more supervised (especially by the father), had better communication with their mother and father (especially from the latter) and

were particularly satisfied with this aspect of the relationship with their parents. It was also in Madrid, however, that more fights and episodes of abuse among adolescents were found.

In Andalusia, key findings include high satisfaction in communication with siblings and family relationships (including the relationships between siblings and among parents as a couple). These adolescents also demonstrated the most satisfaction with life. Explaining these differences would require the analysis of a significant number of factors that would exceed the scope of this study, but differences in socioeconomic status certainly play a role in the differences found by region.

The HBSC study in Spain

The data on Spanish adolescents presented in this study have been taken from the last two HBSC surveys, completed in 2002 and 2006. These were made possible through a Collaboration Agreement between the Ministry of Health and Consumer Affairs (General Public Health Office) and the University of Seville.

As established by international methodological guidelines, a representative sample of adolescent Spanish schoolchildren aged 11, 13 and 15 was studied in 2002 and 2006. Samples of 17-year-olds and adolescents in the intermediate ages (12, 14 and 16) were also incorporated as a national option. Consequently, the Spanish sample in 2006 consisted of a total of 21 811 adolescents ranging from 11 to 18 years of age (Table 1).

The 2006 sample was somewhat larger than that obtained in 2002 (13 552 adolescents) due to the fact that a randomized, multiphase sample was taken. This allowed an independent representative sample to be obtained for each of Spain's 18 regions. Since this study focuses on the total national data and, specifically, those of the regions of Andalusia and Madrid, data referring to the samples taken from these two regions have been included in Table 1. Andalusia and Madrid have well-differentiated socioeconomic characteristics, with Andalusia being below the national average income per capita and Madrid being above.

Table 1

Total make-up of the Spanish HBSC 2006 national sample and of two regional samples (Andalusia and Madrid)

*National Institute of Statistics, 2006.

	Age	Girls	Boys	Total	Income per capita (*)
Total Spanish sample	11–12	2 884	2 985	5 869	€22 152
	13–14	2 748	2 751	5 499	
	15–16	2 801	2 932	5 733	
	17–18	2 065	2 645	4 710	
	Total	10 498	11 313	21 811	
Andalusia	11–12	241	254	495	€17 251
	13–14	216	216	432	
	15–16	239	245	484	
	17–18	123	192	315	
	Total	819	907	1 726	
Madrid	11–12	125	132	257	€28 850
	13–14	130	153	283	
	15–16	184	154	338	
	17–18	95	79	174	
	Total	534	518	1 052	

Below is a synopsis of some of the most significant results obtained in relation to psychological adjustment and development in social contexts. More details of the study can be found in the complete reports (1–3).

Positive health

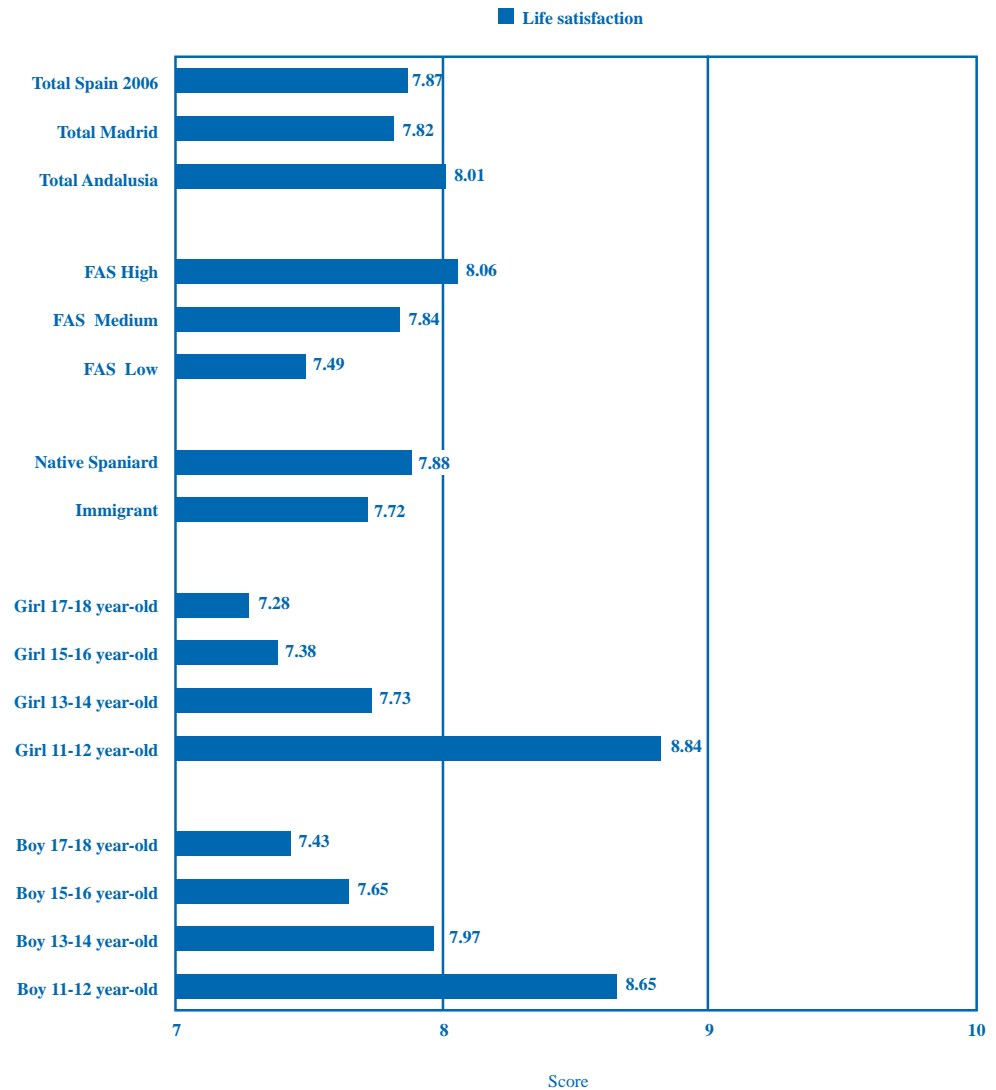
Life satisfaction

Age was clearly associated with adolescents' life satisfaction. As age increased, satisfaction with life decreased in both boys and girls. The decrease was particularly noticeable between the ages of 11 and 13 in both. Gender also played an important role; although 11-year-old girls expressed a higher level of satisfaction than did boys of the same age, girls systematically demonstrated lower scores than boys from that age onwards.

Differences were also associated with family purchasing power (adolescents from the most affluent families demonstrated greater life satisfaction) and with immigrant status (immigrant adolescents recorded lower scores). By region, Andalusian adolescents scored above the national average and those from Madrid scored slightly below (Fig. 1).

Fig. 1

Average scores given by adolescents to the question: "Here is a picture of a ladder. The top of the ladder, '10', is the best possible life for you, and the bottom, '0', is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?"



Psychological adjustment

Gender, age, family purchasing power and native/immigrant status were important variables in psychological adjustment (Fig. 2), with very similar results being found in relation to self-esteem (Fig. 3). Boys demonstrated better levels of well-being than girls of all ages, especially from 13 years onwards, but both boys and girls recorded poorer adjustment as adolescence advanced. Adolescents from families with better economic resources had higher scores for well-being, while immigrants (as opposed to native Spaniards) appeared to have more problems in this area. There were no significant differences by region.

Fig. 2

Average score of adolescents with different sociodemographic characteristics for psychological well-being (scores on the Mental Health Index, Kidscreen: maximum value = 100, minimum = 0)

Source: Ravens-Sieberer et al. (4)

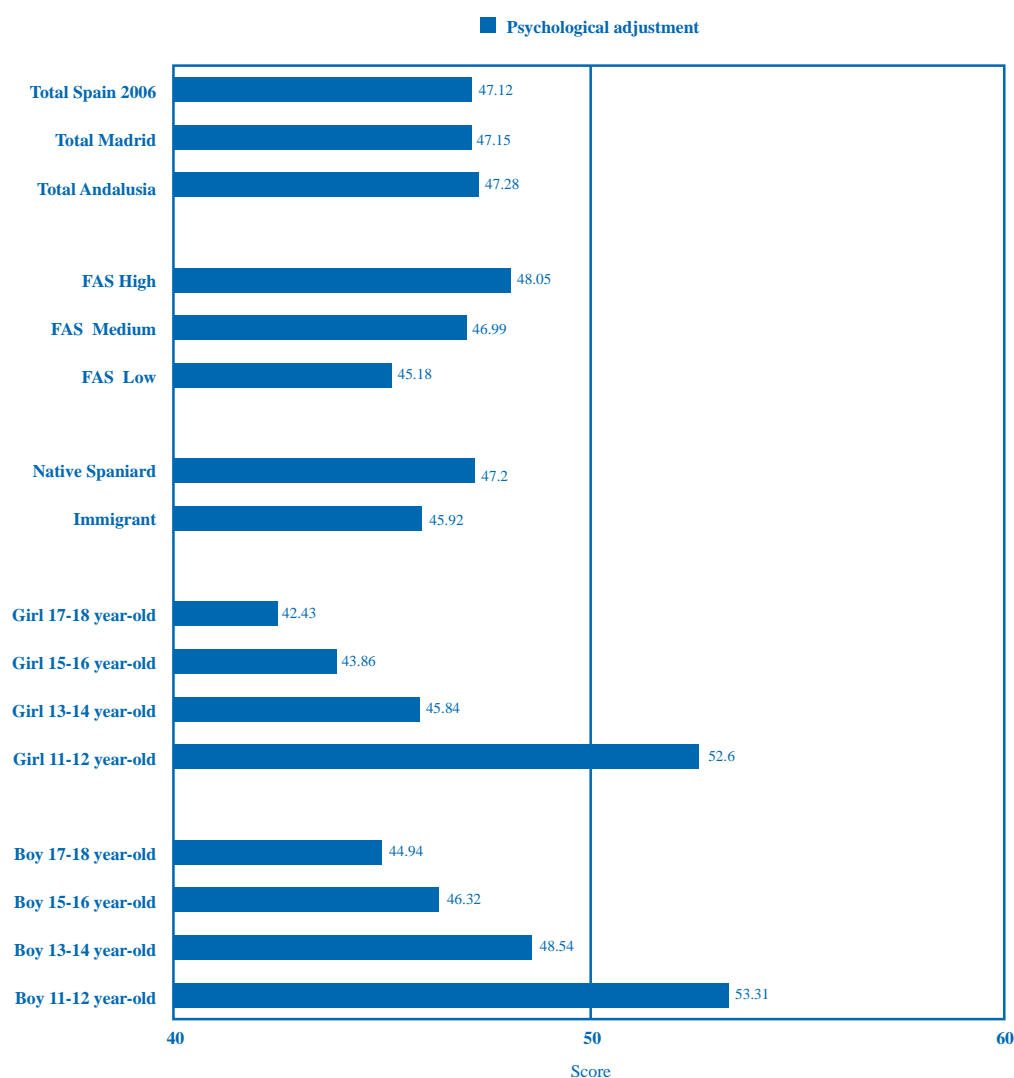
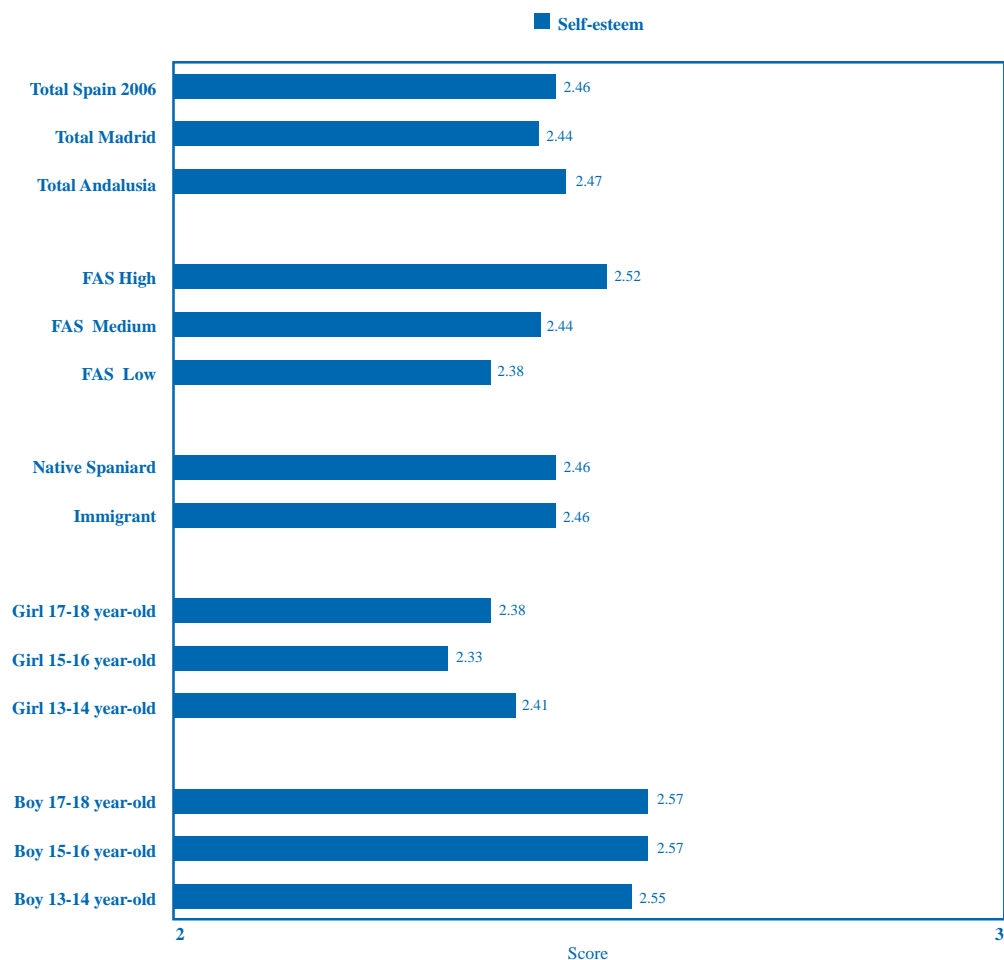


Fig. 3

Measurement of the self-esteem of Spanish adolescents according to different sociodemographic characteristics (values: 1 = low, 2 = medium, 3 = high)
Source: Rosenberg (5)



The family context

Family structure

Just over 83% of the households of Spanish adolescents interviewed in 2006 were biparental, with 10.6% being monoparental and 3.4% being reconstituted. The remaining 2.7% of adolescents lived in diverse family circumstances, such as with stepmothers or stepfathers, with grandparents as main caregivers, in foster homes, with siblings or in other types of households.

The 2006 data show that family structure in Spain has changed since 2002, mostly due to a decrease in the percentage of biparental households from 85.9% to 83.3%. Data collected in 2006 show that Andalusia maintained a higher biparental percentage than the national average (87.1%), while the region of Madrid was lower (80.4%).

The average number of adults in the households of Andalusian adolescents was the same as the national average (2.06 adults), while the average number of children was greater (2.54 compared to 2.33 national). Both values in Madrid were below the national average (1.99 adults and 2.23 children). An average of 4.22 people lived together in a household in Madrid, while the average household in Andalusia had 4.6 people; the national average was 4.39.

Communication with parents

Data on the ease with which adolescents communicated with their parents were similar between 2002 and 2006. The 2006 data seem to indicate a slight improvement in communication with both parents, but general trends established in 2002 remained unchanged. These are:

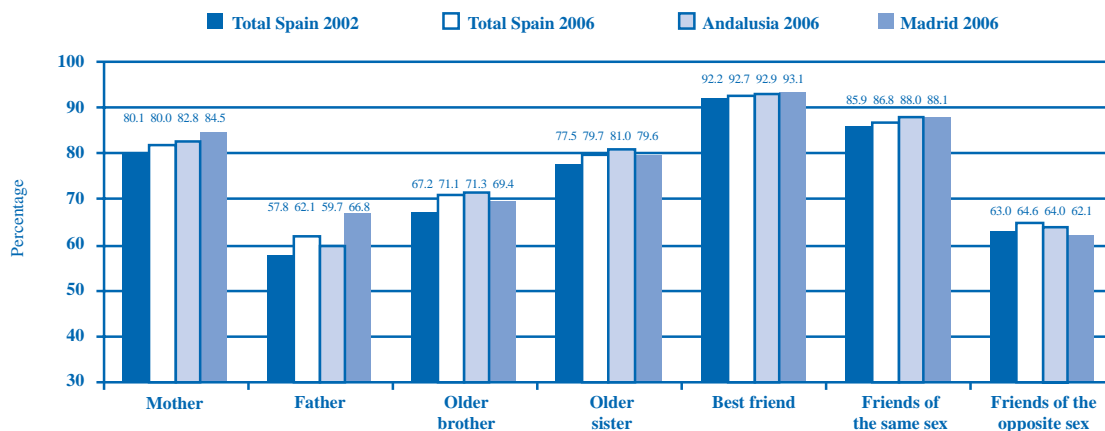
- self-perception of ease of communication with both parents decreases as age increases, although ease of communication with the mother is always higher; and
- boys and girls do not differ in their perceptions regarding ease of communication with mothers, but boys clearly indicate that they find it easier to communicate with fathers.

Fig. 4 shows the perceived ease with which adolescents communicated with a range of significant people.

Fig. 4

Adolescent responses (“Easy” or “Very Easy”) to the question: “How easy do you find it to talk to the following people about things that really worry you?” National data from 2002 and 2006, and regional data from 2006 (Andalusia and Madrid)

Note: The percentages were calculated once those subjects who replied “I don’t have/don’t see that person” were eliminated.



Focusing on the data from 2006, there were no appreciable differences between the two regions with regard to communication with friends, but differences did appear in relation to communication with parents. Adolescents in Madrid reported that they found it easier to communicate with the father (66.8% claiming it was “very easy” to talk to their father, against 59.7% in Andalusia and a national average of 57.8%), while those in Andalusia reported a better level of communication with older siblings (71.3% for older brothers and 81% for older sisters; the respective figures for Madrid were 69.4% and 79.6%, and for Spain 67.2% and 77.5%). The data indicate that while mothers continue to play a significant role in the lives of adolescents, peers (especially best friends) are of key importance. Older siblings are also an important source of support, especially when the older sibling is a sister.

Parental supervision

Answers to questions about mothers’ and fathers’ knowledge of the details of adolescents’ lives were similar in 2002 and 2006:

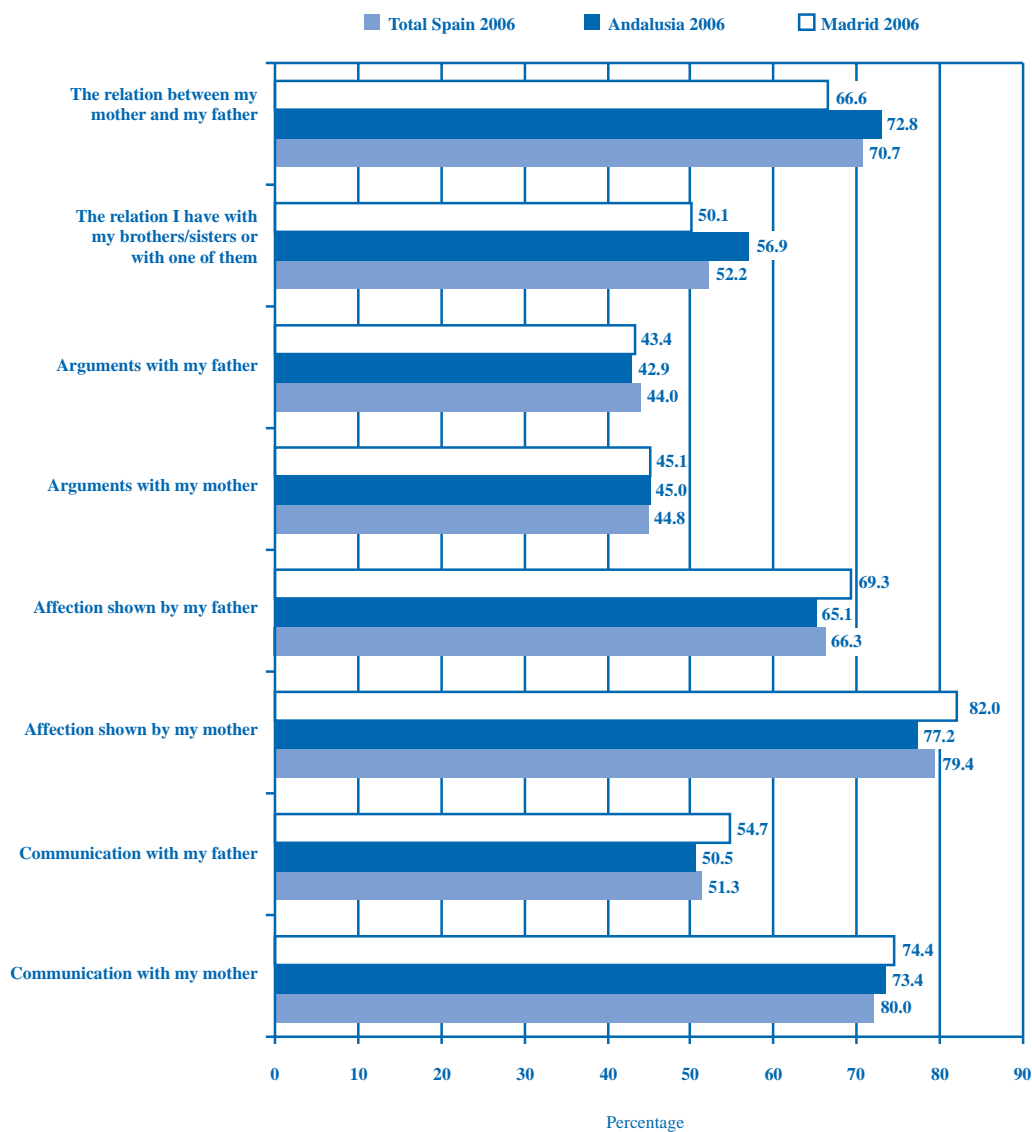
- adolescents, especially adolescent girls, felt more supervised by mothers than fathers
- maternal and paternal supervision ebbed as adolescence advanced.

The latter result deserves further analysis. It is important that adolescents are supervised by parents to prevent risky behaviours, but it is also important that parents know how to allow their children more freedom so they can develop their sense of independence. External paternal control is subsequently gradually replaced by internal control mechanisms; in other words, as children grow, adults reduce their supervision.

The 2006 data showed that children from families with higher purchasing power indicated that both their fathers and mothers knew more about them than did adolescents from families with lower purchasing power. This was also the case with those born in Spain compared to adolescents and parents who were born in another country. There were no significant regional differences between what mothers in Andalusia and Madrid knew about their offspring compared to the national average, but fathers from the region of Madrid knew more about their children than the national average, while those from Andalusia were below the average.

Fig. 5

Percentage of adolescents who responded “It’s OK” to the question:
“What would you like to change in your family?”



Perception of aspects of family life that need to be improved

Adolescents felt particularly satisfied with (in order of importance):

- affection from, and communication with, their mothers
- the relationship their father and mother have with each other.

The areas in which they want their families to improve are (in order of importance):

- arguments with the father
- arguments with their mother
- their relationship with their siblings (or some of them)
- communication with, and affection from, their father.

When examined by region, Andalusian adolescents were satisfied with their relationship with siblings and the relationship they perceived their fathers and mothers had with each other, while those from Madrid demonstrated satisfaction with affection from and communication with both their father and mother (Fig. 5).

Global satisfaction with family relationships

Data revealed that adolescents' satisfaction with their family environment was related to age (as they matured, satisfaction decreased), gender (boys reported more satisfaction than girls), family purchasing power (adolescents from more affluent households tended to be more satisfied), whether they were native Spaniards or immigrants (the former reported more satisfaction) and, to a lesser degree, the region in which the adolescent matured (adolescents from Madrid were below the national average in this variable and Andalusians were above) (Fig. 6).

The academic context

Academic achievement by girls (based on adolescents' self-perception of how their teachers felt about them) was higher at all ages, but it decreased with age in both girls and boys. Academic performance tended to improve according to the purchasing power of individuals' families. Regional differences in performance were seen, with Andalusians performing above adolescents from Madrid and the national average. Immigrant adolescents had better results than those from the native population and their enjoyment of school was particularly striking: immigrants reported the greatest satisfaction with school, after 11-year-old girls and boys (in that order) (Fig. 7).

The peer context

Having a special friend

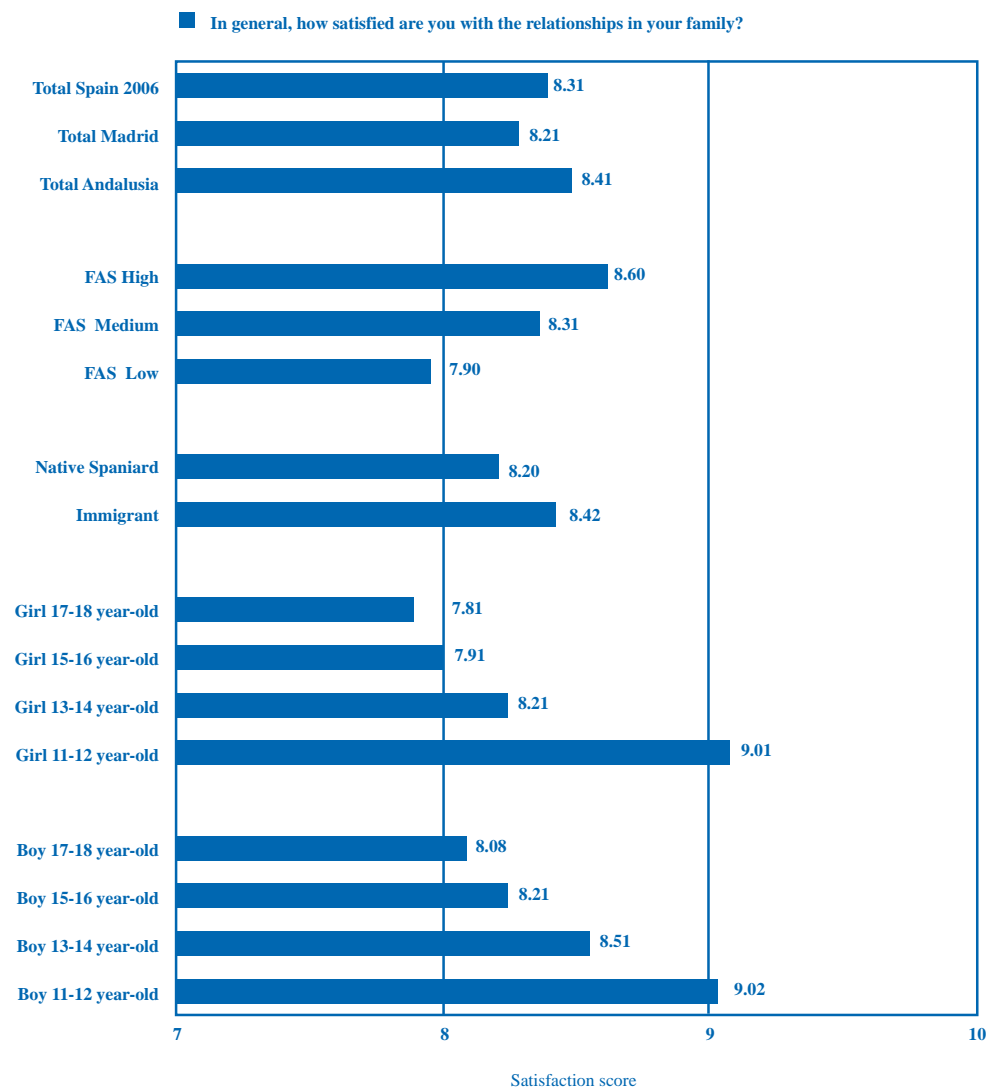
Adolescents, particularly girls, tended to identify with an especially important figure of support as they matured. It was more likely that those from families with higher purchasing power would have a best friend (97.3% of those scoring high on the FAS, against 92% scoring "medium" and 89% "low"). The most important differences, however, could be found in comparisons between those born in Spain and those who had emigrated from another country and had foreign parents: 92.6% of native Spaniards reported that they had a special friend, against only 79.6% of immigrants.

Satisfaction with the peer group

Girls and boys of all ages showed similar levels of satisfaction in their relationships with peers, with all groups demonstrating a similar decrease in the level of satisfaction with increasing age. While there were no appreciable differences in this topic by region, differences in satisfaction were seen in relation to family purchasing power (with adolescents from the most affluent families being most satisfied) and by immigrant status (immigrant adolescents were less satisfied).

Fig. 6

Average scores to the question: “How satisfied are you with the relationships in your family?” (0 = “In my family, our relationships are very bad”; 10 = “In my family, our relationships are very good”)



Fights and abuse among peers

There were clear gender differences in relation to fights with peers, with males being more likely to become involved in a fight (13–14-year-old boys reported being involved in 1.07 fights in the last year, while girls of the same age reported 0.53). Age also played an important role, with involvement in fights decreasing as age increased. Family purchasing power did not appear to be associated with fights, but immigrant status did; adolescents from immigrant families were the group most likely to be involved in physical fights (0.81 in the past year, against 0.55 for native Spaniards). Region was associated with participating in fights to a lesser degree, but adolescents from Madrid were involved in more fights in the last year (0.68) than those from Andalusia (0.54) and the Spanish average (0.56).

Peer abuse occurred most frequently among males. Adolescent males reported that abusive behaviour reached a peak at the age of 13, and then declined. There was also a clear decrease with age in relation to being a victim, a feature that was also

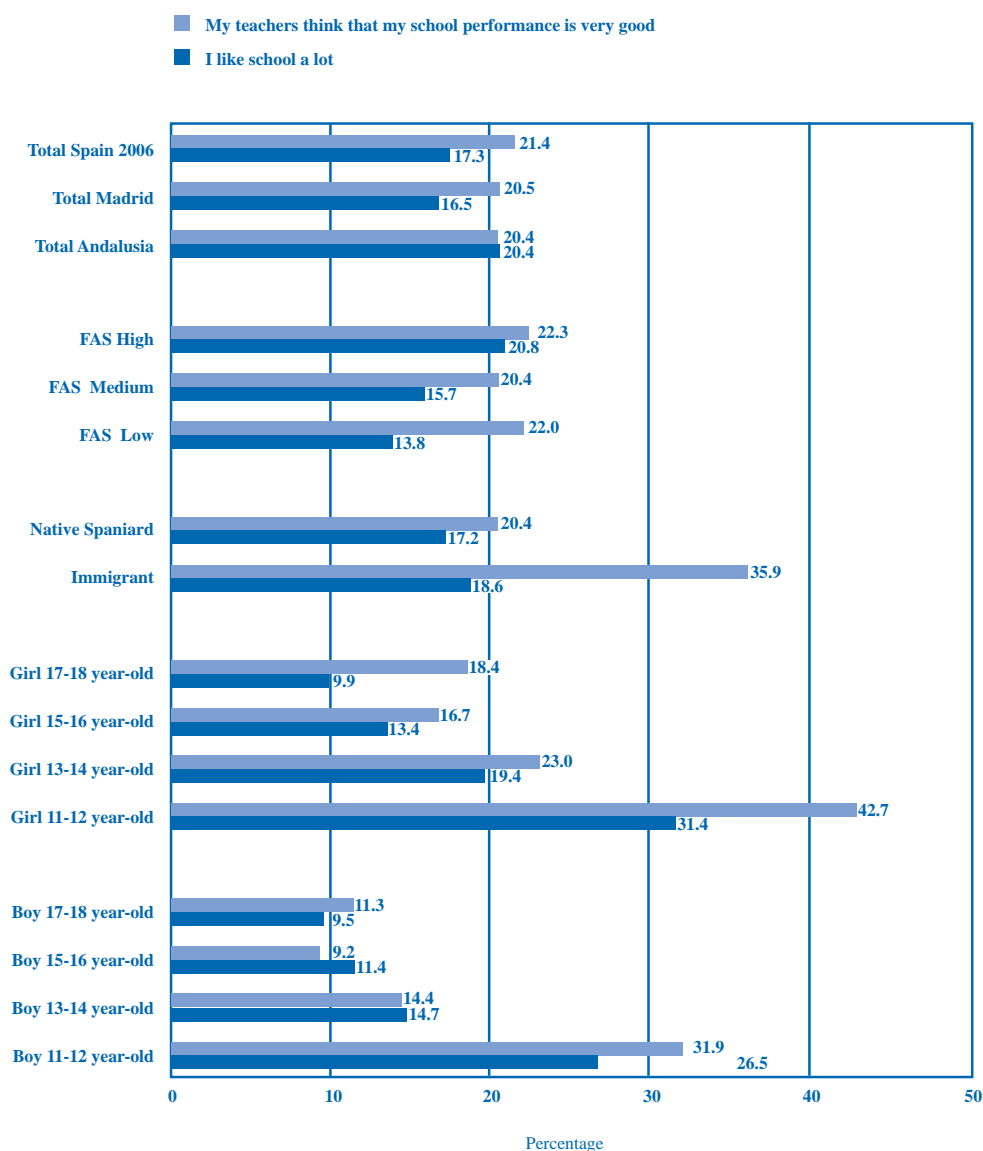
evident among girls. Percentages of perpetration and reception of abuse were lower among girls, with the peak of participating in abuse as aggressors occurring at the age of 15.

There were no significant differences by region in adolescents' perception of being victims of abuse, but a significant association in their participation as aggressors was observed, with those from Madrid being above both Andalusia and the national average.

No significant relationship was observed between family purchasing power and abuse, but there was a relationship between abuse and having immigrant status; adolescents with immigrant status tended to be significantly more involved in episodes of abuse, both as victims and aggressors.

Fig. 7

Percentage of adolescents who responded with "Very good" to the question: "Your teachers think that your academic performance, when compared to that of your classmates, is..." and: "I like it a lot" to the question: "Right now, how much do you like school?"



Conclusion

It is hoped that the national and regional focus of the Spanish HBSC 2006 survey will help the autonomous regions of Spain to identify key areas for action to improve education and health policies for children and young people.

The first national report of recommendations, *Ganar salud con la juventud [Improving health with young people]*, was approved in April 2002. It recommended the creation of an information and evaluation system integrated with the different sources of data on adolescents and young people. It also recommended that longitudinal studies reflect the social context of adolescents and young people, with the aim of obtaining the information required for the design of effective prevention and health promotion strategies. HBSC has enabled these recommendations to be fulfilled. A second edition of *Ganar salud con la juventud [Improving health with young people]* is forthcoming. It will be based on data from the 2002 and 2006 HBSC surveys.

The information on social context (covering the school, peer, and family) is important for the design of interventions that promote improved well-being. The two examples of interventions presented here profile community spaces (including health service points) that aim to promote mental well-being and prevent mental disorders, while strengthening social cohesion. The lessons learned through these experiences have influenced the first national strategy on mental health of the national health system, which was approved in December 2006.

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Spain (Autonomous Community of Andalusia): improving responses to the health problems of adolescents and young people

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Executive summary

Young people's mental health has been identified as a health priority nationally and internationally. The Autonomous Community of Andalusia (Spain) case study presents initiatives focused on young people's mental health, in particular the "Forma joven" [Young people's way] programme.

The Health Department, working with the Department of Education and the Department for Social Welfare and Equality, designed "Forma joven" to provide young people with support and training to help them respond positively to risks commonly encountered at this stage of life. The young people receive information and training in their own environment in "Forma joven advisory points".

The case study describes the separate strands of work that have been developed through "Forma joven", with detail of the structures and the interventions, achievements to date, problems encountered and the challenges in overcoming them. The study has a double objective:

1. to convey the value of the association between prevention of mental health problems and early interventions in primary care settings; and
2. to identify the problems which cause young people to be admitted to specialist mental health centres for care and treatment.

In addition, the study describes the policy and social context within which "Forma joven" emerged. The mental health of young people in the Comprehensive Mental Health Plan 2003–2007 is discussed, setting out the mental health service organization and defining its structure and function. Policy advances in organizing a better response to mental health problems in young people in the context of decreasing health inequalities and creating greater social cohesion are briefly described. These include responses to mental health problems among adolescents and young people in Andalusia that have been developed at three levels since 1987:

- first level, in primary care settings;
- second level, in specialist mental health settings within specific health districts (mental health centres); and
- third level, in child and adolescent mental health units of the general hospital (USMI-J); at present, these are directly associated with the first (primary care) level through referral, case follow-up and training.

The population attached to a USMI corresponds to that of a hospital area, and the Hospital Virgen del Rocio of Seville is the reference area of the USMI featured in the case study. The area encompasses the 11 most socially impoverished zones in the capital city of Seville and includes districts characterised by socioeconomic and educational inequalities.

Addressing the mental health problems of young people in the region

Demands for adolescent mental health services have increased significantly in recent years, with higher incidence of conditions such as self-control deficit, behavioural disorder and affective disorder.

The Andalusian public health system (SSPA) has a network of services and specialized units designed to meet the needs of patients with severe mental health and behavioural disorders. All have been developed in the context of a comprehensive mental health plan (1).

The network is arranged in territorial demarcations called Mental Health Areas. There are 15 such areas in Andalusia, each of which has the following centres to provide services to patients with mental disorders: district mental health team (ESMD), day hospital (HD), therapeutic community (CT), mental health unit of the general hospital (USM-HG), and the above-mentioned USMI. All of these are designed as specific support units to the district mental health teams and to manage severe problems in children and adolescents up to the age of 18 years.

The Mental Health Care Network consists of the mental health centres described above, working in partnership with primary health care teams (EBAP), social work units (UTS), specialist social services and paediatric services in the children's hospital of reference.

The Hospital Area Virgen del Rocio is the area of reference for the population described in the case study. It provides services for a population of 800 000, organized into health districts. The district mental health teams belonging to this area are the "gates" of access to the USMI of Virgen del Rocio.

The USMI has three functions. It:

- supports the district mental health team in providing services to children and young people
- provides direct clinical health care in outpatient, day programme and inpatient settings
- develops liaison and support programmes for other health, education and social centres.

The case study aims to emphasize the additional value of implementing an intervention for the early detection of mental health problems, developing collaboration between advisory services and the USMI for the area, and delivering interventions that can be implemented in the areas to reduce inequalities and achieve better social cohesion.

A number of policies aimed at reducing inequalities and achieving better social cohesion already exist, including:

- management policies, usually in the form of intersectoral comprehensive plans;
- policies that take a comprehensive approach to the agenda (generally health plans and programmes that cross social, gender and age lines);
- policies focusing on action in socially impoverished areas in an interterritorial and participative manner; and
- policies relating to specific disadvantaged groups, such as young immigrants, sex workers and people with disabilities.

A range of problems are encountered in trying to progress this agenda. There is, for instance, insufficient intersectoral input to the drafting and development of public policies and ongoing challenges in overcoming cultures that militate against cross-sectoral working. In addition, there are inadequate channels and instruments through which people at local level can participate in the development and implementation of policy.

The "Forma joven" programme

Analysis by consensus takes account of the different views of the mental health sector, primary care professionals, school teachers and young people to develop a synthesis of perceptions. The approach has enabled us to develop appropriate responses to the complex problems of adolescents, devising health promotion and prevention mechanisms that are mediated by young people and organized jointly by the different state services (health, education and social services). If necessary, specialist health services can be asked for advice.

"Forma joven" is an interinstitutional programme designed to promote healthy lifestyles. It was started in 2001/2002 by the Andalusian Regional Council in collaboration with the regional health departments, Department of Education, Department for Social Welfare and Equality, Department for Drug Dependence and Addictions, the Andalusian Women's Institute and the Andalusian Youth Institute/the Youth Committee for Andalusia. These collaborating organizations offer the necessary support and resources to ensure the programme's implementation and ongoing development within the Autonomous Community.

“Forma joven advisory points” are places where adolescents and young people can go for advice or help. In general, implementation is focused around group activities rather than individual consultations. The vast majority of “Forma joven” points – 98% – are currently located in secondary schools throughout the Autonomous Community, although it is proposed to also open them in other meeting places that are easily accessible and regularly visited by young people, such as youth clubs and town halls. There are currently more than 500 “Forma joven” points across the Andalusian provinces.

It should be noted that the establishment of “Forma joven” points is prioritized for areas requiring social transformation due to adverse socioeconomic conditions. Disadvantaged young people are exposed to greater risk factors for health and typically have less access to services. “Forma joven” points, however, are only part of an integrated strategy designed to increase social cohesion and improve access to public services in socially disadvantaged areas. The overarching strategy for disadvantaged areas includes:

- intersectoral social inclusion plans;
- health policies, plans and programmes designed to overcome social, economic, gender and age barriers to services; and
- policies and interventions targeting specific disadvantaged groups such as young immigrants and sex workers.

“Forma joven” is an important component of this strategy in that it targets young people in disadvantaged areas while involving them proactively in programme implementation. It also links young people to other relevant social services.

On being set up, a “Forma joven” point is supplied with a set of basic materials consisting of a range of support materials for different activities for professionals, young people and mediators. The advisory centres at the “Forma joven” points are attended by professionals from all branches of health care (doctors and nurses), teaching services (secondary school guidance counsellors) and social services.

Training is offered for professionals and mediators. Professionals are given: a basic module at the start of the programme; specialist courses with specific modules in sexuality, social habits and mental health; and courses on prevention of violence at school, prevention of gender violence and prevention of addictions. Courses are taught by specialists in mental health and workers from addiction prevention centres. Training for youth mediators consists of a specific course in health mediation in which five young people are chosen from each centre to attend a 20-hour training course, and a course on how to mediate.

Specific objectives of the various lines of work developed are to:

- promote young people’s developmental skills to facilitate psychosocial balance and good adjustment at this stage of life;
- promote a healthy and safe approach to sexuality;
- encourage effective contraception policy;
- inform young people about the consequences of behaviours consequent to consumption of alcohol or other substances;
- prevent road traffic accidents;
- detect and refer food-related and other disorders;
- promote healthy living habits with peers, developing negotiation skills and positive responses to offset issues such as facing violence or suffering from low self-esteem;
- implement the “Forma joven” programme in socially impoverished areas; and
- include a gender perspective in actions.

The programme has focused on promoting health and avoiding risk behaviours in young people through three main areas of intervention:

- affective–sexual
- addictions
- mental health.

The affective–sexual area is the one which traditionally generates the highest demand from young people, both individuals and groups, but consultations about mental health seem to have become increasingly important for young people over the past few years. The most common mental health issues raised in individual sessions and in workshops include eating disorders, violence among peers and gender violence, self-esteem, social skills, depression and suicide. Table 1 presents a list of mental health issues raised by young people attending a “Forma joven” point in one school.

Table 1

Mental health issues raised by young people attending a “Forma joven advisory point” in one school

Forma Joven Seville	
Profile of mental health demands	
Total number of consultations = 216, of which 166 addressed mental health	
Shyness, low self-esteem	30
Family problems	28
Violence between peers	20
Anxiety and phobias	12
Depression and grief	15
Lack of school integration	10
Gender violence	6
Attempted suicide	2
Schizophrenia	2
Hyperactivity	2
Aggression	2
Lack of supervision	2
Isolation	2
Anorexia	1
Not specified	20

Almost 500 “Forma joven” points were in place throughout Andalusia during the school year 2006/2007, representing rapid expansion since 2002/2003 (Table 2).

Table 2

Year-by-year numbers of Forma joven points

2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
176	286	367	435	491

Around 35% of all secondary schools in the region are now covered, including 57% of schools in the state sector.

“Forma joven” now intends to expand into other kinds of centres. There are already a few points in non-school settings, such as in the university, in Poligono Norte (a socially impoverished area of Seville) and in a municipal school workshop in Cordoba. Further expansion is a priority objective for this year.

The complete data on the numbers of young people who have attended the points, group activities or workshops for the whole Autonomous Community or the provinces are not available yet. The available data suggest that the attendance rate is

around 20%, which is much lower than the potential number of students who could benefit from the service. The found range of attendance rates varies from 18.84% (Jaen), to 10.53% (Huelva), through to 5.46% (Cordoba); Seville, however, has an exceptionally high participation rate for group activities and workshops, with a figure of 52%.

The current attendance data are summarized in Table 3.

Table 3

Attendance at “Forma joven” points and events, 2006/2007

Students attending “Forma joven”		Total secondary school students		Percentage participation rate	
State	State-assisted	State	State-assisted	State	State-assisted
200 986	2 562	446 513	114 706	45.01	2.23

From these data it can be deduced that there is a need to promote and advertise the programme to the target population, since many young people do not use the points because they do not know about them. Also the benefits of “Forma joven” need to be promoted in the education sector to alert teaching staff about how they can support and promote the initiative.

An average user of the service is around 15 years old, with twice as many boys as girls attending individual consultations. There is a greater demand by both sexes in the affective–sexual area, while girls are more likely to seek advice on mental health.

The programme currently has a paper-based information and recording system but, from next year, information will be recorded in electronic format. Each “Forma joven” point must complete activity sheets and draft a report at the end of a course. Reports are sent to the regional authorities, who in turn send them to the State Health Department.

The commissioning of an external evaluation to estimate not only the number of users, but also the impact the programme is having on young people’s health and lifestyles, was identified as a priority. In response, an opinions and satisfaction survey carried out in Seville in 2005 drew responses from 71% of active “Forma joven” points. The following results emerged.

- Professionals and young people expressed a high degree of satisfaction with the programme.
- Young people received information in 73% of cases and 50% considered their problems to have been solved.
- Young people highly valued the presence of a medical professional in the secondary school.
- Professionals and young people recognized the important work of the youth mediators, but only 39% of young people had met them (not all secondary schools had mediators).
- The average time dedicated to the programme was two hours per week (70% of professionals believed it would be better to dedicate at least five hours per week to the points).
- The biggest identified problem was that health care staff had little available time.
- Eighty per cent of professionals considered the resource materials to be good.

It is now intended to screen for young people who attend the children’s mental health unit with diverse symptoms and who attend schools in which there is potential to implement the “Forma joven” programme. The secondary school population (12–16 years) has been selected as the target. A preliminary study was carried out in 2006 looking at diagnosis and reason for consultation. The preliminary study showed:

- a high prevalence of problems related to lack of control and impulse control;
- difficulty for young people in accepting their own limits and those of their environment, resulting (in the most severe cases) in antisocial disorder and severe behavioural disorders;
- limited family restraint and few social, education or health resources to resolve conflicts;

- higher prevalence of behavioural disorders in males and more emotional and eating disorders in females;
- little participation of young people already receiving mental health treatment in the consultations; and
- a demand for better coordination between institutions.

In the second phase, it was mapped the availability of the programme in the schools the young people attended.

Findings of the mapping exercise showed a high incidence of young people from state-assisted centres attending the USMI who had no access to the “Forma joven” programme due to the limited implementation of the programme in state schools. Difficulties in implementing the programme in this sector are related to infrastructure issues and insufficient provision of health care staff. Schools not currently using the programme will be put in touch with “Forma joven” advisory services already operating in schools.

Lessons learned

At the current time, it is possible to identify the following strengths of the programme:

- increased intersectoral and interdisciplinary working
- positive contributions from youth mediators
- young people’s positive involvement in the points
- development of cross-level training
- creation of resource material for the programme
- technical support and development of a web page
- positive perceptions of the programme by professionals.

The following challenges can also be identified:

- difficulties in intersectoral working
- insufficient time to coordinate professionals and the temporary nature of professionals’ involvement
- inadequate information and evaluation systems
- achieving genuine integration of mediators
- standardizing procedures
- involving teaching staff and parents’ associations
- introducing “Forma joven” to community spaces outside schools
- including new areas and strategies for health promotion for young people in the programme.

Despite the advances made, there is still a long way to go. Strategic lines of work have now been developed to focus on:

- reorganization of health policy for young people, based on intersectoral sharing of resources, time and personnel;
- coordination of planning, organization and provision of services, to define a single line of action;
- balancing of actions to promote health, prevent illness and provide interventions, to ensure a comprehensive approach to care;
- cooperative working between specialist and primary care levels on patient cases, work patterns, training and study programmes and service planning;
- alliances with other state sectors, especially education and social services;

- territorial policies in which interventions can be focused on specific areas or populations;
- increased resources resulting in more available time for service planning and delivery;
- identification of priorities related to high-risk and problematic situations; and
- taking young people's views into account, working with young people rather than for them.

Opportunities can also be identified to:

- engage individuals and groups in debates on the shape of future policy;
- engage with the education and social sectors, especially on health promotion and illness prevention;
- engage with young people on responding to risk factors they face;
- develop resources to change professionals' ways of working to better meet the needs of young people;
- provide training across levels and sectors to promote policy cohesion; and
- research the "action-reflection" model of working, with direct application to task planning.

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Spain (Alcalá de Henares, Madrid): the strategy “for and with young people” for promoting adolescent mental health in primary health care

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Executive summary

The Manuel Merino Health Care Centre launched a project on promoting mental health for adolescents and their parents – “Promoviendo la adaptación saludable de nuestros adolescentes” [“Promoting the healthy adaptation of our adolescents”] – in 1998. The project, which is based on a methodology of active involvement, aims to provide young people with effective resources for building self-esteem, developing confidence about their abilities and limitations, equipping them with the ability to assert themselves in the face of challenges and offering them training on how to control risk situations in their surrounding environment through critical analysis techniques. To this end, personal development workshops, workshops for parents on preventive guidelines, training seminars for educators, youth consultation and coordination meetings with parents and professionals from the education, social and health care fields are held both at the health care centre and at secondary school and socioprofessional institutions.

In the summer of 2002, the working group of adolescents who have been leading figures in the 1998 project and professionals (educators, municipal youth experts, family therapists, social and health care workers) developed into the adolescent and youth community involvement project “Aprendiendo entre todos a relacionarnos de forma saludable” [“Group learning on healthy lifestyles and positive relationships”]. The young people become partners in health. They carried out activities including preparing audiovisuals and educational manuals for other youngsters, organizing alternative leisure-time activities, hosting roundtable discussions for parents’ and educators’ associations, transmitting a radio broadcast, developing a web site (1) and organizing self-help groups and youth gatherings.

As follow-up, a participative research initiative was launched in September 2005. This aimed to identify how satisfied young people and social and health care experts were with the progress of the community experience. It also explored their demands, motivations and criticisms of the project’s functioning and their aspirations for how they would like to see it shaped in the future.

During this process, the need for greater training to foster the healthy development of young people in the community was identified, particularly in relation to challenging street violence by forging, expanding and reactivating effective dynamic alliances with young people from other local associations and institutions. It was also decided to undertake an “empowerment for health” process throughout the 2006–2010 period; this is aimed at facilitating the creation of a youth community network to promote the biopsychosocial development of young people in the locality and encourage their participation in preventing violence.

As a result of this collaborative research, a joint project with the Collective Action for Games and Education (CAJE) was developed, focusing on empowering young people through the development of community networks to promote their own biopsychosocial development and enable them to prevent violence and aggression. The project Advanced Young Partners in Mediation and Prevention of Violence (Programme JAMPA) adopts a number of strategies and activities to achieve these objectives.

Lessons learned from the work are set out in the case study.

Introduction

The Autonomous Community of Madrid’s Human Poverty Index (11.25) is the same as that of Japan and lower than that of Italy or Canada (2). Madrid is the Autonomous Community with the highest Human Development Index (0.945) and the highest Gender-related Development Index (0.940) scores in Spain (3).

The historic city of Alcalá de Henares is primarily industrial but has grown in importance as a tourist centre as a result of being declared a World Heritage City in 1998. Its population is over 197 800, having undergone major growth over the past few years through foreign immigration. According to the Spanish National Institute of Statistics 2005 population survey, 15%

of the population are immigrants. The natural growth rate (birth rate minus death rate) of Alcalá de Henares is 7.19/1000 inhabitants, as compared to 4.4/1000 inhabitants for the Autonomous Community of Madrid, and the proportion of children aged 15 years (14.83) is slightly higher than that of the Autonomous Community of Madrid (14.43) (4). For the 2003/2004 school year, the school failure rate for Alcalá de Henares was 27.85%, significantly higher than that of the Autonomous Community of Madrid (22.8 %) (5).

Foreign immigrants comprised up to 10% of pre-university students in the Autonomous Community of Madrid during the 2006/2007 school year (6). According to data presented in the report *La opinión de los alumnos sobre la calidad de la educación [Students' opinion of the quality of education]* (7), only half of students aged 11–18 in the Autonomous Community of Madrid are happy with immigrants being in their classes, while 15% reject them. For one third of the students, the main thing in life is being loved, and the worst thing is being alone or feeling mistreated.

The Cisneros Report 5 on school bullying and violence in the Autonomous Community of Madrid indicates that 24% of students surveyed were being bullied at school (26.8% in males and 21.1% in females) (8). The qualitative study *Las concepciones de salud de los jóvenes [Health concepts among young people]* (9) conducted in the Autonomous Community of Madrid with young people aged 13–21 indicated that living with violence was becoming increasingly common among adolescents.

The Autonomous Community of Madrid's 2003 Child/Adolescent Health Promotion Programme (10) sets out that the non-university schools should be safe places in which health is promoted and health education provided, and that specific health care services for young people at primary care level should be developed. Encouraging direct involvement of young people in promoting their emotional health is one of its specific objectives.

Theoretical underpinnings

Empowerment for the mental well-being of adolescents

At the Manuel Merino Health Care Centre in Alcalá Henares “empowerment for the mental well-being of adolescents” is understood as being the process through which adolescents acquire greater control over decisions and actions affecting their mental well-being.

Adolescents can take part in the design, provision and evaluation of mental health promotion programmes to ensure they meet their needs. Involvement of adolescents who have undergone training as educators of other adolescents ensures that the programmes, activities, information and services delivered are consistent with their concerns. This can only be possible if they are trusted and asked for help to improve programmes and services.

Giving adolescents “a say” does not mean that a set of questions should be devised and a survey conducted to gather adolescents' responses. It is about creating a situation in which adolescents and young people have an opportunity to tell us what they think about things they know about first-hand, that are part of their lives and about which all of them have something to say.

For adolescents to be able to (and to want to) say what they think, adults need to know how to listen to them. Adults need to not only make themselves available to listen, but they must also try to understand and value what adolescents have to say, identify their true intentions and pick up on the messages they send. Adolescents who do not talk much or who express themselves poorly also have important things to say and need adults who are able to listen to them and understand them.

Listening means sitting by their side, being willing to defend their position and to do what is necessary to meet their requirements. That is how active involvement and “prosociality” are encouraged, solidarity networks are strengthened and essential characteristics such as resiliency are acquired.

The participative mental health promotion model

Participative mental health promotion is a dynamic process targeting the community in which the learning process is implemented within a multidisciplinary framework.

The three pillars of participative mental health promotion model are:

1. information as knowledge;
2. the importance of a value system which is freely endorsed by the individual without imposition from the educator; and
3. health emerging from the community, with change in the socioeconomic structures being necessary to improve the level of health and quality of life.

Five dimensions are taken into account:

1. the target group is also the partner and the most important figure in education for health;
2. the group serves to disseminate information throughout the community, consequently becoming a participating social partner;
3. communication is two-way;
4. participation entails motivation; and
5. participation is the guarantee of the authenticity of the process.

The educational methodology of the participative mental health care model consists of four stages. In the first stage (THINKING), each individual considers his or her view of specific situations based on personal experiences before moving on to consider the problems more globally and objectively. In the second stage (JUDGING), a “diagnostic judgement” of the facts observed will be made through critical thought to try to understand and explain the situation. Stage three (ACTING) involves getting an action under way to improve the situation, and the fourth stage is EVALUATING.

Building resilience at individual and group level

Resilience is the ability to withstand, show strength and not bend in the face of adversity. Building resilience at individual and group level is a basic tool for successfully dealing with risk situations and is one of the top-priority objectives in promoting the mental health of adolescents and young people.

The profile of resilient adolescents is characterized by social skills, problem-solving abilities, self-reliance, sense of purpose, self-confidence and confidence in the future and in the surrounding environment.

According to Henderson and Milstein (11), the key elements for building resilience are:

- enriching prosocial ties
- setting clearly defined, firm limits
- teaching “life skills”
- offering caring and support
- setting and conveying high but achievable expectations
- providing opportunities for meaningful involvement.

Intervention

The starting design

In 1998, the Manuel Merino Health Care Centre embarked upon the project of promoting mental health for adolescents and their parents, “Promoviendo la adaptación saludable de nuestros adolescentes [Promoting the healthy adaptation of our adolescents]” (12). It was launched in response to identified deficits among adolescents in this health district (maladaptation, poor self-perception, low self-esteem, insufficient assertiveness) and demands from parents and professionals at the health care centre.

The project, which is based on a methodology of active involvement, aims to provide young people with effective resources for building self-esteem, developing confidence about their abilities and limitations, equipping them with the ability to assert themselves in the face of challenges and offering them training in how to control risk situations in their surrounding environment through critical analysis techniques. Social and health care professionals (paediatrician, nurses, nurses' aid and social worker) provide the following at the health care centre and in secondary school and socioprofessional institutions.

- Personal development workshops for adolescents (10 x 1.5-hour sessions on a weekly basis), where they learn how to: know and understand themselves and others better; have a realistic view of their bodies and of their own potential; better express what they feel and what they want; withstand pressures from others; deal well with interpersonal conflicts; plan well to achieve their goals; and make decisions.
- Workshops for parents on preventive guidelines (4 x 1.5-hour sessions on a weekly basis), where parents are taught about: the factors involved in adolescent development; how to improve their abilities in talking with their children; and how to help them accept themselves, communicate with others and solve problems.
- Training seminars and meetings involving social and health care workers and educators where specific cases may be analysed and actions coordinated for working on interpersonal relations, self-perception and self-esteem, self-control, social skills, misconceptions and irrational beliefs in the classroom during learning time.
- The “12–20 space” youth consultation, a health promotion consultation for young people aged 12–20 that is headed by a paediatrician. Young people can come alone or accompanied by people they trust (friends, boyfriend/girlfriend) to talk about their needs, doubts and fears about mood, sexuality, HIV/AIDS, eating habits, drugs, physical development, sports, studies, aspects of their personality and interpersonal relations (family, boyfriend/girlfriend, friends). Assurances of confidentiality, motivational interviews, participative health advice (the young people are provided with guidance to help them find their own solutions), easy accessibility and consistent access to the same professional are key elements of the consultation.
- Other supplementary activities, including planning meetings, providing advice for other professionals (social services, school guidance counsellors and the psychopedagogical team) and parents, continuing evaluation of the adolescents and practical training in adolescent mental health promotion for nursing students.

Adolescents become involved in the project through five channels:

- from the youth consultation, where the possibility of getting involved in the workshops is offered to them;
- from different Alcalá de Henares education, social and health care institutions which refer youngsters;
- on a walk-in basis in response to public service advertising;
- via their families; and
- through fellow adolescents, who tend to bring their friends into the project.

The school health forum (an interinstitutional coordinating body in which representatives from education and health participate) has included the project's activities in their resources guide for all schools in the area (Alcalá de Henares and nearby towns) since 2001.

The Ministry of Health and Consumer Affairs recognized the merits of the project in June 2002 when they presented it to the National Health System Interterritorial Board Health Promotion Working Group. As a result, the book *Promoviendo la adaptación saludable de nuestros adolescentes [Promoting the healthy adaptation of our adolescents]* (13) was published by the Ministry of Health and Consumer Affairs in 2004. The Costa Rican Ministry of Public Education adapted the book (14) in 2007 after having piloted it in several regions; they found it was very valuable, useful and easy to use, and are now promoting it to all of their education institutions.

Adolescent community involvement

In the summer of 2002, the group work of adolescents who have been leading figures in the 1998 project and professionals (educators, municipal youth experts, family therapists, social and health care workers) gave rise to the adolescent and youth

community involvement project, “Group learning on healthy lifestyles and positive relationships” (15,16). While continuing to carry out the 1998 project youth consultation and workshops for adolescents, parents and educators, top priority was placed on helping these young people to become “partners in health” by means of activities such as the following.

- Joint participation with trained experts on a project coordinating and monitoring committee responsible for coordinating resources, designing and supervising activities and considering suggestions put forward by the community.
- Quarterly planning meetings at youth hostels, where their accommodation is subsidized by the Autonomous Community Health Department’s Public Health Institute.
- Preparation, with the help of professionals, of educational and audiovisual materials for young people, including a pamphlet on partner relations, videos (“Denunciátronic joven”, “Learning to get along with others healthily”), a short film (“IN-EX-CULPA-DOS”), a hip-hop master recording on adolescents and their problems and a report and suggestions for improvement on the Autonomous Community of Madrid’s Public Health Institute’s contraceptives pamphlet.
- Get-togethers at compulsory secondary education institutes (including a hip-hop group concert and “open microphone” sessions).
- Organization of Saturday night entertainment activities within the municipal alternative leisure-time entertainment programme, “Another way to move around”.
- A self-esteem and sexuality workshop and a hip-hop and funky workshop.
- Roundtable discussions on “How to talk with your kids about ...” for parents of children at compulsory secondary education institutes. The presenters are adolescents, whose interventions are based on personal and group experiences and revolve around providing parents with advice on how to talk to their adolescent children and promote healthy approaches to different subjects such as drugs, sex, violence, immigration, studies, friendships, roles and sharing responsibilities at home, how to have fun and respecting privacy.
- A theatre production on adolescent problems – “FIVEADOLESCENTS.TK (Monologues on adolescence)” – written and performed by adolescents.
- The “Rusty tools” film forum for adolescents and participation in the Seco social centre creative contest.
- Adolescents contributing to local radio programmes on health.
- A workshop for adolescents promoting intercultural dialogue, “Everybody’s alike. Everybody’s different”, run in collaboration with the Red Cross.
- The “Dialogues with adolescents” section in the city youth information, documentation and counselling centre bulletin dealing with mental health promotion and publicizing the project’s activities.
- A web site (1) on which news of the project and health promotion articles written by adolescents and professionals are published. It is linked to adolescent and social health care web blogs, forming part of a blog community under the community involvement project.
- A virtual youth consultation (17).
- A community designed by the adolescents in the project within the Autonomous Community of Madrid’s Sexuality Programme web site (18).
- Adolescent self-help groups supervised by trained experts.
- Get-togethers consisting of field trips for adolescents and trained experts to youth centres, museums, parks or other places of interest in the city and nearby towns.
- The “Learning to be a community” school for professionals, consisting of training sessions for health care centre social and health care staff in the town of Meco (near Alcalá). The sessions are designed to raise awareness of the project, establish communication channels and generate community involvement for adolescent mental health promotion.
- Participation in the organization of working days on “The participation of adolescents in the programmes of sexual and reproductive health of the Community of Madrid” in 2003 and for the XVII Spanish Adolescent Medicine Society Congress in 2006.

The Autonomous Community of Madrid's child/adolescent health promotion programme proposed, as objective 23.2 for the year 2003, "Support and collaboration with the 'Learning among us all to get along healthily' adolescent and youth involvement project (Manuel Merino Health Care Centre, Alcalá de Henares)" (10).

Towards a network of young partners in health

A participative research initiative was launched in September 2005. This aimed to identify how young people and trained social and health care experts could work together. It also explored their demands, motivations and criticisms of the project's functioning and their aspirations for how they would like to see it shaped in the future.

A sociologist from the Autonomous Community of Madrid Health Department held discussion groups (DG) with the young people and open interviews with trained experts. Participants' comments on health education activities were analysed (some details are reproduced in Tables 1, 2 and 3). The analysis was set out in a report which supported participative brainstorming involving young people and trained experts, from which future strategies and actions were identified (19).

Table 1

Design of the discussion groups in the qualitative research of 2005

Group	Characteristics
DG 1	Older adolescents (17–19 years). Participants in the work groups, Commission of Coordination, shelters and self-help groups.
DG 2	Middle adolescents (14–16 years). Participants in the same activities as older adolescents.
DG 3	Younger adolescents, boys (12–13 years). All participants in the self-help groups; one of them attends the Commission of Coordination.
DG 4	Younger adolescents, girls (12–13 years). All participants in the self-help groups.
DG 5	Ex-members of the project (19–21 years). They participated in all the activities of the project; some also took part in the health promotion project of 1998.

Table 2

Some identified qualities (in the project) and significant comments from discussion groups in the qualitative research of 2005

Qualities	Comments
To share problems Mutual aid Group feeling	"More than one person has the same problem that you have and then you can speak with that person, and he understands you." (DG1) "Everybody had problems. We had something in common." (DG 5) "We all come here to meet people and to spend some time. And if somebody has problems, we can solve them." (DG2)
Personal development	"It is a way to feel you are really a person, evolving, maturing, and so on ..." (DG5)
Referring adults Security	"You know that there is an adult person with whom you can speak, and you know he is going to help you to solve problems that for some reason you perhaps do not dare to tell your parents, and that your friends can't help you with." (DG5)
Self-esteem	"To me, it is being aware that I am worth more than to be in the bed crying into my pillow ... It gives me more; it encourages me to go on." (DG4)
Preventive function	"As for me, it has helped me so much. For example, it helped me to realize what I was doing. It was no good. Then, it has helped me to leave certain things." (DG 5)

Table 3

Some identified qualities (in Young Consulting) and significant comments from discussion groups in the qualitative research of 2005

Qualities	Comments
Confidentiality Emotional bond To learn how to handle emotions	<p>“Do you know what I have learned? It is to control my aggressiveness. Not with the group, but at least with Patricio.”</p> <p>“In the group I got angry sometimes but Patricio calmed me.”</p> <p>“I am not scared now. I was almost raped once, but thanks to Patricio, I have learned not to be scared.” (DG2)</p>

During this process, the need for greater training to foster the healthy development of young people in the community was identified. The need was particularly pressing in relation to challenging street violence by forging, expanding and reactivating effective dynamic alliances with young people from other local associations and institutions. It was also decided to undertake an “empowerment for health” process throughout the 2006–2010 period; this is aimed at facilitating the creation of a youth community network to promote the biopsychosocial development of young people in the locality and encourage their participation in preventing violence.

As a result of this collaborative research, a joint project with the CAJE initiative was developed, focusing on empowering young people through the development of community networks to promote their own biopsychosocial development and enable them to prevent violence and aggression. The project, “Programme JAMPA” (20), adopts a number of strategies and activities to achieve these objectives, including:

- maintaining a stable coordinating body (the Standing Coordinating Committee);
- creating awareness among a “critical mass” of the population (including through the introduction of “violence-free spaces for the young” and a family initiative against violence);
- developing participative action research spaces (the participative action research group (IAP) on violence affecting adolescents);
- developing spaces for in-depth thought (the Youth Parliament and a theme-based coffee shop discussion on violence among young people);
- developing training spaces (a basic workshop on health promotion and building resilience for adolescents, a JAMPA training workshop, and a workshop on violence and health for parents and educators);
- developing spaces for self-expression and productive output (a youth web site, hands-on creative competitions and a “White Paper” on interpersonal violence, health and youth); and
- promoting a young people’s community network (JAMPA sentinel network).

There will be a youth partner in mediation and prevention of violence at different schools and youth association centres in the city. She/he will be in charge of detecting risk situations and suggesting corrective measures. Each youth sentinel will fill out a risk situation declaration sheet once a month, which she/he will send to the Standing Coordinating Committee. If the situation is urgent, she/he can call or e-mail. There will be a meeting of all of the sentinels on a quarterly basis with trained experts on hand with whom to share problems, learn how to overcome them and improve the functioning of the network.

Lessons learned

Some of the lessons learned while carrying out and evaluating the 1998, 2002 and 2006 projects, in which over 800 adolescents and 200 parents have taken part, are as follows.

The feeling of having control over their own lives, of being able to shape their circumstances and make decisions which are going to have a bearing on their future, is an essential aspect of self-esteem for adolescents. The affection, support and basic confidence of the adults who are significant to them support this (positive Pygmalion effect).

Adolescents need spaces where they can express in confidence their needs, doubts and fears about the topics in which they are interested and where they can go alone or in the company of their friends.

Spaces are also necessary for work with parents and educators on issues such as to how to improve their ability to talk with adolescents and how to help young people to accept themselves, communicate with one another and solve problems.

According to the adolescents, participating in community activities and being partners in health allows them to feel more comfortable with themselves and with others. It helps them to feel more self-reliant, more satisfied with their bodies, more confident in interpersonal relationships, less stressed and more able to express their conflicts in words. Community involvement and prosocial behaviour build resilience. The ability to sit down and talk with another person, being able to chat within a controlled context in which safe, orderly relationships can be built and in which each person's individual differences are respected, also builds resilience.

Parallel individual and group work, with a participative methodology consisting of a continuous cycle based on “thinking, judging, acting, evaluating and rethinking”, has fostered the progression from one project to the next, with each of the projects being absorbed into its successor.

The participation and empowerment of the adolescents and the pursuit of alliances with other institutions and associations has had the effect of multiplying the health care centre's limited professional human resources.

The most important conclusions of the qualitative research conducted in 2005 are the following.

- This project provides a space the adolescents feel is their own. They feel secure within it, as they can respect the rules by which it is governed. They are recognized, they are listened to and their views are taken into account. This is an orderly place where they can get together with other young people to experience “closer and more personal” relations, share thoughts about themselves and their problems, learn to live in a healthier manner and carry out jointly agreed activities. It is a place for getting together with other young people who have similar problems, to share them and help one another to try to solve them. This is encouraging a sense of responsibility within the participants.
- The commitment to confidentiality on matters discussed at the meetings is very important. This offers security and the assurance that what they say about themselves is going to be handled with respect and will not go beyond the group.
- The trained experts have an important part to play, particularly in their role as “reference-point adults” in the project. The adolescents need to break their childhood ties to their parents, but they still need the reference point of readily accessible, understanding adult figures who will impose order and provide security (this is the view of the trained experts).
- For the families, the project provides reassurance that the adolescents are being supported to manage risks when they are out on their own.

Participating in this project is having many positive effects on the adolescents, ranging from improvements in their studies to changes in their behaviour, attitudes and self-esteem. They feel more understanding of others they may have ridiculed in the past. They are more reflective and think things through before acting. They control their behaviour, aggressive reactions and hyperactivity more effectively, which makes them feel more self-assured. Professionals from other institutions who have referred adolescents to the project and who have seen them again at follow-up meetings have confirmed the positive changes in the behaviour.

The possibility of getting together with others, talking about things and knowing that they are going to be listened to is fundamental to this project. It is therapeutic in itself and opens a whole new world of discovery for these adolescents. They find others who are like themselves, which makes them feel that they are not alone; and finding others forces them to take others into account, cultivating respect.

Former participants who have now had sufficient time since leaving the project to reflect on their experiences stress the preventive function the project had for them. It enabled them to see what they were getting themselves into and to correct behaviours they felt were going to be detrimental to them.

The Youth Consultation and the accessibility it creates are highly valued by adolescents and professionals. It is considered important that the person running the Youth Consultation should always be the same person, a reference-point individual who has a strong sense of empathy and can assure the adolescent of the confidentiality necessary in any therapeutic relationship.

The following manifesto was prepared for the WHO/HBSC Forum 2007 by the young people of Alcalá de Henares, Madrid, Spain.

Nosotros, adolescentes y jóvenes de Alcalá de Henares, manifestamos en relación con la promoción de nuestro bienestar mental lo siguiente.

We, the youth of Alcalá de Henares, in relation to the development of our mental well-being, declare the following.

Necesitamos modelos adultos coherentes, que nos acompañen desde pequeños, dándonos oportunidades de ser nosotros mismos.

We need adult role models who are coherent, who accompany us from infancy through adolescence, who give us the opportunity to be ourselves.

Os pedimos que no nos impongáis vuestras ideas ni quienes tienen que ser o dejar de ser nuestros amigos. Nuestra mente y nuestros afectos no son propiedad vuestra, sino nuestra. Sabemos lo que queremos.

We ask that you do not impose on us your ideas or indicate to us who should or should not be our friends. Our ideas and our feelings are our own, not yours. We know what we want.

No nos encasilléis y atribuyáis defectos solamente por ser jóvenes, ni nos trasladéis vuestros miedos y preocupaciones.

Don't classify us as bad-tempered or otherwise judge us just because we are young. Don't make us feel or suffer your worries and fears.

Para sentirnos bien necesitamos tranquilidad, respeto, estabilidad y menos violencia a nuestro alrededor.

To feel fine we need calmness, respect, stability and less violence around us.

Contad con nosotros en las decisiones que afectan nuestras vidas.

Count on our contribution when making decisions that affect our lives.

Dadnos espacios reales de participación.

Give us real and valid spaces for participation.

Para algunas cosas somos mayores pero para otras somos pequeños, por lo que necesitamos que confiéis en nosotros y nos ayudéis a desarrollarnos sin sobreprotegernos ni dejándonos solos ante el peligro.

For some things we are big enough; for others we are still young. That's why we need your trust. We want your help to develop our personalities, but we ask you not to overprotect us nor let us face the danger alone.

A veces se nos olvida que somos únicos y valiosos y nos desanimamos. Ahí estáis vosotros para valorarnos y recordarnos lo maravilloso de ser diferente. Si la gente se ríe de ti por ser diferente, ríete de ellos por ser todos iguales.

Sometimes we forget that we are unique and valuable, and we become depressed. Then you should be there to appreciate us and remind us how wonderful it is to be unique. If people laugh at us for being different, we laugh at them for being all the same.

Queremos, decirnos lo que hacemos bien y no solo lo que hacemos mal, y apoyar nuestros esfuerzos por conseguir nuestras ilusiones.

Love us, tell us what we do right just as you tell us what we do wrong. Support our efforts to achieve our dreams.

Bye, bye!



Acknowledgements.

As their contribution to the WHO/HBSC Forum 2007 process, young people involved in the project for community participation of adolescents at the Manuel Merino Health Centre in Alcalá de Henares (Madrid, Spain) designed, produced and edited the film “With and for youth”. The film was shared at both the case study pre-meeting in March 2007 and the Forum in October 2007. It described the activities of the centre from the point of view of the young people and included testimonials from the young people involved and footage of workshops.

In addition, the adolescents coordinated the collective drafting process of a Manifesto statement (see previous page). The drafting process was directed by the steering committee of the Programme JAMPA (consisting of 10 adolescents and 4 adult technical experts). The process incorporated two phases.

1. A first phase dedicated to the collection of ideas through consulting diverse groups of adolescents and young people (more than 70 young people aged between 11 and 23) who participated in the activities of the Programme JAMPA during the January to July 2007 period. Feedback to the question “what do we need for our mental well-being?” was collected using distinct formats (including brainstorming and discussion groups) during this period.
2. A second phase dedicated to collectively drafting the Manifesto. The steering committee convened three sessions between August and September 2007 with young people representing diverse groups of adolescents and young people involved in the first phase. These served to build consensus on the Manifesto, the final version of which was filmed.

Young people who participated in the production of the film “With and for youth” and/or the drafting of the Manifesto included:

Anderson Monsalve Henao	Adrián Martínez Pradanos	Facundo Daniel Ballardo
Didier Monsalve Henao	Victor Hugo Cobo de la Cuesta	Patricia Milán Castillo
Francisco Javier Meco Nova	Arturo Coronado Nava	Luis Edgar López González
Irene García Perrián	José Manuel Coronado Nava	Pedro Sáez Pérez
Álvaro Martínez Manzano	Alberto Matilla González	Javier de la Rosa Palanca
Ion Sebastian Bobit	Alba Tarjuelo García	Jeannette Pereira Perea
Patricia Ruiz Cruz	Luis Miguel Tarjuelo García	Alba Losa López
M ^a Argeme Domínguez Ventura	Sergio Sánchez Según	Marcos Caja González
Ismael Domínguez Ventura	Asiel Puerta Salvador	Victor Herranz Matienzo
Carlos Chica Rodríguez	José Usón Llanos	Victorio López López
Fabiola Chica Rodríguez	Walter Richards Mato	Samuel Bueno Fernández
Javier Medina Alcántara	Ángel Moreno Álamo	Daniel de Pablos Muñoz
Christian Muñoz Ramírez	Rubén Blanco Merino	Mario Pastrana Monterrubio
Javier Solís Hernández	Álvaro Vera García	Irache Pastrana Monterrubio
Israel Gusano Hernando	Eric Raya Tebar	Cynthia Pablos Martín
Aitor Ruiz Barbosa	Néstor Leceta Simarro	Daniel Romero Sánchez
Rubén Ruiz Noblejas	Vicente Quijorna Novella	Sergio González López
Sergio Moreno Fernández	Alba de la Prida Llamas	Aura Torbellino Muñoz
Samuel Cámara Cabrero	Juan Manuel Cortés Picado	Eduardo Aguilera Valera
Ismael González Sabina	Olga Rabadán Elvira	Antonio Serrano Ibáñez
David García Díaz	Sergio Martínez Calvo	Estefani Wright Pastrana
Sadrac González Perellón	Alexandra Muntean	Mirian Gil Moreno
Noel Prada Berruoco	Bogdan Stefan Mihai	Cristian González Salamanca
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United Kingdom (England): the framework and the process – how social and emotional aspects of learning (SEAL) addresses the mental well-being of adolescents through the context of healthy schools

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Executive summary

This case study outlines how the emotional health and well-being of adolescents is being actively promoted in England through collaboration between the Department of Health and Department for Children, Schools and Families through the National Healthy Schools and SEAL initiatives.

Schools from all phases of education (aged 4–19) are involved within the National Healthy Schools programme and are working towards achieving National Healthy Schools status. This requires a school to demonstrate it has met rigorous criteria in each of four themes: personal, social and health education; healthy eating; physical activity; and emotional health and well-being. Each of the associated 41 criteria has minimum evidence. SEAL is included in criteria within the emotional health and well-being theme.

SEAL is a whole-school approach to promoting social and emotional skills that aims, when fully implemented, to involve all members of the school and all aspects of school life. It proposes that social and emotional skills will be most effectively developed by children and young people, at the same time enhancing the skills of staff, through:

- using a whole-school approach to create the climate and conditions that implicitly promote the skills and allow them to be practised and consolidated;
- providing direct and focused learning opportunities for whole classes (during tutor time, across the curriculum and outside formal lessons) and as part of focus group work;
- using learning and teaching approaches that support pupils to learn social and emotional skills and consolidate those already learned; and
- facilitating continuing professional development for the whole staff of a school.

SEAL has been enthusiastically adopted by primary schools in England. A phased national implementation in secondary schools started in September 2007 following a pilot project in 54 schools. Primary SEAL provides an early-intervention approach to improving the mental health of adolescents, while Secondary SEAL addresses their current needs and helps to create a social and emotional climate that is inclusive, reduces bullying, promotes feelings of belonging and encourages emotional health and well-being. Adults have an important role to play in setting the school climate, but the social climate is largely determined by the students themselves; when their social and emotional skills are nurtured, the social climate for all young people is enhanced.

Early indications from evaluation of the primary and secondary programme are that they have a positive impact on emotional health and well-being.

Introduction

This case study will outline how the emotional health and well-being (this term is used by most English schools rather than “mental health”) of adolescents is being actively promoted in England through collaboration between the National Healthy Schools and Primary and Secondary National Strategies programmes. Funding and responsibility for these programmes lies across the Department of Health and the Department for Education and Skills.

Social and policy context

The National Healthy Schools programme

The National Healthy Schools programme was launched by the Department for Education and Skills and the Department of Health in October 1999. This followed the 1997 Education White Paper *Excellence in schools*, the 1998 Health White Paper *Saving lives: our healthier nation*, and the 1998 independent inquiry into inequalities in health.

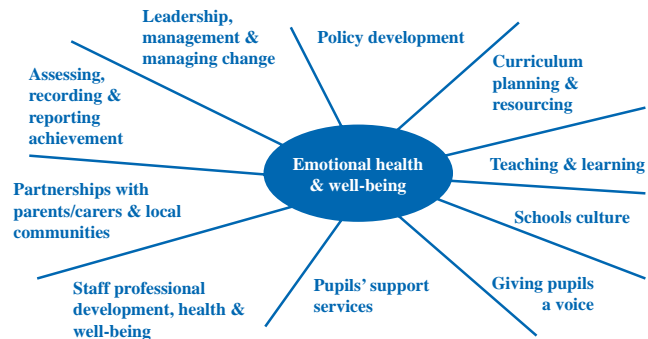
Local healthy schools programmes are now established in each of the 150 local authorities (which manage education) in England. They support schools from all phases of education (4–19) to develop policy and practice as they work towards and gain Healthy Schools status. For a school to achieve Healthy School status, it needs to demonstrate that it has met rigorous criteria in each of four themes: personal, social and health education; healthy eating; physical activity; and emotional health and well-being. Each of these 41 criteria has minimum evidence. The SEAL initiative is included in criteria within the emotional health and well-being theme.

Participation in the National Healthy Schools programme is voluntary for both schools and local authorities. Despite this, 87% (n =19 880) of schools had “signed up” to take part in the programme by mid-March 2007. It is anticipated that the programme will meet the targets set by the government that indicate that all schools in England should be participating in the programme, with 75% having gained Healthy School status by 2009.

The National Healthy Schools programme promotes a whole-school approach, which is set out in diagrammatic form in Fig. 1. This means that if a school is to gain Healthy School status, it will need to show how mental health is being addressed through each of the 10 elements of the approach.

Fig. 1

National Healthy Schools programme whole-school approach



Evaluation of the National Healthy Schools programme

It is difficult to prove causality in many educational and health intervention programmes as schools are subject to so many different initiatives, and societal factors are increasingly dynamic. Nonetheless, the National Healthy Schools programme has been evaluated at national level by a number of different bodies, including Glasgow University, the Institute for Education (University of London), the National Foundation for Education Research and – currently – by the National Centre for Social Research. The results of these various research projects show more promise in qualitative data than quantitative, with the vast majority of stakeholders citing positive outcomes for schools, pupils, staff and parents/carers. The Glasgow University study suggested a quantitative link between schools achieving Healthy School status and better results in national tests in science among 11-year-olds. The National Foundation for Education Research/Institute of Education report in 2004 showed some interesting results regarding mental health, including that pupils in Healthy Schools were significantly less likely to fear being bullied and significantly less likely to be offered an illegal drug.

The research model of the National Centre for Social Research recognizes the difficulty of gathering robust quantitative data for behavioural change and instead is concentrating most of its efforts on a qualitative, intensive study of about 30 schools.

There are a number of databases relating to children's health-related behaviour. The HBSC study helps to give international comparisons and the Health-Related Behaviour Questionnaire from the Schools Health Education Unit in Exeter is widely used by individual schools, local authorities and National Health Service primary care trusts. These are very useful in monitoring behavioural trends and needs over time, but are less useful in capturing the change attributable to individual programmes such as Healthy Schools or SEAL.

Social and emotional aspects of learning

In response to concern about the behaviour, learning and mental health of children and young people, the Department for Education and Skills planned and implemented a pilot project (2003–2005) in primary schools to act as an early-intervention approach. This included the production and piloting of SEAL, a whole-school approach to developing social and emotional skills. It was designed to be integrated and mutually supportive to schools' work within the National Healthy Schools programme, particularly through the emotional health and well-being and personal, social and health education themes.

Early indications were positive and the approach was adapted and developed in the light of feedback from schools. The adapted materials were introduced into schools through local authorities in a systematic way. There is an expectation that 80% of primary schools across the country will have been supported to implement SEAL by April 2008. In April 2005, a small pilot was introduced in 10 local authorities and 54 secondary schools. It was based upon the same basic principles as the approach in primary schools but provided a more flexible approach. This has resulted in substantial learning and development over the two-year period of the pilot project.

The developments were able to draw on existing and longstanding work on social and emotional learning in Cumbria, Bristol and Southampton as well as some evaluated work in the United Kingdom – notably the use of the Promoting Alternative Thinking Strategies (PATHS) curriculum in Flintshire and Portsmouth, the “You can do it” programme in Bristol, the “Family links nurturing” programme in Oxfordshire, and Caroline Webster Stratton's “Dina Dinosaur” materials in schools supported by the Maudsley Institute.

Important early sources of evidence on effective practice were used in the development of SEAL. These included Wells & Barlow's *A systematic review of universal approaches to mental health promotion in schools (1)*, early drafts of Weare & Gray's Department for Education and Science research report *What works in developing children's emotional and social competence and well-being? (2)*, and an influential United States review from the Collaborative for Academic, Social and Emotional Learning (CASEL) which synthesizes the evidence on 51 social and emotional learning programmes.

The core principles of effective programmes identified in these reviews and used to guide the development of the SEAL resource were:

- a holistic approach which recognizes the importance of the school environment for developing social and emotional competencies;
- a focus on staff development for the adults involved;
- quality proactive first teaching for all pupils, which also helps those usually targeted using “deficit” support models;
- explicit teaching of skills using teaching methods that are participative and active rather than didactic;
- the involvement of parents and the community; and
- starting early and taking a long-term developmental approach through a spiral curriculum in which key learning is constantly revisited.

SEAL, like most of the existing United States programmes, has its basis in research on the affective competencies variously described as emotional intelligence or emotional literacy (3,4), in long-standing experimental psychological research on empathy (5), social problem solving (6) and anger management (7), and in cognitive-behavioural theories (8,9).

“Every child matters” and public service agreements

Following a series of high-profile child protection tragedies in which the difficulties of different agencies working together were cited as contributing to a lack of effectiveness, the government decided to overhaul and radically change the whole system of children’s public services. It published the Green Paper *Every child matters* in 2003 after widespread consultation with parents/carers, professionals, children and young people. It heralded radical reform in the way children’s public services were organized, their responsibilities and accountabilities. This was put into law by the Children Act (2004).

It was agreed that there are five national outcomes for children for which all agencies should be striving, and against which all are judged. These outcomes are that all children should:

- be healthy
- stay safe
- enjoy and achieve
- make a positive contribution
- achieve economic well-being.

Each of these is subdivided into key judgements and each has a number of key indicators against which local councils are measured and judged annually (via annual performance assessments) and with an intensive triennial inspection (joint area review). All of the outcomes can be supported by schools working on the National Healthy Schools programme. The outcomes for “Be healthy” are shown in Box 1 as an example.

Box 1. Sample outcomes

Be healthy

Children and young people are: physically healthy; mentally and emotionally healthy; sexually healthy; have healthy lifestyles; and choose not to take illegal drugs.

Key judgements are:

- parents and carers receive support to keep their children healthy;
- healthy lifestyles are promoted for children and young people;
- action is taken to promote children and young people’s physical health;
- action is taken to promote children and young people’s mental health;
- looked-after children’s health needs are addressed; and
- the health needs of children and young people with learning difficulties and/or disabilities are addressed.

To support these judgements, inspectors use a number of indicators. Most of them are discretionary but three are compulsory – that is, they have to be used as a basis for judging the extent to which children and young people are supported to be healthy. These are:

- teenage pregnancy, conceptions below age 16 and 18
- percentage of schools participating in the National Healthy Schools programme
- participation in sport.

It is the reference to Healthy Schools that is most relevant to this case study.

Public service agreements

In 2004, following a comprehensive spending review in which the government outlined its spending priorities and intentions for the next three years, a new system of public service agreements was introduced. The government set itself various targets,

organized action to meet the targets and gave local authorities incentives to plan and implement local action.

A number of public service agreements are affected by the emotional health of adolescents. These include the following.

1. Substantially reduce mortality rates by 2010 from suicide and undetermined injury by at least 20%.
2. Tackle the underlying determinants of ill health and health inequalities by:
 - reducing adult smoking rates to 21% or less by 2010, with a reduction in prevalence among routine and manual groups to 26% or less;
 - halting the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole; and
 - reducing the under-18 conception rate by 50% by 2010 as part of a broader strategy to improve sexual health.
3. Safeguard children and young people, improve their life outcomes and general well-being, and break cycles of deprivation by improving children's communication, social and emotional development so that by 2008, 50% of children reach a good level of development at the end of the Foundation Stage (aged 4–5) and reduce inequalities between the level of development achieved by children in the 20% most disadvantaged areas and the rest of England.
4. Raise standards in English language and mathematics so that:
 - by 2006, 85% of 11-year-olds achieve Level 4 or above, with this level of performance sustained to 2008; and
 - by 2008, the proportion of schools in which fewer than 65% of pupils achieve Level 4 or above is reduced by 40%.
5. Raise standards in English language, mathematics, information and communications technology (ICT) and science in secondary education so that:
 - by 2007, 85% of 14-year-olds achieve Level 5 or above in English, mathematics and ICT (80% in science) nationally, with this level of performance sustained to 2008; and
 - by 2008, in all schools at least 50% of pupils achieve Level 5 or above in each of English language, mathematics and science.
6. Improve levels of school attendance so that by 2008, school absence is reduced by 8% compared to 2003.
7. Reduce the use of Class A drugs and the frequent use of any illicit drug among all young people under the age of 25, especially by the most vulnerable young people.

It may not be immediately obvious that all of these targets relate to the emotional health of adolescents, but there is an increasing acknowledgement by teachers, social workers, therapists and other professionals that good emotional health is vital to optimizing performance and enabling the choice of healthy lifestyles.

The UNICEF Innocenti Research Centre report

In 2005, the UNICEF Innocenti Research Centre published its report *Child poverty in rich countries 2005 (10)*, in which it analysed the position and progress in tackling child poverty in the world's developed economies. Although it found that children in the United Kingdom were among the worst off (in terms of percentage living in poverty), it also found that the United Kingdom was one of only four countries where the position had improved in the 1990s, and it also suggested that a 25% reduction in child poverty would have been achieved by 2004/2005 (much of the available data were retrospective).

This has significant implications for the mental health of teenagers, as there is considerable correlation between child poverty and health status (including mental health) in adolescence and later life. It may be the case that the Healthy Schools programme and SEAL are being introduced against a more supportive background than was previously the case. However, it also suggests that many children and young people in England in 2007 are being parented by adults who experienced significant child poverty in the 1980s.

HBSC study

The 2002 HBSC survey in England found that 9% of students reported not being happy and 33% reported feeling low each week. The report suggests that schools make a difference in terms of students' reported feelings of unhappiness. Students who said they had no opportunity to get involved in decision-making were more likely to report they were unhappy and more likely to report they were feeling low each week. This was the case with students who indicated they did not have a sense of belonging in school.

The intervention

SEAL is a whole-school approach to promoting social and emotional skills that aims, when fully implemented, to involve all members of the school and all aspects of school life. It is a comprehensive approach to promoting the social and emotional skills that underpin effective learning, positive behaviour, regular attendance, staff effectiveness and the emotional health and well-being of all who learn and work in schools. It proposes that the skills will be most effectively developed by children and young people, at the same time enhancing the skills of staff, through:

- using a whole-school approach to create the climate and conditions that implicitly promote the skills and allow these to be practised and consolidated;
- providing direct and focused learning opportunities for whole classes (during tutor time, across the curriculum and outside formal lessons) and as part of focus group work;
- using learning and teaching approaches that support pupils to learn social and emotional skills and consolidate those already learned; and
- providing continuing professional development for the whole staff of a school.

The social and emotional aspects of learning provide a framework for teaching social and emotional skills. These skills are classified according to the five emotional intelligence domains (empathy, self-awareness, managing feelings, motivation and social skills) popularised by Goleman (4).

SEAL integrates anti-bullying work with citizenship, work on tackling racism and promoting positive approaches to diversity, the emotional health and well-being strand of the National Healthy Schools programme, and the developments in teaching and learning spearheaded by *Excellence and enjoyment*, the government's strategy for primary schools.

The core materials in Primary SEAL were written by a team of psychologists and leading academics with a wide range of experience of leading developments in the field of emotional literacy and social skills. Powerful children's literature (poetry and story) was selected or commissioned to stimulate empathy and inquiry to encourage social and emotional understanding by engaging the emotions. In addition, full use is made of the arts and drama as a vehicle for effective learning.

A significant milestone in the development of the materials was aligning them with government work to map key aspects of learning across the curriculum. SEAL's five affective "domains" (empathy, awareness of feelings and so on) were included alongside cognitive skills (inquiry, problem solving, creative thinking, information processing, reasoning, evaluation, communication) in the eleven aspects of learning that underpin the primary national strategy's core professional development resources for schools. Key themes from work on personalised learning (notably assessment for learning) were also incorporated as the materials developed. This ensured coherence for schools in work they were already doing to further children's learning and promote their social and emotional development within the *Every child matters* agenda.

The enthusiastic take-up of SEAL by primary schools and the growing interest from secondary schools attests to the success of its design principles. The initial evaluation by the Institute of Education is promising, although it needs to be followed up with in-depth and ongoing microanalysis. Meanwhile, the fact that SEAL shares its theoretical basis with evidence-based programmes used overseas, and the robust match between its core features and those established by research as fundamental to success, give comfort to users that impact will be at least as good as that of longer-established programmes.

At the heart of SEAL is a set of learning outcomes or learning objectives that have been categorized under the five aspects of learning. SEAL provides a systematic approach to “teaching” these in three main ways:

- through discrete learning opportunities, either in personal, social and health education or across the curriculum;
- consideration of the climate and ethos or environment of the school and classroom; and
- consideration of teaching style or approach to ensure this promotes SEAL implicitly.

An essential component of SEAL is staff development. The SEAL model is based upon the assumption that all adults who interact with pupils within school are involved in teaching the five aspects of learning. This means that they have to model the skills involved as well as promote them more explicitly.

Primary SEAL provides a themed approach to the explicit teaching of social and emotional skills through a spiral curriculum. Following an assembly, to start a theme all children explore the same area of learning through both discrete and cross-curricular learning opportunities. This means that a child entering primary school in the Foundation Stage (aged 4–5) and leaving at the end of Year 6 (aged 11) will have experienced each key theme at an appropriate level each year, both at specific times during the school day and across all subject areas. Suggested activities are provided for all staff to use together and for children to take home to explore with their families. Secondary SEAL continues this work with the provision of resources to support the teaching within four themes, taking a similar approach in the first year of secondary education.

Secondary SEAL and Primary SEAL are founded upon the same basic principles, although these have been adapted to fit with the age-specific contexts. They are based upon the same social and emotional aspects of learning (self-awareness; managing feelings; motivation; empathy; social skills) and provide a set of learning outcomes which link together. In addition to suggested whole-school approaches to promote achievement of these outcomes, Secondary SEAL has produced learning materials for Year 7 which build on the approaches and themes of Primary SEAL but make them relevant to the secondary context. Schools are encouraged to consider how these can be extended into Year 8 and Year 9 as part of a consultation process.

Multiagency involvement (intersectoral coordination mechanisms)

The national implementation of Primary SEAL was delivered through existing structures by the children’s services departments of local authorities. These departments are multiagency with a range of professionals, including educational psychologists, education social workers/education welfare officers, school improvement advisers/inspectors, behaviour support teachers and healthy schools coordinators. The departments were given additional funding based upon the level of disadvantage (as measured by eligibility to free school meals) and the number of schools in the local authority. Two thirds of this resource was to be distributed to schools involved and one third retained to enhance staffing within existing services and allow for coordination. Children’s services departments are encouraged to coordinate support, training, monitoring and evaluation of SEAL through a multiagency steering group. They have been advised to extend and further develop this group so that it can effectively coordinate the introduction of Secondary SEAL.

Children’s services departments have been encouraged to support schools to work collaboratively to introduce SEAL across schools within a district. This has involved the identification of lead practice schools and networks of schools working together, sharing practice, training and resources. Nine school development groups have been established to further extend and develop the materials.

SEAL and disadvantage

SEAL is designed for universal provision, and it is planned that by the year 2011 all children and young people in state schools (19 000 primary schools and 3700 secondary schools) will be expected to have opportunities to experience SEAL or an equivalent approach to the systematic teaching of social and emotional skills.

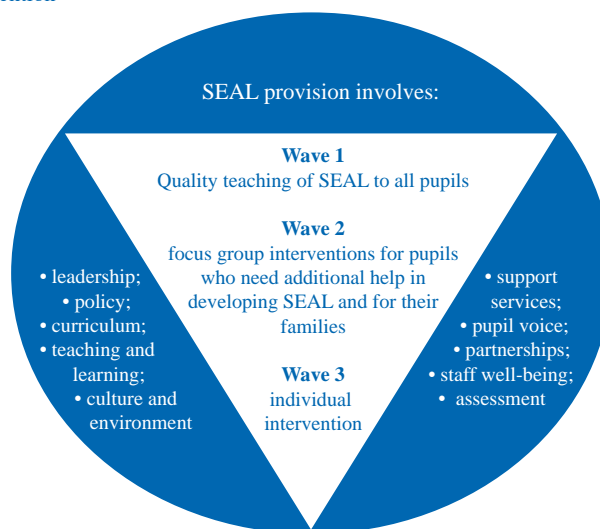
However, the approach recognizes that there are some children and young people who have additional needs in this area. This includes those from fractured or disadvantaged homes or who are at risk of mental health difficulties later in life. SEAL is a differentiated approach with support being offered through the provision of learning within a safe small group facilitated by a skilled adult or focus group.

SEAL is based upon the wave model of intervention, which is current within all national strategy materials considering provision for children and young people with additional needs. It is illustrated in Fig. 2. Universal provision is located at the top of the figure (Wave 1), with additional group-based support for pupils with additional needs at the centre (Wave 2) and individual support (Wave 3) at the bottom.

Focus group work is located at Wave 2 of this model as it builds upon the universal offer at Wave 1 and does not replace the need for more intensive or multiagency support (Wave 3). This means that schools will continue to refer pupils to outside agencies for more specialist and intensive intervention. Focus group work is one element of the overall strategy to promote social and emotional skills.

Fig. 2

Wave model of intervention



Social and emotional skills are a key component of an emotionally healthy, inclusive school culture that helps all pupils succeed and which values and celebrates diversity. By promoting high levels of social and emotional skills in all children and young people, the social and emotional climate is enhanced, ensuring a more positive experience for all, including those with the greatest needs. For example, the key skill of self-awareness helps all members of a school community to recognize and face their own prejudices and intolerances. This is the first step to tackling them. Empathy is central to developing a concern for, and understanding of, others, both recognizing the common humanity and acknowledging and celebrating social, cultural and individual difference. Social skills help build groups and create feelings of belonging.

At the same time, helping adults to manage, understand and cope with their own feelings helps them cope more effectively with challenging behaviour.

Lessons learned

SEAL sets out to address several of the key governmental priorities identified above, including the emotional health and well-being, behaviour and effective learning of children and young people.

SEAL was initially piloted as one of four strands of the Primary Behaviour and Attendance pilot. This was evaluated independently by the Institute of Education. It found that the programme increased staff understanding of the social and emotional aspects of learning and helped them to understand their pupils better. This changed their behaviour, enhanced their confidence in their interactions with pupils, and led them to approach behaviour incidents in a more thoughtful way. All staff perceived a positive impact on the children's behaviour and well-being, and classrooms and playgrounds were calmer.

The impact of SEAL is still being explored through high-level data analysis of areas such as the impact on exclusion, attendance figures and attainment. The national strategy is currently identifying 27 tracker schools for more precise and detailed analysis using specially designed measures of social and emotional skills. This will allow for a longitudinal approach to be taken and for children to be tracked across the transition to secondary school. It will also provide more accurate information about the impact on the mental health of adolescents. In addition, an independent evaluation of the impact of small group or focus group work is being commissioned.

Regional advisers from the national strategies monitor progress with the implementation of SEAL through school and local authority visiting programmes and meetings for representatives from children's services department from local authorities. These visits and meetings provide valuable information about the extent and quality of implementation of SEAL. They include observations of lessons and interviews with adults and children. SEAL is popular with local authority personnel, school leaders and children and young people.

During the visits, it is the voices of the children involved that often provide the most powerful insights into the impact on the programme. The responses of a group of 11-year-olds when asked about what SEAL means to them are shown in Box 2.

The pilot was monitored and evaluated by the Office for Standards in Education (Ofsted). The report indicated that:

...the pilot's greatest impact was on developing teachers' understanding of pupils' emotional and social development. Such understanding improved interaction between teachers and pupils. In nine of the pilot schools, the work helped to change systems in the school and influenced behaviour management. In six of the schools it improved lesson planning, teaching and the organization of learning. Where the pilot was most effective, pupils' social and behaviour skills improved, such as the way they worked with each other and with staff, their greater resilience, willingness to take risks in their learning, and their skills of teamwork.

The impact of the secondary SEAL programme is to be investigated further through an independent evaluation. This will consider how effective it is in enhancing the social and emotional skills of students, as well as the impact of school climate.

The primary school programme has proved to be popular. Support is still required by staff to enhance their skills through high-quality staff development and to empower effective work with parents and carers. Implementing the programme in secondary school will be an even greater challenge. The structure of these schools is not conducive to cross-curricular development and it is harder to ensure consistency, but the success of primary SEAL has encouraged a real enthusiasm among secondary school colleagues to adopt the programme.

Box 2. Children's thoughts about SEAL

"SEAL helps us to understand our feelings and to express them."

"Literacy and mathematics are important but friendships last forever. SEAL helps us to keep our friends and sort out our problems."

"If friendships go wrong in school it gets in the way of everything – we can't learn, we can't think. SEAL helps us to role play how we might solve our problems and to work out how to sort things out. We can then practice the skills during SEAL before we use our ideas in the playground if we fall out."

"In SEAL there is no fear of failure."

"In SEAL we learn to forgive when things go wrong."

"We share how we dealt with our feelings and we can talk about things that we find hard to cope with.

We find out what is happening to each other. For example when my parents split up I was unhappy but I feel okay now so when I found out that someone else was going through the same, I went and had a quiet word. I told them what I had done that made me feel better."

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United Kingdom (Scotland): HeadsUpScotland – a country case study

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Executive summary

The Scottish case study focuses on the work of HeadsUpScotland because of its role in Scotland's efforts to build social cohesion for mental well-being among adolescents. Established in 2004, this national initiative is closely connected to policy developments, works with a range of partners and plays a key role in bringing together policy and strategy at national and local levels.

Adolescents' mental health and well-being status is described, drawing on data from the HBSC study. Trends between 1994 and 2006 are outlined in terms of happiness, confidence, life satisfaction and perceived health. Gender, socioeconomic and rural/urban differences are analysed together with the impact of family context, school environment and bullying. It is noted that in overall comparative terms, Scotland's young people are above average in terms of happiness and below in terms of confidence and perception of body image.

The social and policy context in Scotland is described. The central place of the National Programme for Improving Mental Health and Well-being in bringing together mental health improvement (promotion and prevention), anti-stigma and suicide prevention aspects is outlined alongside more recent policy developments within health, education and children's services, such as: the new Curriculum for excellence (which includes learning outcomes for mental, social, emotional and physical health); the Schools (Health Promotion and Nutrition) Act (which places mental and emotional well-being at the heart of all schools' activities); and *Getting it right for every child* (which reforms children's services to promote cross-agency planning to meet all the needs of the child).

Some of the work of HeadsUpScotland is then described. The process of developing *The mental health of children and young people: a framework for promotion, prevention and care* is set out in detail. The role of the Framework in assisting local health, education, social work and voluntary sector services in planning and delivering integrated approaches to children and young people's mental health across the continuum of promotion, prevention and care is outlined, together with HeadsUpScotland's support for local strategy development and implementation. "Young Scotland in mind", an initiative and network for NGOs established by HeadsUpScotland, is described together with initiatives to involve children and young people. Links to European policy are also outlined.

The lessons learned point to the importance of the preconditions for establishing the project:

- a scientific evidence base underpinning work in the area and research which allows tracking of health improvement at a population level;
- high-level support – the importance of governmental support was noted both in terms of promoting leadership and encouraging innovation;
- adaptability to move with a changing policy environment, as well as influencing it;
- early involvement of stakeholders to foster ownership;
- a willingness to take a mid- to long-term view and to build capacity;
- an openness to learn from other sectors and to work in a way that is inclusive and open;
- the importance of maintaining a view of the long-term vision while at the same time being clear about what is expected of people and partners *now*;
- the capacity to provide support for implementation; and
- determination!

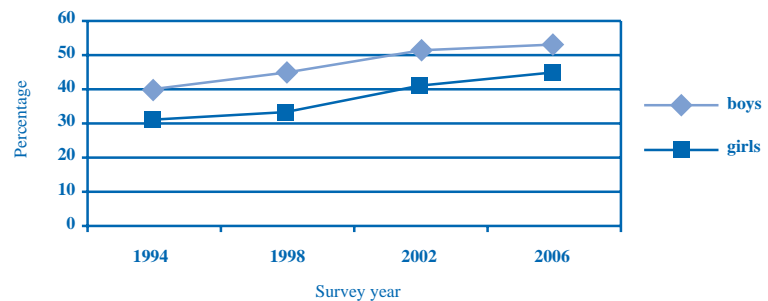
Mental health and well-being status among adolescents in Scotland: HBSC findings on mental well-being

Trends, 1994-2006

Since 1994, young people's levels of happiness and confidence have increased (Fig. 1) and the proportion of young people reporting multiple health complaints (such as headache, stomach ache and feeling low) has fallen.

Fig. 1

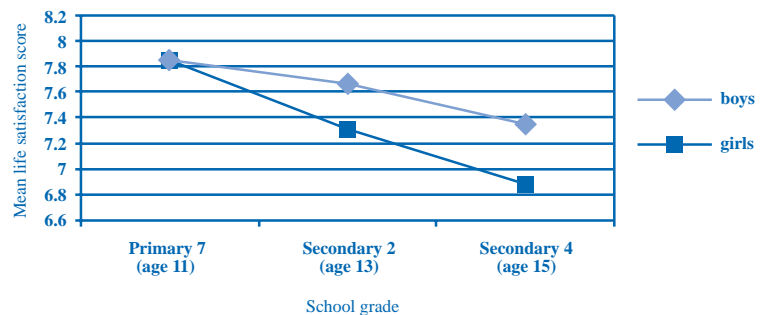
Trends in the proportion of boys and girls that are very happy



Gender differences and age differences persisted in 2006, however (Fig. 2). Boys reported higher rates of positive mental well-being than girls on all indicators (happiness, life satisfaction, perceived health and confidence). The gender gap increased with age. Overall, children in primary schools reported better mental well-being than those in secondary schools (1).

Fig. 2

Mean life satisfaction scores by age and gender



Cross-national comparison

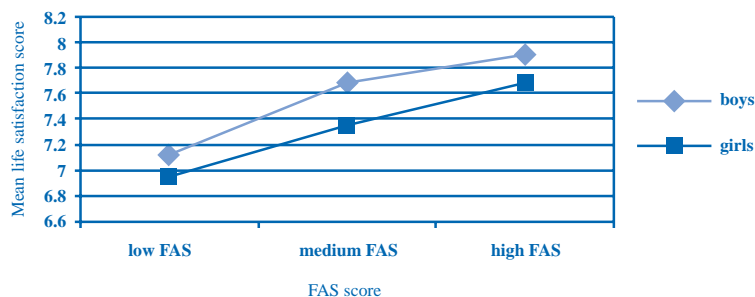
Cross-national comparisons in 1998 placed Scottish young people above the average in terms of happiness, but below average on confidence and positive perceptions of body image. In 2002, Scotland was close to the HBSC average for life satisfaction at all ages (2).

Socioeconomic status

Young people from high-affluence families (as measured by FAS) were more likely to report feeling happy, confident and having excellent health than those from low-affluence families. Mean life satisfaction scores also rose with increased family affluence (Fig. 3).

Fig. 3

Mean life satisfaction scores by FAS



Rural/urban differences

Young people from remote and rural Scotland had high life satisfaction, but those living in urban areas and accessible towns were more likely to feel confident (1).

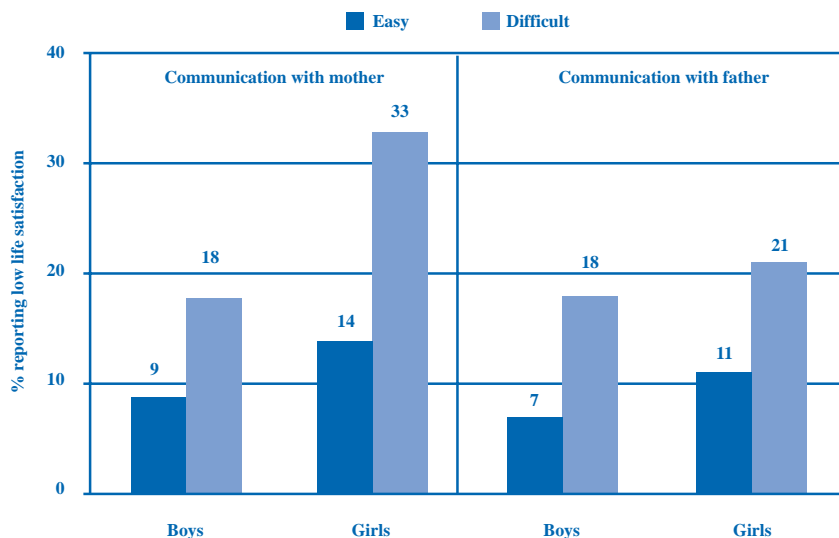
Family context

Higher proportions of boys and girls from both-parent households reported excellent health and high life satisfaction. Girls from stepfamilies were more likely to report multiple health complaints than those from other family structures.

Boys who found it difficult to talk to their parents were twice as likely to report low life satisfaction as those who found it easy. However, the greatest correlation between poor communication and life satisfaction was seen among girls: one in three girls who found it difficult to talk to their mothers reported low life satisfaction. These patterns were seen for all three age groups, analysed together and separately (Fig. 4) (3).

Fig. 4

Low life satisfaction and communication with parents



School environment

Of those pupils who viewed their school in a positive light, the majority also reported themselves to be very happy. About 50% of young people who held moderately positive views about their school environment also reported themselves as very happy (4).

Bullying

Reports of being bullied declined between 1994 and 2002. A higher percentage of boys than girls reported that they had bullied others, while reports of being bullied were the same for both genders. When compared cross-nationally, Scotland has a relatively low rate of bullying. Girls who bully others reported higher levels of multiple health complaints than those who neither bullied nor were bullied. They were also more likely to smoke and to report being drunk. For both genders, cannabis use during the last year was reported most frequently by bullies (5–7).

An overview of these findings shows inequalities in the mental health and well-being of adolescents which relate to gender, socioeconomic status, urban/rural living and social relations. These inequalities need to be addressed in policies and practice that aim to improve the mental health of all young people in Scotland. HBSC provides a unique picture of mental health and its social and developmental context and is a valuable source of scientific evidence that can underpin and help efforts to impact on the well-being of young people.

Social and policy context

In Scotland, the National Programme for Improving Mental Health and Well-being has been central to policy development in this area since its launch in October 2001. The programme has been working nationally and locally to raise the profile of, and to support further action in, mental health improvement (promotion and prevention), to address the stigma of mental ill health and to prevent suicide in Scotland.

The initial work of the Programme from 2001 to 2003 focused on two key priorities: eliminating stigma and preventing suicide. The current action plan sets out the key aims to be achieved and the main priority areas for action nationally and locally from 2003 to 2006 (Fig. 5) (8).

HeadsUpScotland – the focus of this case study – is part of the Programme. A key initiative for HeadsUpScotland, discussed in more detail below, was *The mental health of children and young people: a framework for promotion, prevention and care* (9). It was developed to assist local health, education, social services and community and voluntary sector partners in planning and delivering integrated approaches to children and young people's mental health and well-being. The Framework is designed to encourage positive mental health promotion, prevention of mental illness and early care and treatment of mental health problems among children and young people.

Since the Framework was published, other policy initiatives have been introduced that have considerable influence on the direction of the work. The principal ones are now described.

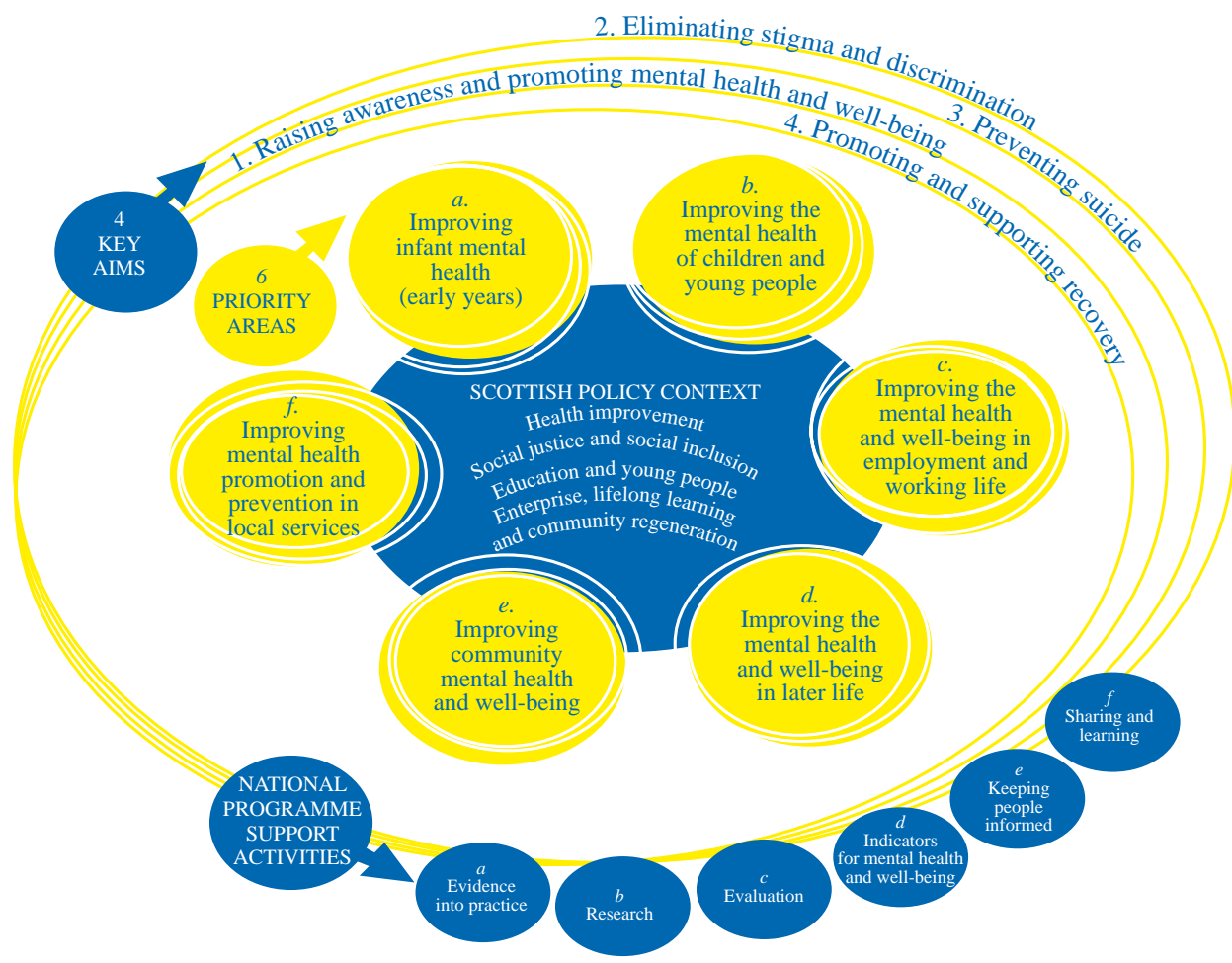
Delivering a healthy future: the action framework for children's health in Scotland (10)

This framework draws together many strands of work and distils them into one resource that identifies key actions for each area of work. In the main, it is a National Health Service-focused document. All the milestones and actions within it have been consulted upon and have been generally well received. It includes a set of milestones and actions for children and young people's mental health.

The mental health delivery plan (11)

HeadsUpScotland, along with many others, has been involved in helping to develop a set of indicators for the children and young people's section of the Mental health delivery plan. The indicators for children and young people are a subset of those identified for children and young people's mental health in the action framework for children's health. In addition, there are

Fig. 5
National Programme for Improving Mental Health and Well-being action plan



other commitments in the Delivery Plan that might reasonably be expected to be applicable to children and young people, such as increased access to psychological therapies.

Curriculum for excellence (12)

A major curriculum review is currently under way in Scotland which will make a valuable contribution to promoting children’s and young people’s mental health within the school setting. It aims to focus classroom practice upon the child and states that the purposes of education are to enable all young people to become:

- successful learners
- confident individuals
- responsible citizens
- effective contributors.

The onus of developing these key capacities is on all teachers and other adults who work with young people and rests on

a platform of sound mental health and positive self-regard. Curriculum for excellence places health and well-being at the core of the curriculum in recognition of the vital importance of learning about health and well-being not just in and of itself, but also to enhance learning and experiences in other areas. Draft learning outcomes and experiences for mental, social, emotional and physical well-being are expected to be published late in 2007 and be tested in schools during the 2007/2008 school year.

Schools (Health Promotion and Nutrition) Act 2007

A key target in Scotland is that every school in Scotland will be a health promoting school by the end of 2007. The above Act, passed by Parliament in March 2007, builds on this commitment by placing health promotion – including the promotion of positive mental health – at the heart of all schools’ activities. The principles and proposals contained in the Act have been used to inform those elements which relate to developing and maintaining good mental health in schools. Detailed guidance to support the implementation of the Act is currently being developed by the Scottish Government with support from key partners such as NHS Health Scotland, HeadsUpScotland and the Scottish Health Promoting Schools Unit.

Happy, safe and achieving their potential (13)

This report on the review of guidance provision in schools in Scotland was published in 2004. It describes the impact school staff can have on pupils’ well-being and sets out 10 standards of support schools are expected to provide. It stresses that all pupils need to be supported (not just those who are experiencing difficulties) and that all school staff have a role in safeguarding the health and welfare of pupils. To support pupils as fully as possible, it is essential to make sure schools promote good mental and emotional health. The report is currently being implemented across Scotland.

Getting it right for every child (14)

This is the overarching programme of reform for children’s services in Scotland which aims to ensure that all agencies working with young people will join up, plan together and meet all the needs of the child. Implementation will involve a three-pronged approach of practice change, legislation and the removal of any barriers to joined-up working that prevent more timely and appropriate responses for children. Work is under way to develop tools and test out approaches to enable local agencies to work together to assess, plan and deliver improved outcomes for children, particularly those who are vulnerable or at risk. The aim is to ensure that all children get the help they need when they need it from services that are planned and delivered in an integrated way at local level.

Intervention: HeadsUpScotland

Leadership and governance

HeadsUpScotland has been chosen as the focus of this case study because of its central place in taking forward Scotland’s commitment to improve the mental health and well-being of its children and young people. The project is closely linked to the policy environment in this area and plays a key role in bringing together partners at national level and supporting local strategy and practice.

As an initiative of the National Programme for Improving Mental Health and Well-being, it is part of the mental health division at the Scottish Government, reflecting the fact that responsibility for children and young people’s mental health lies at this level. The project is also well connected with the ministerial advisory group on children’s health, the Children and Young People’s Health Support Group. This Group gives the project direct access to the children’s services planning processes within local authorities and to the health service-based child health commissioners. The recently established Steering Group for Children and Young People’s Mental Health is a subgroup of the Children and Young People’s Health Support Group. Informal links with other parts of the government such as those dealing with health improvement, education, early years, social work, youth justice and communities are also important.

Background

HeadsUpScotland was established in May 2004 to make a major contribution to the activity already under way in Scotland aimed at improving the mental health and well-being of children and young people. It supports the process of implementing the 10 recommendations contained within the Scottish Needs Assessment Programme report for child and adolescent mental health at national and local level (14).

The Scottish Needs Assessment Programme report emphasized that all agencies and organizations have a role in supporting the mental health of children and young people. It highlighted the need to address the whole continuum of mental health from mental health promotion, through preventing mental illness, to supporting, treating and caring for those children and young people experiencing mental health difficulties of all ranges of complexity and severity. It also suggested that mental health promotion should underpin all work with children and young people, even when they are mentally unwell and accessing specialist mental health services. This is a complex matrix which needs to take account of the:

- life stages of children and young people;
- the settings and places where young people live their lives;
- the range of people and organizations who come into contact with children and young people;
- the continuum of mental health to mental ill health; and
- underlying principles such as reducing inequalities, improving accessibility and increasing participation.

Developing the mental health of children and young people: a framework for promotion, prevention and care (9)

To take these recommendations forward, it was agreed that a framework should be developed to assist local health, education, social work and voluntary sector services in planning and delivering integrated approaches to children and young people's mental health across the continuum of promotion, prevention and care.

A rigorous development process took place, involving a wide range of workers as well as children and young people, followed by a formal consultation process. *The mental health of children and young people: a framework for promotion, prevention and care (9)* (hereafter referred to as “the Framework”) was eventually published in October 2005 and endorsed by both the health and education departments.

The Framework is intended to be used by local agencies as a planning and audit tool, to identify goals and milestones for continuous improvement in the delivery of services and approaches to support, and to improve the mental health of children and young people in Scotland. It was developed as a guide for all those who work with children and young people to help them deliver services which promote the mental health of children and young people and prevent some mental health problems from developing.

Support for local strategy and practice

The Framework is intended to support local practice and to be used in an interagency way within the overall context of children's services planning. It also outlines what a “good enough” child and adolescent mental health service should look like.

The document is based on two underlying principles:

- that inequalities and adverse life circumstances will have an impact on an individual's potential for good mental health and that this must be taken into account when delivering universal services; and
- that the mental health of children and young people is particularly vulnerable at times of transition (the document has a section defining further when these are).

Based on these two principles, the document describes what all those who work with children and young people can do within their own environment to address children's and young people's mental health. It stresses that children's and young people's mental health is everyone's business.

The document is divided into five sections called "contexts":

- early years
- school age
- community environments (including voluntary sector work)
- additional and support needs (including the voluntary sector)
- specialist child and adolescent mental health services.

Model for good practice

The Framework presents a model through which those working in universal services can become more skilled and competent in dealing with the everyday stresses and challenges children and young people face that impact on their mental health. It describes a workforce in universal services who feel better equipped to address less-severe mental health difficulties within their own environment, supported by specialist child and adolescent mental health services staff. It envisages training and development opportunities for those working in universal services and for those working with vulnerable children and young people. The support for this would come from the specialist child and adolescent mental health services staff as they provide more training, support, supervision, consultation and advice.

Considerable progress towards this vision is already being made in some sectors. Early Years and schools are particularly active, aided by the Scottish Health Promoting Schools Unit, which is taking an active role in supporting the development of mental and emotional well-being in the education sector. The challenge for the future is to achieve this level of activity across all the sectors – the Framework sees this as a ten-year process.

Key initiatives to support implementation of the Framework

A number of specific areas of work have been identified for HeadsUpScotland to complement the aims of the National Programme for Improving Mental Health and Well-being and provide further development of the plans for the children and young people target group. Three are highlighted here.

Mapping local activity and progress

In response to the challenge of implementing the Framework locally, HeadsUpScotland commissioned support for local multiagency activity. Each National Health Service board was asked to map current provision for children and young people's mental health and assess this against the Framework, highlighting areas for further development. This countrywide process allowed the development of a robust national picture of services. Inevitably, all areas had gaps, but not always in the same "context". In response, two learning collaboratives were established: one for rural areas, and a second for more urban environments. These allow participants to bring their challenges with Framework implementation for discussion and support. This work is under way and there are plans to ensure that non-National Health Service orientated groups meet occasionally with the specialist children's mental health clinicians group.

"Young Scotland in mind"

A second specific area focused on the need to ensure that the contribution made by NGOs was fully recognized and supported. Funds were allocated to one of the bigger NGOs to establish a forum – "Young Scotland in mind" – for those working in NGOs either in mental health or with children and young people. This has enabled organizations who traditionally work in mental health but with a more adult focus to meet with those NGOs who have expertise in children and young people's issues, while at the same time helping NGOs who work with children and young people to appreciate better the major contribution

they make to their mental health and well-being. This network is now well established and seeks to develop local networks through which practitioners can share and learn together about issues relating to their work and the mental health of children and young people.

Involving children and young people

Involvement of children and young people provided a third important focus for the work. The need to ensure that their voices are heard in making decisions about how services they use affect their mental health is increasingly recognized. This involves all services used by children and young people, not only those that have a specific mental health remit. In addition, it is recognized that the process of finding your voice and having it listened to is mentally health-promoting in its own right. Accordingly, a participation partnership group was established by HeadsUpScotland, with three of the major NGOs playing a lead role in supporting the work. A piece of research is under way to assess how much children and young people are actually involved in work across Scotland.

In addition, two exemplar areas have been identified which are seeking to engage children and young people in the work and activity of the local community, supported by a participation worker. Staff who work in the exemplar areas with children and young people are being trained in a range of methods that improve involvement and participation. A national event for 120 young people was held in November 2006.

These are three of the main strategic areas of work for HeadsUpScotland. At the same time, there are many other strands of work being developed, such as: workforce capacity; the development of support resources (training packs, web sites and courses) for staff; specific initiatives and interventions in schools; the development of advisory reports on infant mental health and primary mental health work; and the hosting of national conferences that encourage people to get more involved in work for children and young people's mental health.

Links to European policy

The work of HeadsUpScotland reflects both the scope and priorities outlined in the *Mental Health Declaration for Europe* (15). There is action in each of the priority areas of the Declaration: fostering awareness of mental health; collectively tackling stigma; designing and implementing comprehensive, integrated mental health systems that cover promotion, prevention, treatment, care and recovery; supporting the development of a competent workforce; and encouraging and facilitating service-user and carer involvement.

In addition, HeadsUpScotland is closely aligned with the guiding principles of the *WHO European strategy for child and adolescent health and development* (16). For example, supporting the participation of children and young people in service development and delivery is a core element of the Participation Partnership Group. In addition, support to local areas related to the Framework and "Young Scotland in mind" is based on the need for stimulating concerted intersectoral action and collaboration across the spectrum of care.

Lessons learned

HeadsUpScotland is not a traditional "intervention" in the classic sense; it is a wide-ranging programme that is attempting to address several major strands of work simultaneously, aspiring to lead ultimately to a major cultural and mainstreaming shift. HeadsUpScotland is still active (with at least one further year to run) and it is timely that the opportunity should be taken at this point to review "lessons learned". Using the usual approach of stakeholder involvement that HeadsUpScotland has invoked since the beginning, many people have contributed to the following section about lessons learned.

Barriers and enablers

Leadership and influence

The locus of HeadsUpScotland has given the programme a particular ability to provide leadership. As part of the wider national programme, HeadsUpScotland is directly funded by the Scottish Government; it is also linked closely to major influential

groups such as the ministerial advisory group for children’s health. The Framework was published by the government and supported by both the health and education departments. This ensured that the document became the policy framework for this area of work, and it was generally acknowledged that it had to be implemented.

An exemplar of innovative support for implementation

Another key lesson is that the provision of local support for the implementation process was both innovative and worthwhile. This work has provided a baseline for how services are positioned and has provided a structure for local areas to move forward and a locus for further development of the work.

For both these points, the key issue is that governmental support for the work is essential for success.

Building a shared agenda through dialogue between different perspectives and views

The process of developing HeadsUpScotland was a long one; there was a determined effort to include stakeholders for many years in advance of its establishment. There are many different groups of professionals and voluntary organizations in the network. Challenges included ensuring adequate representation, clarifying issues of language and terminology and including the perspectives of different cultures. The recent move for different voluntary bodies forming into one committee for the purposes of implementation of the Framework has been a valuable development.

The aim was to create a shared agenda and to explore varying perspectives and views. Early work to build strategic vision helped address this. At a later stage, when the work developed to focus more on implementation, it became apparent that the work of “building bridges” has to continue longer term.

Keeping the “big picture” in view

Many strands of work are running in parallel, and it has been difficult to keep hold of the “big picture” at times to see how all of the strands fit together. This is not so much a barrier, but is more of a tension, in that it relates to the complexities of seeking to achieve whole-system change. Ensuring that the concerns and goals of one part of the system do not distort or detract from the overarching vision and goals is a continuing challenge. Feedback from people involved locally in implementing the Framework suggests that this is a real problem for them. There is also an issue about the priority given to specialist mental health services when in competition with other areas of work for which there are clear targets and “requirements”. As with any change process, there is an enormous need to continue talking to people and feeding back to them as things develop.

Sustainability

Another significant barrier relates to sustainability. A huge amount of work has been done across sectors to raise awareness and build and strengthen capacity over the last three years, but much of this is inevitably through time-limited initiatives. This raises questions about how to ensure that understanding about the mental health of children and young people is embedded in mainstream thinking and practice (planning, policy and service delivery).

To summarize: from the experience at HeadsUpScotland, the preconditions for establishing this type of intervention elsewhere are:

- a scientific evidence base underpinning work in the area and research which allows tracking of health improvement at a population level;
- high-level support;
- adaptability to move with a changing policy environment – as well as influencing it;
- early involvement of stakeholders, to foster ownership;
- a willingness to take a mid- to long-term view and to build capacity;
- an openness to learn from other sectors and to work in a way that is inclusive and open;

- clarity about what is expected of people – the Framework provides a vision that is popular and to which people are willing to commit, but it is often difficult for them to see how to implement it;
- the capacity to provide support for implementation; and
- determination!

Evidence of effectiveness

The work of HeadsUpScotland overall has been rooted in the Framework, which provides a robust analysis of what promotes mental health and what needs to be done to improve it. Evidence of effectiveness is therefore largely indirect, in that the initiatives developed have been designed to address recognized deficits or flaws in the system. Evidence is emerging, but there needs to be more collation and distribution of the evidence so that others can see what can be done.

HBSC provides useful data on aspects of mental well-being among 11–15-year-olds in Scotland and this has been used to present an overview of trends and inequities on a number of different measures for this age group. There is a need, however, for a comprehensive assessment of the mental health and well-being of Scotland’s children and young people, including both younger and older age groups and on a wider range of indicators. This is needed to provide a baseline from which to monitor change, to assess future trends and to inform decision-making about priorities for action and resource allocation.

In support of the Scottish Government’s drive on mental health improvement as part of overall health improvement, NHS Health Scotland (Scotland’s national health improvement agency) is working to establish a core set of defined national indicators for children and young people that can be used to create a summary mental health profile for Scotland. This will enable a fuller overall assessment of the mental health and well-being of adolescents to be made. Capitalizing on work which established an indicator set for adults, this indicator set will cover not only mental health status (positive mental health and mental health problems), but also the wide range of determinants (risk and protective factors) that act at many levels, from individual, through community, to societal.

Building local capacity

Human resource capacity has been developed through a range of well-considered initiatives targeted at different tiers and sectors. This involves training the existing workforce by, for example:

- offering ideas on models of working that broaden the types of workers who can be employed to deliver a service;
- offering a highly relevant “new to child and adolescent mental health services” training package to ensure new workers have the relevant skills; and
- providing ideas to child and adolescent mental health services about efficiency improvements within existing resources (for example, the Seven Helpful Habits workshops).

It also involves developments such as the National Interagency Training Resource and the “HandsOnScotland” web-based toolkit for the nonspecialist workforce. Just as importantly, however, it is recognized that building capacity for partnership working is an important strand of work. More generally, the process of implementation of the Framework is one that can be used to engage other services around the issue of children’s mental health. That engagement is critical, but it is also a role that requires particular skills and approaches. It is not yet a role that is widely recognized and there are few people with the time and remit to do it consistently. Again, good practice examples exist, but they need to be generalized.

Addressing inequities

This is a complex issue and perhaps one of the biggest challenges. The framework recognizes the components of social exclusion and the ways in which these correlate with mental health problems. To ensure that better use is made of the available knowledge about the damaging long-term effects of inequities on the mental health of children and young people in Scotland, it would be good to see a stronger focus on this in local priority setting and more explicit expectations about what

local service systems should be doing to address mental health inequities. However, there are issues of culture and rurality that are less well recognized, or at least are less well addressed, and these have a significant impact on outcomes for children and on the capacity of services to respond to need. The balance between universal and targeted approaches is key to inequity issues but has to be developed on the basis of local need. If a national policy is to be implemented across areas with such different local profiles, those differences have to be reflected in approaches and in funding levels.

Building national and local alliances for mental health and well-being

At national level, being able to demonstrate that mental health is not “new” but is part of what is already being addressed by a range of agencies and being more explicit about improving mental health outcomes for children and young people helps to take partners further towards the goals to which they are already committed. Without paying more attention to mental health, many of the problems that services currently react to will persist. Mental health improvement is an opportunity to take a pre-emptive approach, and the long-term social and economic costs to society of mental health “casualties” need to be continually identified, if things are not done differently.

At local level, it is more about process. Engagement is a two-way process and requires specialist children and young people’s mental health services to reach out to others and build relationships with them. The process is then about negotiating a shared way forward, rather than telling other agencies what they should be doing. This is a skilled role and one that is not sufficiently valued yet.

In conclusion, the partnership approach adopted by HeadsUpScotland has been central to success to this stage. The range of work is complex and there is a continuing need to strive for clarity. There is also a need for patience. Sometimes it appears that progress is very slow for a long time, but then the idea “tips” and suddenly takes off. Scotland may be in that situation. The implementation support work is beginning to uncover good information on what will help us reach a tipping point.

HeadsUpScotland has learned a lot about children and young people’s involvement and has made great progress. It is happening locally, but not yet widely. The lesson, as with much else here, is that the only way to learn how to do it is to get started and then to reflect and develop based on that experience.

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**WHO/HBSC FORUM 2007:
Social Cohesion for Mental Well-being among Adolescents**

VIAREGGIO, ITALY, 5–6 OCTOBER 2007

AGENDA

Friday, 5 October

Welcome by Chair (first day): Clive Needle, Director, EuroHealthNet

Opening statements:

- Enrico Rossi, Regional Minister of Right to Health, General Direction of Right to Health, Tuscany Region, Italy
- Gudjón Magnússon, Director, Division of Health Programmes, WHO Regional Office for Europe

The Forum 2007 journey thus far – Emma Witney, Head of Healthy Settings, NHS Health Scotland, United Kingdom

Session I: The evidence base

Adolescent mental well-being and follow-up to the 2005 European Ministerial Conference on Mental Health

- Matthijs Muijen, Regional Adviser for Mental Health, WHO Regional Office for Europe

Adolescent mental well-being and the new *European Strategy for Mental Health*

- Jürgen Scheftlein, Policy Administrator, DG Health and Consumer Protection, European Commission

Panel: Resources, tools and know-how for adolescent mental health promotion

Introduction (“The Evidence”) and Monitor: Eva Janè-Llopis, WHO Temporary Adviser on Mental Health Promotion and Mental Disorder Prevention

- Dainius Puras, Head and Associate Professor, Centre of Child Psychiatry and Social Paediatrics, Vilnius University, Lithuania: representing CAMHEE (Child and Adolescent Mental Health in an Enlarged European Union)
- Peter Paulus, Head of Unit, Centre of Applied Sciences of Health, Leuphana University of Lueneburg, Germany
- Sarah Stewart-Brown, Director of Health Sciences Research Institute, Chair of Public Health, Warwick Medical School, University of Warwick, United Kingdom

Discussion with the audience

Session II: From data to policies to action

The scientific context: what is the HBSC telling us about adolescent mental well-being in Europe?

- Candace Currie, HBSC International Coordinator and Chair, Director, Child & Adolescent Health Research Unit, The Moray House School of Education, University of Edinburgh, Scotland, United Kingdom
- Antony Morgan, Associate Director, Centre for Public Health Excellence (NICE), England, United Kingdom

Questions and answers

Interview round: using data in policy-making contexts

Monitor: Valentina Baltag, Technical Officer, Child and Adolescent Health and Development, WHO Regional Office for Europe

- Armenia – Sergey Sargsyan, Head of Centre for Child Health Care Organization and Methodology, Institute of Child and Adolescent Health
- Lithuania – Rita Pazdrazdyte, Head, Public Health Strategy Division, Ministry of Health
- Republic of Moldova – Aurelia Vomisescu, Deputy Head, International Relations and External Assistance Department, Ministry of Health and Social Protection
- England (United Kingdom) – Deborah Michel, Senior Adviser, Programme Lead, Social and Emotional Aspects of Learning (SEAL), Primary and Secondary National Strategies

Questions and answers

Session III: Addressing inequities

Child and adolescent poverty in the European Region

- Eva Jespersen, Chief, Social Policy and Economic Analysis, UNICEF Innocenti Research Centre

Socioeconomic inequities in mental health among adolescents in Europe

- Ulrike Ravens-Sieberer, Director, WHO collaborating centre for child and adolescent health promotion, Bielefeld School of Public Health, University of Bielefeld, Germany

Questions and answers

Panel: inequities in mental well-being and levels of social capital among adolescents

- Hungary – Dóra Eszter Várnai, Psychologist, Researcher, National Institute of Child Health
- Iceland – Stefán Hrafn Jónsson, Division Director, Research and Development, Public Health Institute of Iceland
- Slovenia – Helena Jeriček, Senior Researcher, Health Promotion Centre, National Institute of Public Health

Discussion with the audience and introduction to breakout roundtable discussions

Session IV: Breakout roundtable discussions

Breakout roundtable discussions

Interview with Facilitators: report on discussion outcomes

First day wrap-up: Reflections and announcements

Saturday, 6 October

Welcome by Chair (second day): Richard Parish, Chief Executive, The Royal Society for the Promotion of Health, United Kingdom

Session V: Intersectoral collaboration

The economics (within and beyond the health sector) of mental health among adolescents

- Marc Suhrcke, Scientist, Socioeconomic Determinants of Health, WHO European Office for Investment for Health and Development

Interview round on country experiences in mental health promotion in schools

Monitor: Goof Buijs, Coordinator School Programme, Netherlands Institute for Health Promotion and Disease Prevention (NIGZ)

- Belgium – Christine De Coninck, Adviser Ministry of Education, Flemish Community, Ministry of Education
- Finland – Heidi Peltonen, Senior Adviser, Department for Support for Learning, Well-being and Multicultural Education, Finnish National Board of Education
- Portugal – Maria Isabel Machado Baptista, Coordinator of Health and Promoting Schools, Ministry of Education
- Romania – Diana Tudose, Psychologist, National Centre for Mental Health, The National School of Public Health and Health Management, and Adriana Baban, Professor, Department of Psychology, Babes-Bolyai University
- the former Yugoslav Republic of Macedonia – Suzana Velkovska, Head of the Unit for Social Inclusion, Ministry of Labour and Social Policy

Questions and answers

Session VI: Involving youth

The *WHO European Strategy for Child and Adolescent Health and Development* and the principle of youth involvement

- Vivian Barnekow, Technical Officer, Child and Adolescent Health and Development, WHO Regional Office for Europe

Interview round: Involving youth in mental health promotion and the prevention of mental disorders

Monitor: Sarah Stewart-Brown, Director of Health Sciences Research Institute, Chair of Public Health, University of Warwick, United Kingdom

- Ireland - Michal Molcho, Lecturer, Department of Health Promotion, National University of Ireland
- Alcalá de Henares (Spain) - Patricio José Ruiz Lázaro, Paediatrician, Manuel Merino Health Care Centre, Madrid Health Service
- Andalusia (Spain) – Rafael Garcia Galan, Technical Councillor, Social Inclusion Service, Directorate General of Public Health, Regional Government of Andalusia
- Scotland (United Kingdom) – Anne Clarke, Senior Manager, Health Promotion, NHS Ayrshire and Arran

Short film and statement by youth from Alcalá de Henares

Questions and answers, and introduction to breakout roundtable discussions

Session VII: Breakout roundtable discussions

Breakout roundtable discussions

Interview with Facilitators: report on discussion outcomes

Closing

Fabrizio Simonelli, Head, WHO collaborating centre for health promotion capacity building in child and adolescent health, Health Promotion Programme, A. Meyer University Children's Hospital

Erio Ziglio, Head, WHO European Office for Investment for Health and Development

Short film "Write your own story"

"Escribe su propia historia", by the Directorate General for Drug Addiction Attention, Government of the Canary Islands, Spain

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Case Study Review Meeting Local Organizers (30-31 March 2007, Las Palmas, Canary Islands, Spain)

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Advice offered to case study authors

Proposed structure of a case study

It is suggested that the case study be approximately 5500 words in length and contain the following five sections:

- executive summary
- mental health and well-being status among adolescents
- social and policy context
- policy or intervention (describing a specific policy or intervention aiming to build social cohesion for mental well-being among adolescents)
- lessons learned.

Executive summary

This section should contain a succinct synopsis of the main issues covered in the case study. Please limit the word count of the summary to 500 words (included within the 5500).

Mental health and well-being status among adolescents

This section should highlight evidence related to mental well-being and mental ill health and disorders among adolescents in the country or region. Particular attention should be given to socioeconomic and gender inequalities in risk factors, health behaviours and health outcomes.

As the Forum focuses on mental well-being (including the prevention of mental disorders), it is suggested that this section look at evidence on positive health (such as life satisfaction), protection from mental ill health (self-esteem), and assets for health (such as resilience and positive family and peer communication). If the case study is at the region level, comparisons to national data could be considered.

For countries involved in the HBSC study, this section should look at how HBSC data cover issues related to mental well-being, in addition to considering other data sources. It could include analyses of the following elements of the study, as applicable:

- self-reported health
- health complaints
- life satisfaction
- Mental Health Index
- Strengths and Difficulties questionnaire
- relationships with peers, family and school
- bullying.

Crosses between the above elements, as well as with SES/FAS and gender variables, are requested. It may also be appropriate – depending on the social and policy context in the country and the policy/intervention reviewed in the study – to cross the above variables with those related to risk behaviours. For countries where HBSC data are not available, authors are encouraged to draw from other data sources.

Authors are requested to include a short description of how the evidence sources listed above have been used to inform policy-making processes.

Social and policy context

The aim of this section is to provide the case study reader with an understanding of the social and policy context within which the specific policy/intervention discussed in the next section is being implemented.

It is proposed that this section briefly highlight relevant current and recent-history social, economic and cultural factors that influence:

- the socioeconomic status of the population, with special attention to child poverty rates
- levels of social cohesion, particularly for youth
- mental well-being and mental ill health and disorders, particularly among youth.

The section could then delineate the overarching policy responses by the health sector and by other sectors. Examples include:

- mental health strategies
- child and adolescent health strategies that include a focus on mental well-being
- child poverty strategies or social cohesion policies impacting disadvantaged youth
- health promotion strategies that mainstream measures for young people's mental well-being.

Special attention could be given to intersectoral governance mechanisms that promote action and awareness on mental well-being among youth.

Policy or intervention

This section describes one national or subnational policy or intervention that promotes adolescents' mental well-being. The description should cover partners – specifying the role of the health sector – and the setting(s) where the policy or intervention works. It should explain the link to the overarching policy responses highlighted in the previous section. It should report on key elements of the design, implementation and evaluation phases, indicating if methods used have been evaluated for their effectiveness. As appropriate, it should explore how the policy or intervention addresses health inequities by reaching marginalized/vulnerable groups and describe the approach for engaging these groups.

In addition, authors may wish to explain how the policy or intervention:

- reinforces resilience
- enhances protective external factors (such as positive psychosocial environments in schools)
- involves programme beneficiaries in design/implementation phases
- is funded
- uses intersectoral (such as health–education–welfare) governance mechanisms;
- results in data/analysis that show the impact of the activity undertaken
- is followed up in the long term
- if applicable, is part of another health promotion strategy in which mental well-being is relevant.

Authors are requested to include a brief statement on how the policy or intervention relates to the following European policy frameworks:

- *Mental Health Action Plan for Europe* and *Mental Health Declaration for Europe*, both launched at the WHO European Ministerial Conference on Mental Health, Helsinki, January 2005;
- *WHO European strategy for child and adolescent health and development*, approved by the WHO Regional Committee for Europe in September 2005; and
- the Green Paper *Improving the mental health of the population: towards a strategy on mental health for the European Union*.

Lessons learned

This section should highlight challenges, successes and lessons learned identified through the planning, implementation and evaluation processes for the policy or intervention examined in the previous section.

Authors are requested to dedicate at least 700 words to this section.

The following (optional) probes may assist in drafting this section.

- What were barriers to successful implementation and what were experiences in overcoming these barriers?
- What are preconditions for establishing this type of policy or intervention elsewhere?
- To what extent is there evidence that this intervention improves mental health and/or prevents mental health problems among adolescents?
- How does the policy or intervention help build local human resource capacity?
- How can financing mechanisms be improved?
- How can beneficiaries be involved to a greater extent in policy or intervention design and implementation?
- How can the evidence base for mental well-being be strengthened?
- How can existing evidence be used to a greater extent in policy development?
- How can health inequities be addressed to a greater extent?
- Which other policies impacting adolescents could benefit from the mainstreaming of measures to protect mental health?
- What are good advocacy tools for engaging sectors other than health to address this issue?

Safeguarding the mental health and wellbeing of young people in the WHO European Region requires addressing socially determined risk factors for mental disorders and creating social environments that foster protective factors for mental well-being. The Mental Health Action Plan and Declaration for Europe highlight action in these areas. For the 2007 WHO/Health Behaviour in School-Aged Children (HBSC) Forum, countries throughout the Region analysed mechanisms for intersectoral action to promote adolescents' mental well-being, address health inequities, ensure young people's participation in the design, implementation and evaluation of policy and interventions, and translate research on young people's health into policies and action. This publication describes the Forum and presents the case studies and reviews produced for it. Representatives from the following Member States prepared case studies: Armenia, Belgium (Flanders), Finland, Germany, Hungary, Iceland, Ireland, Lithuania, Portugal, the Republic of Moldova, Romania, Slovenia, Spain (Andalusia and Alcalá de Henares), and United Kingdom (England and Scotland). Evidence reviews covered cross-national HBSC data on mental well-being in school-aged children in the Region, socioeconomic inequalities in adolescents' mental health and economic aspects of mental health in children and adolescents. The 2007 Forum was the second in a series dedicated to increasing action on the socioeconomic determinants of adolescent health.

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