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 wellbeing 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; 15year-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

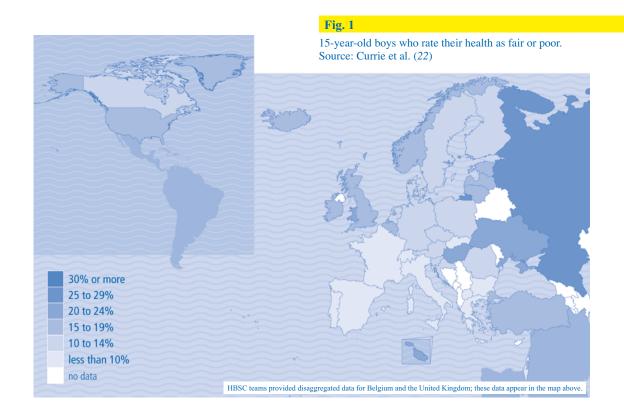
The HBSC study uses a measurement technique known as the "Cantril ladder" to measure young people's global assessment of their lives. It provides a direct assessment of the extent to which young people can fulfil their developmental tasks related to peers, parents and education. The study asks young 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.

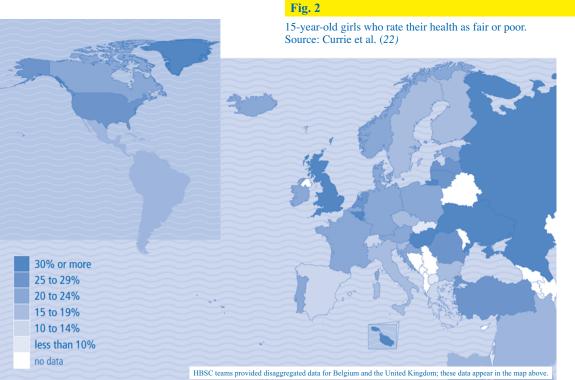
In 2002, although most young people were satisfied with their lives in all countries and regions, the geographical differences were substantial and consistent across age groups (21). Scores were consistently high in Finland and the Netherlands and low by comparison in Latvia, Lithuania and Ukraine. There 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

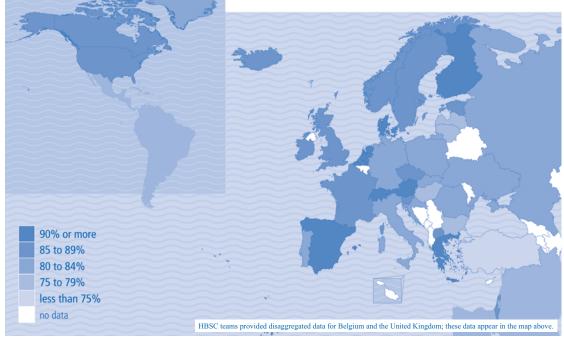
Subjective health complaints, as defined by Torsheim et al. (21), focus on those young people who experience multiple recurrent health complaints, as this is more likely to represent a significantly heavier burden on daily functional ability and well-being than single symptoms. The HBSC study uses a 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,

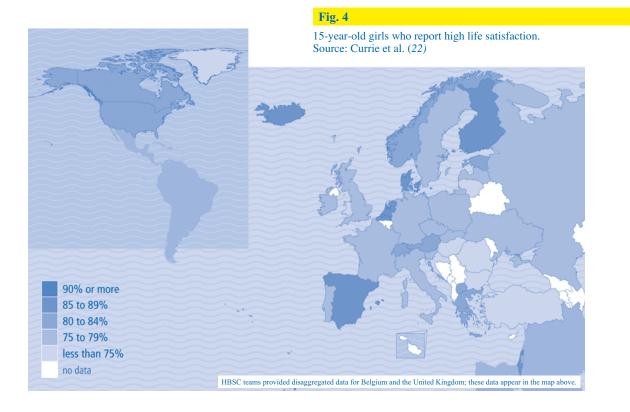






15-year-old boys who report high life satisfaction. Source: Currie et al. (22)





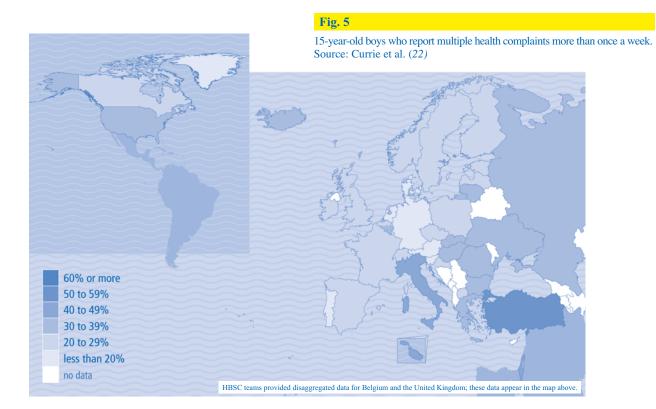
feeling low, irritability, bad temper, feeling nervous, difficulties in getting to sleep, feeling dizzy?"

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).



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.

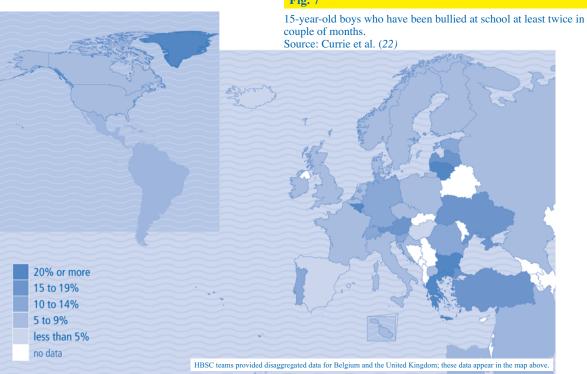
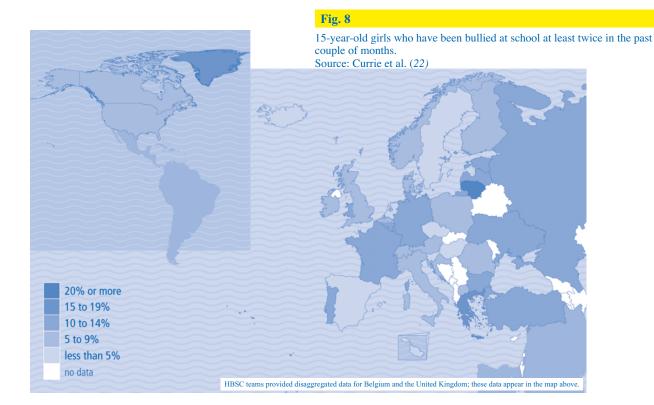


Fig. 7

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



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 aumented 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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