

CHAPTER 8

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CHILDREN'S MENTAL HEALTH IN EUROPE: THE CURRENT SITUATION AND ITS IMPLICATIONS

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SUMMARY

Mental health problems in children and adolescents are considered to be one of the global public health challenges of the 21st century. The overview of the mental health situation of children and adolescents in Europe reveals that there are different dimensions of inequalities in mental well-being. Apart from factors such as age, gender, affluence and geography, macroeconomic factors such as national wealth also play a decisive role. The analyses of European data shows that children's well-being is associated with national wealth and socio-economic status. The evidence on mental health inequalities among young people has implications for policy development at national and international levels. Furthermore, programmes devised to improve young people's health need to take into account the existing inequalities and avoid making the gaps wider.

INTRODUCTION

Over the past decades, the morbidity spectrum has changed significantly from acute to more chronic conditions, not only in adults, but also in children and young people. Not only the shift from acute to chronic disease, but also the corresponding rise of mental health problems are characteristic features of what is referred to as the “new morbidity” or “millennial morbidity” (Palfrey, Tonniges, Green, & Richmond, 2005). In fact, “mental illness is increasingly being recognized as the most significant health concern for children and adolescents in developed countries” (Suhrcke, Pillas, & Selai, 2008, p. 43). The high prevalence of mental health problems in children and adolescents is considered to be the global public health challenge of the 21st century (WHO, 2005; Wittchen et al., 2011). A substantial proportion of mental health problems in adults originate early in life. Adverse conditions in childhood and adolescence can have a long-lasting impact on children's health as the effects of these conditions may persist into adulthood (Kieling et al., 2011). Effective prevention of mental health problems in adulthood is closely associated with effective prevention in early life. Unfortunately, many children and adolescents with mental health problems do not receive the treatment they need (Wittchen, 2000).

Research evidence points out that social experience, such as maintaining social relationships, or confrontation with social problems in young life, such as exposure to violence in the family or a breakdown in social relationships, can have a (negative) impact on young people's health. Important settings for the positive development and nurture of well-being in children are schools, preschools, and other educational institutions. According to the German study of behaviour and well-being of children and adolescents (BELLA), positive changes in self-efficacy, family climate and social support are associated with fewer depressive symptoms over time (Klasen et al. 2014). During adolescence, well-being also corresponds with a successful integration into and acceptance by peer groups. In contrast, negative relationships, such as with parents, can lead to feelings of poor well-being. In connection with mental health, well-being is a critically important health outcome, both for the individual and for a community (WHO 2004). Still, mental health problems do not only cause individual and familial suffering, but also have implications for societies, e.g.

lost productivity and increased costs imposed on the health and education sectors, as well as the criminal justice and welfare systems (Belfer, 2008).

THE CURRENT MENTAL HEALTH SITUATION OF CHILDREN AND ADOLESCENTS

Although the physical health of children and adolescents has been continuously improving, children and adolescents today are more likely to experience mental health related problems, such as social, emotional and behavioural difficulties (Wille & Ravens-Sieberer 2010). Mental health problems in children and adolescents cover a wide range of disorders and include depressive disorders, anxiety, disruptive disorders and eating disorders (Wille & Ravens-Sieberer 2010). The representative BELLA Study revealed that approximately ten percent of children and adolescents in Germany suffer from mental health problems (Ravens-Sieberer et al. 2007). Over a 6-year-period one could observe a persistence of mental health problems in 2.9% children and adolescents, and 7.3% had acute or recurrent mental health problems (Ravens-Sieberer et al. 2014). The prevalence rates in other national studies ranged from 9.5% in Great Britain (Ford et al. 2003) to 22.5% in Switzerland (Steinhausen et al. 1998). Caution is necessary when comparing these rates, as differences in prevalence rates are primarily methodological in nature and a result of the approaches used (questionnaires vs. interviews), the selection of instruments, the information source used (child vs. parent vs. teacher vs. a combination of these), as well as the way data is presented. Another limitation is often also the small sample sizes and the age range chosen which hinder true cross-national comparability. A recent meta-analysis of 33 studies found an average prevalence of 17.6% (Barkmann & Schulte-Markwort 2012).

ASSESSMENT OF MENTAL HEALTH IN CHILDREN AND ADOLESCENTS

As in any kind of assessment, it is indispensable that measurement tools/ instruments exhibit good psychometric properties and are practicable in their use, i.e. can be easily administered, scored and interpreted (Erhart et al. 2009). This also means that questionnaires need to be an appropriate length. It does not suffice to assess mental health with only one or two items, as these do not take into account all the aspects that are relevant (Erhart et al. 2009). At the same time, questionnaires should not be too lengthy, in order to avoid too many questions not being answered or questionnaires not being completed.

Utilization of psychometrically robust and valid instruments in surveys can be helpful in the monitoring of children's health and can foster the early identification of deviating developments. For this, scientifically robust and well-established indicators are necessary. Currently, information gathered is very limited and it is not possible to differentiate well enough between different groups, as "no information on the subjects' position on a mental health continuum is available" (Ravens-Sieberer et al. 2008, 31). In the WHO definition of mental health, positive mental health concentrates on well-being and the factors that contribute to staying healthy – also mentally. Research is increasingly focusing on positive mental health and recognizing it as a field "capable of generating important additional information which facilitates

further discrimination between respondents” (Ravens-Sieberer et al. 2008, p. 38). One of the top research priorities and a recommendation of the ROAMER project group (Roadmap for Mental Health Research in Europe) is in fact to increasingly address positive mental health and well-being, including protective factors, in public mental health research (Forsman et al. 2015).

The next section will describe the specifics of the assessment of mental health in children and adolescents.

What kind of reports are available?

Instruments for children are available in both self-report and proxy versions (a proxy report means that someone else e.g. the parent is reporting on behalf on the child). Self-report is the preferred method of assessing the child's health-related quality of life (HRQoL), while proxy ratings serve the purpose of assessing children's health situation if the child him-/herself isn't able or willing to answer the questions themselves (Waters 2000). Further, proxy reports (for example, completed by a parent) provide a second perspective and generally provide useful information (le Coq et al. 2000), especially considering the influence parents' perception of their child's health-related quality of life has on treatment decisions (Sprangers & Aaronson 1992). Within the KIDSCREEN-project (www.kidscreen.org), a set of health-related quality of life (HRQoL) instruments were developed for children and adolescents in both self-report and proxy versions. The brief KIDSCREEN-10 questionnaire captures “the child's perspective on his or her physical, mental and social well-being” (Ottova et al. 2012, p. 34) and can be used as a “short instrument to screen for deficits in mental health and well-being in 8 to 18 year olds” (Erhart et al. 2009, S160).

How do we deal with discrepancies between self- and proxy reports?

Even though self-reporting is the preferred method of HRQoL assessment, proxy measures are not uncommon in evaluations in children, as proxy reporting is necessary if the child cannot fill out the questionnaire him-/herself due to young age, illness or inability to self-report. Therefore, some authors recommend using proxy-reports as an additional outcome measure (Varni et al. 2007). The concept of HRQoL focuses on the patient's perception of the impact of his/her illness especially when it comes to treatment decisions and outcome measures. Self-reporting is crucial in the assessment of HRQoL, both in adults and children (Ravens-Sieberer et al. 2006). However, proxy- and self-reports do not necessarily lead to the same result, as parents or teachers will always have a different perspective than the child him-/herself, and they should therefore be used with caution (Chang & Yeh, 2005).

The literature is less clear about the level of agreement between self- and proxy-reports of HRQoL, suggesting that a number of variables influence agreement, such as characteristics specific to the rater (e.g. the child's age or parents' own well-being) or the domain being measured (Creemens et al. 2006). A review by Upton et al. (2008) showed different directions of discrepancy between self- and proxy-ratings depending on whether the reporting child was drawn from a clinical or a non-clinical sample. Proxies of non-clinical samples tended to overestimate the child's HRQoL, whereas in

clinical samples, HRQoL was underestimated in the proxy assessment. Other reviews showed that agreement is greater for domains reflecting physical activity as compared to social and emotional domains (Eiser & Morse 2001) and for children aged 6 to 11 as compared to adolescents (Achenbach et al. 1987). The latter finding is especially important to bear in mind when analyzing the results of intervention studies that include a broad range of ages that rely on proxy-reports for younger children and self-reports for adolescents. Differences between groups may be associated with interventions when they are in fact due to reporting differences (Britto et al. 2004).

Significant discrepancies between self- and proxy-ratings may hint at an invalid or unreliable report. Thus, it is crucial to consider the psychometric properties of self and proxy-reported measures (le Coq et al. 2000). Additionally, Varni et al. (2007) recommend selecting HRQoL measures that assess the same construct with parallel items in order to capture the perspective of both the child and the parent and thus make comparisons more relevant. Several instruments are available that include parallel child- and proxy-report versions, such as the PedsQL (Varni et al. 1998, 2001), the CHIP-CE (Riley et al. 2004), the KIDSCREEN (Ravens-Sieberer et al. 2014) and the KINDL (Ravens-Sieberer et al. 2001).

Significant discrepancies may persist while both proxy- and self-reports are considered “valid, and constitut[ing] important information concerning a child’s well-being” (European Commission 2009, p. 4). HRQoL ratings rely on perceptions of functioning and well-being, taking different situations, experiences and events into account. Adults and children have distinct priorities in and perceptions of life due to their difference in age and life experience and proxy reports capture “an adult’s perception of the child’s experiences”, which in itself is influenced by factors such as the proxy’s gender, age, socio-economic status and his/her relationship to the child (Eiser et al. 2000). Further, whereas children are better able to rate their internalizing problems, parents can better assess their children’s externalizing problems (Eiser et al. 2000). Hence, discrepancies in reporting may not necessarily mean that one report is more valid than the other. Rather, both reports complement each other by providing different salient information that enables researchers and clinicians to have a better and more comprehensive understanding of the child’s needs.

Since different raters validly contribute different information, proxy and child reports should be regarded as complementary information rather than a substitute of each other. To guide the use of both self- and proxy-reports, it is crucial to consider and understand the factors that influence the level of agreement, such as rater characteristics or the domain measured.

SOCIETAL LEVEL – EMPIRICAL FINDINGS AT EUROPEAN LEVEL

Three European studies provide extensive data on children’s and adolescents’ mental health and well-being: the HBSC-Study, the European KIDSCREEN study and the Flash-Eurobarometer.

Table 1
Distribution of different health types in European children
Adapted from Ravens-Sieberer et al. 2009, p. S155

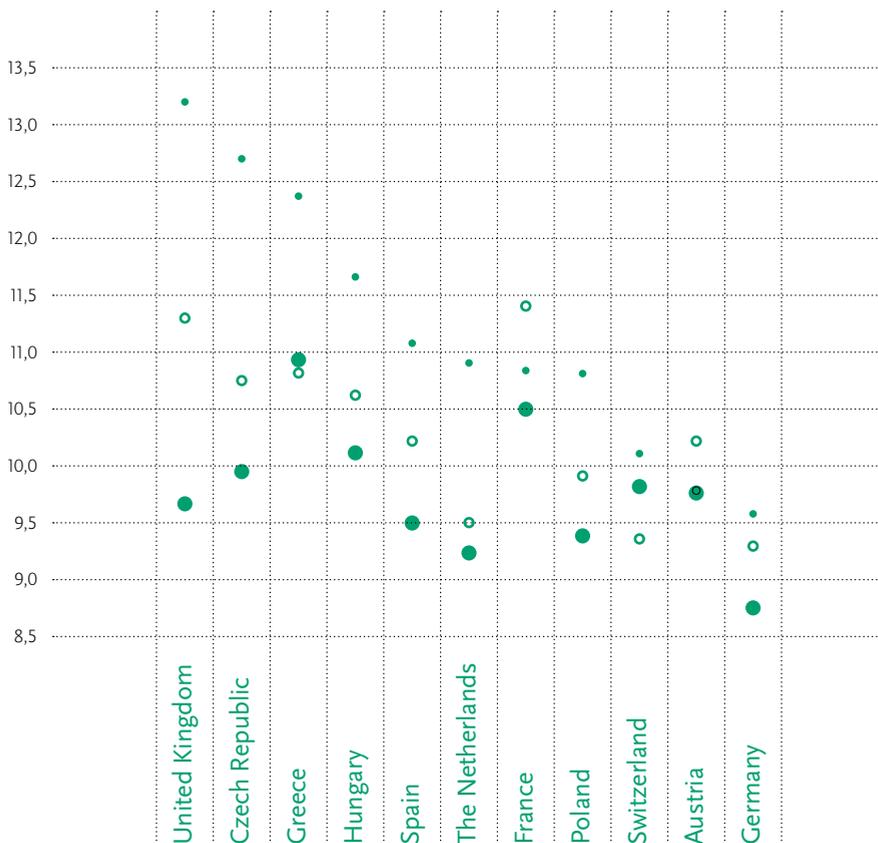
CATEGORY	HEALTHY	SPECIFIC HEALTH PROBLEMS			GENERALIZED PROBLEMS		X ² TEST
		PC	LS	GH	2 OR MORE		
Total	56.10 %	19.12 %	4.68 %	4.74 %	11.68 %		
11 years	61.19 %	18.63 %	4.34 %	4.16 %	15.29 %	P <.001 ^a	
13 years	56.10 %	19.35 %	4.56 %	4.70 %	18.89 %	P <.001 ^b	
15 years	51.30 %	19.36 %	5.13 %	5.32 %	11.37 %		
Boys	62.35 %	16.51 %	5.18 %	4.59 %	19.11 %	P <.001 ^a	
Girls	50.21 %	21.59 %	4.21 %	4.88 %	23.67 %	P <.001 ^b	
SES Low	43.55 %	20.56 %	7.11 %	5.11 %	14.65 %	P <.001 ^a	
SES Medium	56.74 %	19.07 %	4.76 %	4.78 %	11.03 %	P <.001 ^b	
SES High	63.18 %	18.36 %	3.05 %	4.38 %	9.8 %		

SES Low: Low socio-economic status, Family Affluence Scale = low
 SES Medium: Medium socio-economic status, Family Affluence Scale = medium
 SES High: High socio-economic status, Family Affluence Scale = high
 PC: Psychosomatic Complaints high
 LS: Life Satisfaction low
 GH: General Health low

The *Health Behaviour in School-aged Children (HBSC) Study* in collaboration with the WHO Regional Office for Europe has been collecting health information from children and adolescents in over forty countries in Europe and North America in a standardized form for twenty-five years. To date this is the only large-scale study in Europe that assesses a wide range of health indicators, including health behaviours, and contextual social variables (eg social determinants like socio-economic status of the family), in a standardized way thus enabling cross-country comparisons. With successive surveys every four years, trend data is collected enabling long-term monitoring of children's health development across Europe at both national and cross-national level. The data reveals the number of children and adolescents suffering from health complaints, low life satisfaction, poor general health or a combination of two or more of these, differentiated by gender (Ravens-Sieberer et al. 2009; Currie et al. 2012) (see table 1). A gender effect (girls are more likely to report worse health) becomes even more pronounced as children grow older (Ravens-Sieberer et al. 2009; Erhart et al. 2009). Furthermore, noticeable country differences for mental health and well-being emerged, with both lower family affluence as well as multiple health complaints being associated with worse mental health (Erhart et al. 2009).

The *European KIDSCREEN study* served the purpose to develop a standardized screening instrument for health-related quality of life in children and

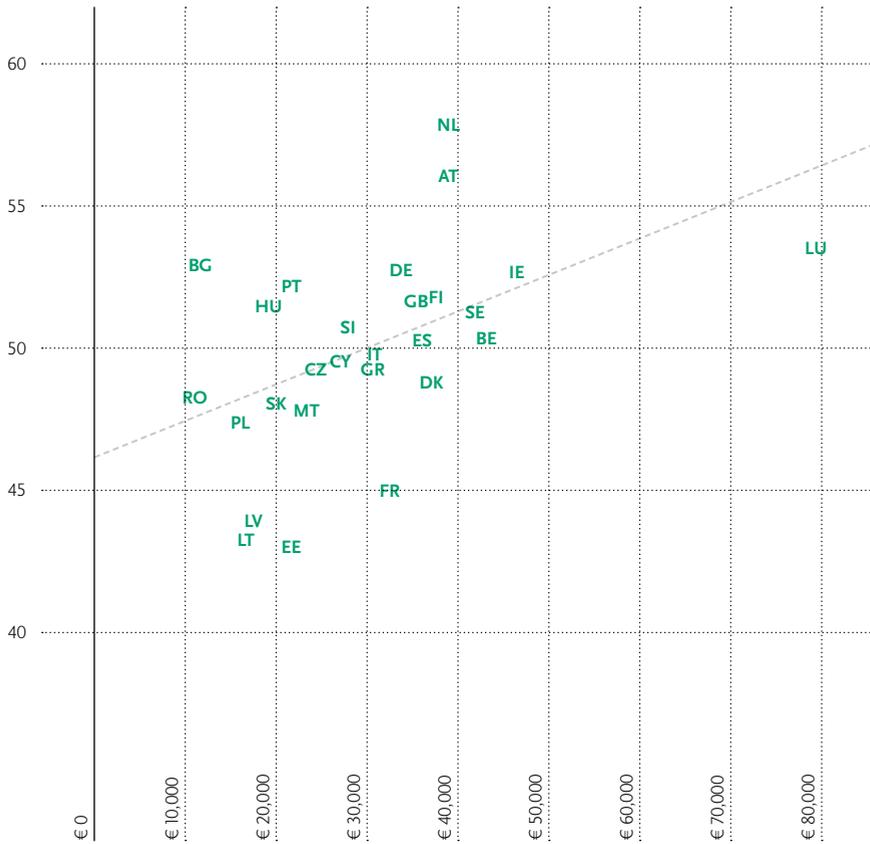
Figure 1
Mental health problems (SDQ mean score) and family affluence (FAS Group).
● FAS low ○ FAS medium ● FAS high Adapted from Ravens-Sieberer et al. 2008, p. 37.



adolescents. The development, validation and implementation of this set of generic and cross-culturally appropriate questionnaires took place in thirteen European countries that participated in the study. Results showed that between 4% and 29% of children and adolescents in European countries report noticeable low mental well-being, with highest rates of low mental well-being in Hungary, Greece and Poland (Results on low mental well-being: Netherlands 4,57%, Switzerland 6,11%, Austria 8,34%, Germany 8,84%, Sweden 10,32%, Spain 13,22%, Czech Republic 18,97% , United Kingdom 20,07%, France 22,26%, Hungary 23,89%, Greece 24,6%, Poland 28,98%).

Also, a significantly higher prevalence of mental health problems, as assessed by the Strengths and Difficulties Questionnaire (SDQ), emerged in children from less affluent backgrounds (high vs. low FAS (Family Affluence)) (Ravens-Sieberer et al. 2008) (see Figure 1). Low family affluence was also associated with low social support. Even if one takes different standards of living in the countries into account, such findings deliver valuable information and highlight the potential of comparable survey methodology and data (Ravens-Sieberer et al. 2008). In addition, lower mental well-being was associated with age and gender: the average level of positive mental health decreased with age, especially in girls. A larger proportion of girls with low mental well-being was found in nearly every European country in the survey.

Figure 2
 Distribution of countries by children's mental well-being (average KIDSCREEN-10 score) and national wealth (GDP in Euros). Adapted from Ravens-Sieberer et al. 2013, p. 3.



In contrast to the HBSC study and the KIDSCREEN study, the *Flash Euro-barometer* collected parents' views on their children's mental health (6-17 years of age). Proxy data on mental health was collected from N= 12,750 parents in 27 EU member states in the autumn of 2008. Parents were requested to answer the 10 KIDSCREEN Items "to the best of their knowledge, while ensuring that the answers they gave reflected their child's perspective" (European Commission 2009, p. 8). The majority of the interviews (75%) were with mothers. Results showed that parents had clear views on their child's mental health, and only very rarely did they choose the answer "don't know" (European Commission 2009, p. 8).

Data from this study showed that there are large cross-national differences in children and adolescents' well-being and their association with national wealth and income inequality. In addition, the analyses revealed that children's well-being as reported by parents co-varied with national wealth and socio-economic status at individual level. The application of an interval-scaled and cross-nationally comparable measure of well-being revealed a stable pattern of association between parental socio-economic status and children's wellbeing in each of the EU27 countries (Ravens-Sieberer et al. 2013). The distribution of the countries according to gross domestic product (GDP in Euros) and average KIDSCREEN-10 score is shown in Figure 2.

The results of this study showed that the variation in children's subjective health could be explained by the gross domestic product (GDP) and income inequality (Gini). The combination of poor educational background, low occupational status of the parents, living in a country with a low GDP and a high level of income inequality (Gini) was associated with an increased risk for lower quality of life and well-being in children (Ravens-Sieberer et al. 2013). These findings confirm previous studies that have found a positive association between health complaints and inequality (Holstein et al. 2009) and a higher risk of health complaints in countries with a lower HDI (Human Development Index) (Ottova et al. 2012).

The implementation of research findings in health policy

Studies, such as the WHO collaborative HBSC Survey, provide robust data on a wide range of child and adolescent health indicators that support the case for the development of policies and strategies which promote child health (Barnekow & Muijen 2009). Furthermore, HBSC "delivers researchers, practitioners and policy makers the knowledge necessary for the evaluation and further development of public health policy and practice at different levels (national, sub-national and international)" (Ottova & Ravens-Sieberer 2010, p.526).

A good example of how research data can be maximised and used for policy making in WHO Europe member countries is the WHO/HBSC Forum Series. This series was first launched in 2006 with a focus on social cohesion for mental well-being among adolescents. The WHO/HBSC Forum meetings use HBSC data to promote discussion among international partners and facilitate the translation of research findings into effective policy-making and practice (www.hbsc.org). The WHO/HBSC Forum provides an opportunity for joint working with policy makers, ensuring a better use of HBSC data in policy-making and practice, and hence, effective action on social determinants of health (Koller et al. 2009). The products of these meetings are a synthesis report and policy statements, along with additional materials as a form of support to Member States. Usually, the meetings correspond with regular WHO ministerial conferences on specific themes to ensure the greatest possible impact of the findings. Past reports addressed the topics of healthy eating habits and physical activity (2006), social cohesion for mental well-being (2007) and socio-environmentally determined health inequities (2009).

At the wider European level, there are two European projects worth mentioning: ROAMER and RICHE. ROAMER (Roadmap for Mental Health Research in Europe) is a project established to develop a Roadmap for Mental Health and Well-being Research in Europe (www.roamer-mh.org) while RICHE (Research Into Child Health in Europe) produced a Roadmap on the Gaps and Needs in Child Health Research in Europe (www.childhealthresearch.eu).

The ROAMER Project set out to produce a roadmap covering all mental and behavioural disorders as depicted in the 2010 Global burden of disease study, excluding any neurological and neurodegenerative disorders. Also excluded were substance use and alcohol use disorders. In its final report, ROAMER identified six research priorities and for each of them, the relevance for the EU was spelled out. As the authors of the report conclude, "Europe has the potential to become world-leading in mental health and well-being which

would benefit all facets of European society” (ROAMER Consortium 2015, p. 23). For this “a coordinated and multidisciplinary effort that includes policymakers, research funding bodies, professionals, researchers, individuals with mental disorders, carers and civil society to achieve proper funding of mental health research” is needed (ROAMER Consortium 2015, p. 23).

The RICHE project finished in 2013 and its main output was a Roadmap Report on the gaps and needs in child health research in Europe. This extensive report highlighted that the prevention of mental health and well-being of children and adolescents should be the overarching goal of health interventions. One of the main messages was to enhance and establish early detection (screening), monitoring systems, age- and culturally-appropriate instruments and to place a stronger focus on younger age groups. At present, measures are generally adolescent-focused and young children are under-represented in international data sources. Monitoring of children’s mental health along with the application of screening tools to detect groups at higher risk of poor mental health is an important act of prevention and a promising strategy to detect negative developments (Ottova et al. 2013).

CONCLUSIONS AND IMPLICATIONS

The overview of the mental health situation of children and adolescents in Europe revealed that there are different dimensions of inequalities in mental well-being. Apart from factors such as age, gender, affluence and geography, also macroeconomic factors such as national wealth play a decisive role. The analyses of European data revealed that children’s well-being is associated with national wealth and socio-economic status (Ravens-Sieberer et al. 2013). The evidence on mental health inequalities among young people has implications for policy development at national and international levels. Furthermore, programmes devised to improve young people’s health need to take into account the existing inequalities and avoid making the gaps wider.

As highlighted above, when speaking of mental health one needs to differentiate between mental illness and positive mental health. Current research still primarily takes on the mental illness perspective, focusing on risk factors for mental health, rather than the resources which keep a person healthy and help maintain their well-being. “The measurement of resources besides the assessment of risks in population based studies [...] is an important starting point for establishing and improving mental health-related policies.” (Wille & Ravens-Sieberer 2010, p. 138). This is confirmed by the ROAMER project group who concluded in their recommendations: “positive mental health and well-being and protective factors should be increasingly addressed in public mental health research to achieve a better understanding of the complexity of mental health and its broader determinants (Forsman et al. 2015, p.252).

The assessment of children’s mental health is only as good as the tools/ instruments used to assess it. Also, health indicators can act as a “bridge between health policy and scientific information” (Korkeila et al. 2006, p. 13). Effective indicators are indispensable as they can facilitate international comparisons that will provide valuable information about well-being in Europe’s children, leading to better identification of areas needing support to improve

children's well-being. In addition, measuring well-being internationally will lead to greater acknowledgement of the importance of well-being in young people. (Ottova et al. 2013).

Finally, and very importantly, there is a need for more European comparative longitudinal studies in specific health areas, to conduct meaningful cross-cultural/cross country comparisons through validated and routinely implemented indicators, and to develop age-related indicators further in specific research areas (Ottova et al. 2013).

In order to obtain comprehensive and comparable information on the current health situation of children and adolescents today, a European health survey for children in all age groups (from infants to teenagers) needs to be established (Ottova et al. 2013). By assessing their health needs and their experiences of health, children will (hopefully) become more visible in health surveillance and research.

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BIOGRAPHY

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