Abstracts
HBSC International Meeting Reykjavík, Iceland, 18-20 June 2019
Preface

The HBSC Spring meeting 2019 takes place in Reykjavik, Iceland. This booklet contains the 26 abstracts that have been submitted to the meeting and will be presented during the parallel sessions. Additionally, there are 12 abstracts which will be presented as posters.

The following parallel sessions take place at the meeting:

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- Methodological concepts, challenges and advances
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- Mental health and wellbeing
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- Policy and socio-cultural influences
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1: ORAL PRESENTATIONS
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Adolescents in a digital world

Predictor for Internet Gaming Disorder in adolescents in Slovenia

Authors: Helena Jeriček Klanšček, Tina Zupanič, Saška Rošar and Maja Roškar

Abstract: In recent years, online gaming has become more popular and can also lead to online gaming addiction. This is a relatively poorly explored area where the findings of the studies are contradictory. The objective of this article is to investigate the prevalence of online gaming and predictors for Internet Gaming Disorder among Slovenian adolescents. The survey use Slovenian data of a quantitative international cross-sectional study Health Behavior in School-aged Children from the year of 2018. This is a representative sample of 11-, 13-, 15- and 17-year-old schooling adolescents (n =7449). The data were analyzed with the SPSS Statistics 25 program, the chi-square test and with the use of the multivariate logistic regression. The results show that 19% of young people play online games almost every day, 20% are playing 2 or more hours per day, mostly boys in the age of 13 years. Higher odds for Internet Gaming Disorder are held among male adolescents (OR=4,5), those who have more difficulty to communicate with their father (OR=1,4), who experience multiple health complains more than once a week (OR=1,8), who bully (OR=2,3) or are bullied (OR=1,3), who feel more pressured by the school work (OR=1,4) and among those who have less friends support (OR=1,2). The findings of our research are consistent with the findings of other studies. Based on the findings, we can plan new programs focused on prevention, health promotion, and protective factors. More in-depth quantitative and qualitative studies of these topics would also be useful.
Adolescent overweight misperception and problematic social media use

Authors: Natale Canale, Alessio Vieno, Michela Lenzi, Claudia Marino

Abstract: The intense increase in adolescents’ social media use has facilitated the proliferation of idealized, yet extreme body shapes amongst youth. Although empirical studies have suggested that social media use is positively related to adolescent boys’ and girls’ body dissatisfaction, less it is known about the association between body imagine and problematic social media use. The present study examines the prevalence of adolescent overweight misperception and the role of problematic social media use in predicting this health issue across different countries. Data come from the 2018 HBSC (only 15-year-old adolescents) in 40 countries. A generalized linear mixed-effects model was used for testing the association between overweight misperception and problematic social media use (controlling for gender and family affluence scale and using countries as random effect). We relied on the cut-off of 5 or more (old version) for problematic social media users. Misperception of overweight was common, with 9.5% of boys and 25.0% of girls classified as normal weight or lower (according to self-report weight and height) perceiving themselves as overweight. Large differences exist between countries, whereby Poland has the highest prevalence of misperception of overweight (16.5% for boys and 44.1% for girls) and Serbia the lowest (3.0% for boys and 4.6% for girls). Problematic social media use showed a significant positive association with adolescent overweight misperception, with more girls characterized by both conditions than boys. The study indicates that problematic social media use can be a potential predictor of adolescent overweight misperception. Implications for future investigations will be discussed.
Electronic media use and adolescents’ psychosomatic symptoms

Authors: Curt Hagquist

Abstract: The possible impacts of adolescents’ electronic media use on their mental health are increasingly investigated. Many empirical studies have reported a negative association showing higher degrees of mental health problems among users of electronic media than among nonusers, but causality has yet not been proven and the direction of the association is an open question. The purpose is to examine the associations between time spent on different electronic media and adolescents’ psychosomatic problems. Swedish HBSC data collected 2005/06 and 2013/14 among grade 9 students were used. The dependent variable was a composite measure based on the HBSC Symptom Checklist (HBSC-SCL). The variable was dichotomised, above or below the 90th percentile. Time spent on TV/DVD/Video, computer and gaming was used as independent variables in three separate logistic regression analyses, controlling for gender, sleep habits and cohort. Only for the most frequent users of electronic media there was a consistent pattern of associations with psychosomatic symptoms across the three types of electronic media. For computer use, the only significant association with psychosomatic symptoms was for those using computers 7 hours per day. In this group, the odds of reporting higher degree of psychosomatic problems was twice as high compared to non-users. Regardless of type of electronic media there was no linear relationship between hours spent on electronic media and psychosomatic problems. Whether this pattern is due to a critical threshold increasing the negative risks or reflecting a selection of users needs further investigations.
Methodological concepts, challenges and advances

Paper and electronic survey modes in HBSC – are they comparable?

Authors: Kastytis Šmigelskas, Justė Lukoševičiūtė, Tomas Vaičiūnas

Abstract: Electronic survey mode becomes more and more widely used research tool. This is strongly associated with the overall digitisation of modern society. However, the evidence on possible mode effects on study results has been scarce. To compare the findings from paper and electronic modes using a randomised controlled design among schoolchildren. Randomised controlled study was conducted in 2017 at five secondary schools in Lithuania, enrolling 531 schoolchildren aged 11–15 years. The study was conducted using the mandatory questionnaire of HBSC and included health and social topics about physical activity, risk behaviours, self-reported health and complaints, life satisfaction, bullying, fighting, family and school environment, peer relationships, electronic media communication, sociodemographic indicators etc. Within classes, the schoolchildren were randomly selected for electronic or paper mode. Questionnaires were administered in classrooms by trained researchers. For statistical analysis, the logistic regression was used adjusting by gender, grade, and school with correction for multiplicity (P<.001). It was found that the differences by study mode were inconsistent and in majority of cases did not exceed 5% point difference. The only significant difference was that in paper survey the participants reported more exercise than in electronic survey. Other trends were non-significant and did not show a consistent pattern – some healthier behaviours were more common in paper mode, others – in the electronic. The use of electronic mode in surveys of schoolchildren may provide findings that are comparable with concurrent or previously conducted paper surveys as long as the study participants are known.
Polish HBSC 2018 sample in relation to the local deprivation index

Authors: Joanna Mazur, Bogdan Wojtyniak

Abstract: For the HBSC survey in 2017/18, the sampling design was modified in Poland and as the main change stratification according to the multicomponent local deprivation index (LDI – Śmętkowski et al., 2016)) has been introduced. The administrative division of Poland comprises 16 NUTS 2 regions and 378 NUTS3 regions (counties). A two-stage sampling procedure was applied. At first 30% of counties were selected randomly and then schools were drawn proportionally to the population size in the LDI groups. The aim of the study is to compare LDI groups according to the selected social characteristics of students and their perception of the neighbourhood. Data refer to 6022 students whose records were sent to the Data Bank in Bergen. Our sample was representative for the country, with the correct representation of the regions and the urbanization rate consistent with the national data. The LDI level was associated with individual data, especially with the family affluence (p<0.001). According to structural features of the neighbourhood the curvilinear relationship was detected (p=0.004). Less straightforward relationship was noticed in relation to its social features. However, in rural regions with the lowest LDI, the level of social capital remained relatively high while in the least deprived areas was the lowest (see Table below).

<table>
<thead>
<tr>
<th>Quintile of LDI</th>
<th>% students in rural areas</th>
<th>Family Affluence</th>
<th>Neighbourhood social features</th>
<th>Neighbourhood structural features</th>
</tr>
</thead>
<tbody>
<tr>
<td>I – most deprived</td>
<td>17.6</td>
<td>73.9</td>
<td>7.17±2.07</td>
<td>10.96±3.19</td>
</tr>
<tr>
<td>II</td>
<td>15.3</td>
<td>55.8</td>
<td>7.20±2.18</td>
<td>10.72±3.29</td>
</tr>
<tr>
<td>III</td>
<td>15.0</td>
<td>58.8</td>
<td>7.57±2.30</td>
<td>10.54±3.30</td>
</tr>
<tr>
<td>IV</td>
<td>22.5</td>
<td>24.8</td>
<td>7.85±2.32</td>
<td>10.77±3.32</td>
</tr>
<tr>
<td>V – least deprived</td>
<td>29.7</td>
<td>13.5</td>
<td>8.37±2.40</td>
<td>10.38±3.36</td>
</tr>
</tbody>
</table>

Local deprivation index may enrich analyses of social inequalities in adolescent health and help in their better understanding. Our results may be also considered as an external validation of some scales describing social status of family and neighbourhood.
“What’s a normal weight?” – Weight assessment standards in Origin- and Receiving Country and Immigrant Adolescents’ Weight-Status Self-Assessment

Authors: Matthias Robert Kern, Andreas Heinz, Gonneke Stevens, Sophie D. Walsh, Helmut Willems

Abstract: Many young people struggle with correctly assessing their weight-status, often leaving over- or underweight to go unnoticed thereby preventing adequate intervention. The prevalence of weight-status misperception differs considerably cross-nationally, indicating that individual weight-status assessment is informed by culturally transmitted standards of evaluation. For adolescents with a migration background, this brings up the problem of multiple frames of reference, as their perception of weight-status may be influenced by different cultural standards. We investigate the extent to which the assessment of own weight-status is based on standards of the heritage country or the receiving country. Data are retrieved from the 2014 Health Behaviour in School-Aged Children study. The cross-national design of the study enabled us to aggregate weight-evaluation standards for 41 countries and subsequently identify a large sample of 8132 immigrant adolescents in 23 receiving countries from 41 heritage countries. The influence of heritage- and receiving country standards of evaluation was assessed using cross-classified multilevel models. Descriptive analyses reveal considerable differences in weight-evaluation standards between the countries. We find evidence of a significant influence of both heritage- and receiving culture standards of evaluation, with a stronger impact of receiving culture standards. Stratified analyses reveal a stronger influence of heritage culture standards among first-than among second-generation immigrants, and a stronger influence of receiving culture standards among second-than among first-generation immigrants.

Conclusions: The results corroborate our expectations regarding the persistency of cultural standards and help to understand inter-ethnic differences in weight-status assessment.
School

Psychometric properties of a new measure of student-teacher connectedness for adolescents. Results from the HBSC 17/18 study in England and Spain

Authors: Irene García-Moya, Fiona Brooks, Carmen Moreno

Abstract: Research on adolescents’ school experiences has often focused on general assessments of the quality of student-teacher relationships, but such approach fails to capture the connectedness phenomenon, since most adolescents connect with one or a few specific teachers. To describe the development of a new measure of student-teacher connectedness and to examine its psychometric properties using data from the HBSC study in England and Spain. 10,323 students took part in the pilot study of the Teacher Connectedness Project, which was included in the 17/18 edition of the HBSC in England and Spain. They answered 15 items about student-teacher connectedness that had been developed based on the literature review and qualitative components of the Teacher Connectedness Project. After examining item performance, factorial structure was assessed using EFA and CFA. We also tested the invariance across countries. We obtained a 14-item scale that showed a high reliability and a similar factorial structure in both samples. Although EFA suggested a unidimensional model, CFA showed that modeling 3 dimensions of connectedness as related factors showed a better fit to the data. Importantly, the model showed configural and metric invariance across countries. The obtained 14-item scale showed good psychometric properties in large samples of adolescents from England and Spain and invariant performance across these countries. This makes it a promising tool for the next edition of HBSC, where it can complement the existing general assessment of perceived teacher support.
Students’ prosocial behaviour in relation to goal orientation and perceived academic achievement

Authors: Anna Dzielska, Joanna Mazur, Agnieszka Małkowska-Szkutnik & Anna Oblacińska

Abstract: Prosocial behavior, as a broad and multidimensional construct that includes e.g. cooperation and volunteering, is connected with personal assets, motivation and goals. Moreover, studies show that academic achievement may influence young people’s behavior and opportunities to develop social skills and relationships. Less attention has been given to finding out how the reciprocal relationships of academic achievement and personal resources can influence the ability to present prosocial behavior. This study examined the interaction of goal orientation and perceived academic achievements on students’ prosocial behavior. Data from the National Science Centre project called Health and School conducted in 2014-2017 among 2850 Polish adolescents aged 13-17 years, Goal Orientation Scale (range 0-20), perceived academic achievements scale (range 0-10) and prosocial behavior scale (range 0-10) of the Strengths and Difficulties Questionnaire were used. The mean values were: 6.58 (SD=2.13) for the prosocial behavior scale, 6.38 (SD=2.17) for the academic achievements self-perception and 12.80 (SD=4.74) for the goal orientation index. The General Linear Model (GLM) results show an interaction of the students’ goal orientation and perception of school performance in relation to the level of prosocial behavior (p <0.01). The average prosocial behavior index ranged from 4.96 (low level of goal orientation and very good school achievements) to 7.80 (high level of goal orientation and poor achievements), (see figure below). It is worth paying attention to students with very good academic achievements and poor personal assets, such as goal orientation. The cumulation of these factors caused lower development of prosocial behaviors in students.
Sexual harassment and students’ health complaints: individual and school-class associations

Authors: Sara Brolin Låftman, Bitte Modin, Petra Löfstedt

Abstract: Sexual harassment is a stressor for those who are exposed, and is likely to be associated with poorer well-being. Yet, the occurrence of sexual harassment in the school class can be stressful also for those who are not directly targeted, with potential negative effects on well-being for all students. The aim was to examine whether sexual harassment at the student- and at the school class-level was associated with students’ multiple health complaints. Data from the Swedish HBSC of 2017/18 were used, with information from students aged 11, 13 and 15 years (n=3,592 distributed across 204 school class units). Multiple health complaints were operationalised as at least two (out of eight) health complaints more than weekly. Sexual harassment at the student-level was measured by a single-item question. Sexual harassment at the school class-level was defined as the school class proportion of students exposed to sexual harassment. Two-level binary logistic regression analysis was applied. Students who had been exposed to sexual harassment had an increased likelihood of reporting multiple health complaints (OR 3.85, p<0.001). Further, compared with students attending school classes with no occurrence of sexual harassment, those attending classes where sexual harassment was relatively common had an increased likelihood of reporting multiple health complaints, even when adjusting for sexual harassment at the student-level (OR 1.39, p=0.005). Sexual harassment is harmful for those who are exposed, but may also affect other students negatively. Thus, a school climate free from sexual harassment will profit all students.
School and preschool mindfulness programmes: A systematic review of the effects on children's psychosocial and cognitive functioning

Authors: Catriona O'Toole, Mairead Furlong, Sinead McGilloway, Arild Biorndal

Abstract: Converging international evidence suggests that approximately one in four children experience a mental health difficulty with less than half of these receiving treatment from healthcare professionals. It is no surprise therefore, that school- and pre-school interventions are increasingly attractive, particularly in terms of their capacity to reach almost entire populations of children. In the past few decades mindfulness practices have been adapted for children and adolescents and a growing body of research points to the positive impact on children’s cognitive and psychosocial functioning. Despite the surge of interest, research on mindfulness with children is far less developed than that for adults and there are several issues in relation to school-based mindfulness that warrant further exploration. The purpose of this review is to assess the available evidence in order to offer a more nuanced understanding of the effects of school/pre-school mindfulness on children’s psychosocial and cognitive functioning. Studies included in this review are randomised control trials of structured mindfulness interventions delivered in schools/pre-schools, with children aged 3-18 years. Mindfulness interventions were included if they corresponded with the two-component definition of mindfulness offered by Bishop et al., (2004). This systematic review is registered with the Cochrane Collaboration. The review is ongoing, currently at data extraction phase. The search strategy yielded 5,957 results, 42 of these studies met the inclusion criteria. Discussion will focus on some methodological challenges, particularly the diversity of interventions and outcome measures, as well as the tensions inherent in the provision of school and pre-school mindfulness interventions.
A complex adaptive systems approach in Healthy School research in the Netherlands

Authors: Patricia van Assema, Nina Bartelink, Kathelijne Bessems, Gerjanne Vennegoor, Marion Willems, Stef Kremers

Abstract: In our research, we embrace the theoretical perspective of schools being complex adaptive systems. Key characteristics of complex adaptive systems include that schools consist of many interacting components, and, as a reaction to change, tend to adapt and self-organize to a state of stability. Changes and their effects are non-linear and unpredictable. Concisely, I will present the implications of this perspective for the change strategies and evaluation approaches in three of the initiatives that we are involved in: The healthy primary school of the future, the educational dietary intervention Krachtvoer for prevocational schools, and the evaluation of the Dutch Healthy School program. The complex adaptive systems approach in research can generate knowledge on which health promoting strategy works best in which context.
The Problem with Low-Prevalence of Bullying

Authors: Arsaell Arnarsson, Thoroddur Bjarnason

Abstract: Previous analysis of HBSC-data found bullying to be associated with psychological symptoms for adolescents in 28 countries in Europe and North America. However, it found that average levels of bullying did not explain between-country differences in symptom prevalence. This paper tests the hypothesis of whether being bullied in an environment where bullying is infrequent decreases adolescents’ life satisfaction. Analyses were based on the international standard questionnaire from the 2005/2006 Health Behaviour in School-aged Children study (HBSC). The sample included answers from 183,736 children in 35 Western, industrialized countries. Our results show that the negative effects of being bullied on the life satisfaction of individuals are stronger in schools and countries where bullying is less frequent. We therefore conclude that the prevalence of bullying in the students’ surroundings may act as a mediating variable explaining the relationship between bullying and life satisfaction.
Health and life satisfaction among 16 year old Icelandic students by sexual orientation: From 2006 to 2018

Authors: Einar B. Thorsteinsson, Natasha M. Loi, Arsaell Arnarsson & Sigrun Sveinbjornsdotir

Abstract: In 2006, 2010, 2014, and 2018, a large percentage of Icelandic adolescents aged 16 years (class 10 at school) responded to the Health Behaviour in School-aged Children (HBSC) survey or 43.8%, 78.6%, 80.1%, and 50.4%, respectively. The surveys included questions covering topics such as health, sexual orientation, liking school, life satisfaction, and bullying. The main objective was to examine changes to various health and social indicators over time by sexual orientation. Various health and social indicators from the different surveys were examined such as liking school, life satisfaction, bullying, general health, drug use, and support from family and friends. Changes over time show that the situation for LGB adolescents, as compared with heterosexual adolescents, was generally worse in 2010 than in 2006. However, it has improved from 2010 to 2014 and again from 2014 to 2018. With the 2018 levels generally being much better than in 2006. Life for LGB adolescents in Iceland appears to be improving over time across various health and social indicators.
Immigration background differences in adolescent mental health problems: The role of socioeconomic status and perceived discrimination

Authors: Elisa Duinhof, S. C. Smid, W. A. M. Vollebergh & G. W. J. M. Stevens

Abstract: Although several former European studies demonstrated that immigrant adolescents are at a higher risk for mental health problems than non-immigrant adolescents, relatively little is known about the role of socioeconomic status (SES) and perceived discrimination in this association. This study examined the mediating and moderating role of family SES and adolescents’ educational level, and the mediating role of perceived discrimination in the association between the immigration background and mental health problems of adolescents. Data from the Dutch HBSC study were used for which 10- to 16-year old immigrant and non-immigrant adolescents filled out a revised version of the problem scales of the Strengths and Difficulties Questionnaire. Immigrant adolescents reported more conduct problems and peer relationship problems, less hyperactivity-inattention problems, and equal levels of emotional symptoms compared to non-immigrant adolescents. Family SES partly mediated immigration background differences in adolescent mental health problems, but mediation effects were all fairly small. In contrast, strong mediation effects were found for perceived discrimination. With two notable exceptions, the relationship between immigration background and adolescent mental health problems did not vary with the adolescents’ family SES and educational level. Only in higher SES families, immigrant adolescents reported higher levels of conduct problems than non-immigrant adolescents. Furthermore, only in lower SES families, immigrant adolescents reported lower levels of hyperactivity-inattention problems than non-immigrant adolescents. While immigration background and SES are quite independent risk factors for adolescent mental health in the Netherlands, perceptions of discrimination seem to play an important role in explaining immigration background differences in adolescent mental health problems
Immigrant background and psychological complaints: the role of school composition in grade nine

Authors: Maria Granvik Saminathen

Abstract: Children with an immigrant background tend to report better psychological well-being than children of native parents. Yet, this relative advantage may vary depending on the sociodemographic composition of shared social environments such as the school. This study aimed to explore whether the immigrant density/school proportion of students with an immigrant background of the school is associated with immigrant students’ psychological complaints. Data from the Swedish HBSC of 2017/18 were used, with information from students aged 15 years (n=1,479 distributed across 77 school class units). Psychological complaints were operationalised as an index of four items. Immigrant background was defined as having been born abroad and/or having two parents born abroad. Proportion of immigrant students at the school class-level was measured as the share of students with immigration background per class in per cent. Two-level random intercept linear regression models were applied. Students with an immigration background reported less psychological complaints, on average, than native students, even when adjusting for family socioeconomic status (b=-1.08, p<0.001). Cross-level interactions showed that these students reported even fewer psychological complaints when the proportion of immigrant students at a school was higher). Immigrant students fare worse psychologically when attending schools with a lower proportion of other students with an immigrant background. This association could be linked with a lack of belonging as well as academic and social comparison processes.
Is Life Satisfaction Contagious?

Authors: Carolina Catunda, Andreas Heinz, Claire van Duin, Helmut Willems

Abstract: Life satisfaction (LS) is a major component of adolescents’ subjective well-being, facilitating adaptive development and influencing health. Literature shows that social support influences adolescents LS. In addition, the social network can affect health-related behaviors of adults - individuals that smoke or exercise tend to group together. However, the effects of others’ LS on adolescents’ individual evaluation of LS (the contagion hypothesis) is still to be addressed. To test the contagion hypothesis of adolescents’ life satisfaction (how LS of proxies influences the individual LS appraisal). Data is from 9738 students (aged 9-20) from the 2018 HBSC Luxembourg survey. A multilevel analysis was used to evaluate LS, with the school classes as subjects (model 1) to estimate the influence of being in a certain school class. Later, FAS, age and gender were entered as control variables (model 2). The grand mean (intercept) for LS in model 1 was 7.57 (SE=.03, p<.001). For model 2, FAS (b=.47, SE=.03, p<.001), age (b=-.14, SE=.01, p<.001) and gender (b=-.23, SE=.04, p<.001) were significantly predictive of LS. The grand mean for LS, conditioned on the presence of FAS, age and gender, was 9.02 (SE=.05, p<.001). Interclass Correlation Coefficient decreased from model 1 (ICC=.08) to model 2 (ICC=.04). Results suggest that part of the variance of LS can be explained by the school class level. In other words, school class clusters have an influence on their LS, indicating that the LS of adolescents from a class partially accounts for individual LS.
Positive mental health among school-aged children: a Nordic research collaboration

Authors: Charli Eriksson, Lidija Kolouh-Söderlund, Ársaell Már Arnarsson, Mogens Trab Damsgaard, Petra Löfstedt, Thomas Potrebny, Sakari Suominen, Einar Baldvin Thorsteinsson, Torbjørn Torsheim, Raili Välimaa, Pernille Due

Abstract: The HBSC study has given us the opportunity to study measures of mental health or related to mental health over a period of 12 years from 2002 to 2014 across five Nordic countries. The aim is to present a Nordic collaborative research program based on the Health Behaviour of School-aged Children (HBSC) using positive perspectives on mental health measures. The collaboration includes meetings in Sweden and one-day writing seminars before the HBSC international bi-annual meetings as well as webinars. Papers have been written on excellent self-rated health, high life-satisfaction and sleep, family communication and school pressure/stress. The data collection 2017/2018 included new measures on general self-efficacy, Self-esteem, sense of unity, loneliness and Warwick-Edinburgh Mental Well-being Scale. The collaboration has included meeting in Sweden and a one-day A special issue of the scientific journal Nordic Welfare Research on mental health among Nordic school aged children will be published later this month. Moreover, the research collaboration and best practices in school health promotion has been presented in a special report published by the Nordic Welfare Center: “Adolescent Health in the Nordic Region – Health promotion in school settings” (2019). A research plan extending the studies to longer time trends and determinants of mental health has also been developed for further Nordic HBSC research collaboration. Positive mental health needs a better understanding through theoretical and methodological development. A Nordic collaboration is beneficial.
Thursday 19th June

Mental health and wellbeing (Part 2 - Thursday 19th June)

An international lens on youth sleep: adolescent sleep duration and bedtimes on school and non-school days across 21 countries

Authors: Genevieve Gariepy, Inese Gobiņa, Frank J. Elgar, Ian Janssen, Jorma Tynjälä, Margarida Gaspar de Matos, Solvita Klavina-Makrecka, Christina Schnohr, Anita Villerušā

Abstract: Promote physical activity and psychological well-being of adolescent girls is public health priority. HBSC study is only source that provides information on wide-ranging aspects of young people’s health and well-being. This study aims to explore a relation between Adolescent girls’ physical activity and psychological well-being. The school-based survey was administered at 123 public and private schools of Georgia. The study population was young students, aged 11, 13 and 15 years. Data was collected and analyzed in 2018 by NCDC. 50.2% of study participants are adolescent girls. 10.6%, 26% and 20% of girls do physical activities 4-6 times, 2-3 times or every day. 17% of them mentioned that they never do physical activities. 39% of girls who do physical excise everyday are satisfied with their life. 30% of girls, who never do activity also satisfied with life. 34% of girls, who do excise every day, feel cheerful and in good spirits. This share is 7% less among girls who never do physical activities. 32% of adolescent physical active girls feel calm and relax. The percentage decreases by 11% among those who are not physically active. Only 4.7% of physically active and 3.1 % of physically less active girls feel depressed. Oppositely, 42.5% from physical active and 34.9% most physically inactive girls reported that feeling happy. The physical activities improve psychological well-being of adolescent girls.
Loneliness, subjective health complaints and medicine use for headache, stomachache, nervousness and sleeping difficulties among Finnish adolescents

Authors: Nelli Lyyra, Raili Välimaa & Jorma Tynjälä

Abstract: Loneliness is a hurtful subjective experience of lacking desired social relationships (Weiss, 1973). During adolescence, developmental changes and maturation increase the risk for loneliness (Laursen & Hartl, 2013) which is a risk for well-being and is associated with various negative health consequences (Hawkley & Cacioppo, 2010). The objectives are (i) to examine the prevalence of loneliness among Finnish adolescents and (ii) to analyse does frequent loneliness increase the risk for subjective health complaints and medicine use among adolescence. Finnish national HBSC data 2018 (total n=3146 in 11, 13 & 15 age groups, boys n=1562). Perceived loneliness was assessed using a single question: “Do you ever feel lonely?” Symptoms were enquired using the HBSC-SCL; self-reported medicine use during the last month was also assessed. Descriptive statistics and binary logistic regression were used. Loneliness is a common feeling in adolescents and 55% of participants experience loneliness sometimes or often. However, 15% of participants experience frequent loneliness and prevalence is higher among girls (p<.001) and among 15-year-olds (p<.001). Loneliness is also associated with higher prevalence of subjective health complaints and medicine use, especially for nervousness (OR 7.8) and sleeping difficulties (OR 5.8) and using medicine for these symptoms (OR 7.8 medicine for nervousness; OR 6.0 medicine for sleeping difficulties). This study confirmed the strong association from loneliness to symptoms and medicine use, especially for nervousness and sleeping difficulties and using medicine for those symptoms. In future there is need to examine the protective factors for loneliness and effective ways to reduce the level of loneliness of all adolescents.
Does physical activity protect against low-mood in adolescence when taking into account environmental and social factors?

Authors: Dorota Kleszczewska, Anna Dzielska, Jadwiga Siedlecka, Agnieszka Małkowska – Szutnik & Joanna Mazur

Abstract: Almost 20% of adolescents suffer from low-mood or other mental symptoms, rising the risk for depression. Unfortunately, those problems are often ignored or overlooked by adults. The purpose of the study was to analyse the prevalence of depression of young people depending on the level of their physical activity, and in the context of selected environmental factors and the quality of social relations. The survey was conducted as part of HBSC research in 2017/2018 among 5225 students from Poland. A short screening test for depression based on WHO-5 was applied as the dependent variable. 16 independent variables were taken into account (demographic features, physical activity, social and economic position and social relations). Logistic regression was estimated. 14.2% of adolescents reported depression threat symptoms. The main risk factors were low level of family support (OR=3.20), maladjustment to school (OR=2.79), inability to cope in social situations (OR=2.52) and low physical activity (OR=2.15). When planning intervention activities to protect mental health a number of environmental and behavioural determinants and their interactions ought to be taken into account.
Gender and health

“Are you a boy or girl” – Who are the non-responders?

Authors: Andreas Heinz, Carolina Catunda, Claire van Duin, Helmut Willems, András Költő, Nathalie Moreau, Emmanuelle Godeau

Abstract: In HBSC and other studies, participants who do not state their gender are excluded from the analysis. This may be appropriate if they do not answer the questionnaire seriously. However, some participants may have understandable reasons for not reporting their gender, e.g. questioning their gender identity. How many students and which students do not answer the question on gender? HBSC 2018 raw data from Ireland, Luxembourg, Belgium and France are compared. To explore the reasons for non-response, we divided the participants into 3 groups: 1. Responders answered both sociodemographic questions (age and gender) 2. age non-responders did not answer the question on age. 3. Gender non-responders answered the question on age, but not the one on gender. Between 0.8% (Ireland) and 1.2% (Luxembourg) of participants did not report their gender. About half of them did not answer the age question either. However, the other half belong to the group of gender non-responders and this group is disadvantaged compared to responders: they report lower life satisfaction, lower self-rated health, more health complaints, less peer support and their WHO-5 Well-being score is lower. Not answering the question on gender is rare. If the participants answered the question on age, but not the question on gender, then the variable gender is missing not at random. The question arises whether the group of gender non-responders should be included in the analysis and whether the question on gender should be asked differently in the future.
Adolescent girls’ physical activity and psychological well-being in Georgia

Authors: Shengelia Lela, Sturua Lela

Abstract: Promote physical activity and psychological well-being of adolescent girls is public health priority. HBSC study is only source that provides information on wide-ranging aspects of young people’s health and well-being. This study aims to explore a relation between Adolescent girls’ physical activity and psychological well-being. The school-based survey was administered at 123 public and private schools of Georgia. The study population was young students, aged 11, 13 and 15 years. Data was collected and analyzed in 2018 by NCDC. 50.2% of study participants are adolescent girls. 10.6%, 26% and 20% of girls do physical activities 4-6 times, 2-3 times or every day. 17% of them mentioned that they never do physical activities. 39% of girls who do physical excise everyday are satisfied with their life. 30% of girls, who never do activity also satisfied with life. 34% of girls, who do excise every day, feel cheerful and in good spirits. This share is 7% less among girls who never do physical activities. 32% of adolescent physical active girls feel calm and relax. The percentage decreases by 11% among those who are not physically active. Only 4.7% of physically active and 3.1% of physically less active girls feel depressed. Oppositely, 42.5% from physical active and 34.9% most physically inactive girls reported that feeling happy. The physical activities improve psychological well-being of adolescent girls.
The Effects of Gender and Family Wealth on Sexual Abuse in Adolescents

Authors: Arsaell Arnarsson, Eyglo Runarsdottir

Abstract: Sexual abuse/sexual assaults against adolescents is one of the most significant threats to their health. Some studies have found poverty to be a risk factor for sexual abuse. The aim of the current study is to investigate the effect of gender and family affluence on the prevalence of sexual abuse of 15 year old Icelandic teenagers in the 10th grade. The study is based on data collected for the Icelandic part of the Health Behavior of School-aged Children study in 2014. Standardized questionnaires were sent to all students in the 10th grade in Iceland, of which 3,618 participated (85% of all registered students in this grade). Girls were more than twice as likely to be sexually abused as boys (20.2% versus 9.1%). Adolescents perceiving their families to be less well off than others are twice as likely to report sexual abuse as those of ample or medium family affluence. However, family affluence had more effect on the prevalence of abuse in girls than in boys. Female gender and low socioeconomic status can each be seen as indices of social disadvantage and may independently contribute to the risk of sexual abuse.
Policy and socio-cultural influences

Cultural values and adolescents’ health inequalities in 21 European countries

Authors: Maxim Dierckens, Bart De Clercq, Benedicte Deforche & Vrije Universiteit Brussel

Abstract: Culture is believed to have an important impact on health and health inequalities and this may vary between countries. Empirical data are however scarce, especially in adolescent populations. To examine the impact of cultural values (emancipatory values index) on cross-national variations in adolescent health, health inequalities and evolutions in these inequalities. Individual-level data from 21 countries participating in the 2002/2006/2010/2014 waves of the Health Behaviour in School-aged Children (HBSC) study were combined with country-level data from the World Values Longitudinal Dataset (n=416777). Multilevel linear and logistic regression analyses were performed accounting for the hierarchical data structure (individual, country-year and country level). Cultural value differences between countries were weakly related to adolescents’ health and health behaviour but had a profound impact on the magnitude of inequalities. In countries characterised by a high level of emancipatory values, material (family affluence-based) inequalities in both health and health behaviours tended to be lower whereas non-material (occupational social class-based) inequalities tended to be higher, in particular for health behaviours. Preliminary results also indicated that cultural value differences between countries may play a significant role in the evolution of adolescent health inequalities. Our findings suggest that between-countries’ cultural value differences may partly explain cross-national variations in adolescents’ health inequalities and in the evolution of these inequalities. By identifying cultural value differences in health, health inequalities and evolutions in health inequalities, this study helps informing policies better to tackle these inequalities.
LGBTI+ equality, life satisfaction, and self-reported health of 15-year-old adolescents in eight European countries

Authors: András Költö, Saoirse Nic Gabhainn

Abstract: Our knowledge on the health risks of LGBTI+ youths in Europe is limited. It remains unclear how social and individual determinants contribute to health inequalities in Sexual Minority adolescents. We tested whether a country-level indicator of LGBTI+ equality predicts health of same-, opposite-, both-sex attracted and not attracted 15-year-old adolescents in eight European countries. Self-rated health of 13,624 adolescents participating in the nationally representative Health Behaviour in School-aged Children (HBSC) study were merged with Rainbow Score (RS), a country-level index of LGBTI+ equality that combines different aspects of social climate and legal protection (www.rainbow-europe.org). Country- and individual level regression analyses were performed with the RS, gender and family affluence as predictors, and life satisfaction and self-rated health as outcome variable. Contrary to our anticipation, RS was not a significant predictor of life satisfaction, either for the overall sample or stratified by romantic attraction categories. Associations between RS and self-rated health also contradicted our expectation, since higher RS predicted lower life satisfaction, overall and in different romantic attraction groups, on both country and individual level; although the slope of the regression was low (−0.01 ≤ B ≤ −0.006). Paradoxically, higher LGBTI+ equality in a given European country was not associated with life satisfaction and predicted lower self-rated health, in the overall sample as well as disaggregated for romantic attraction groups. Limited by the low number of countries, the pattern can still be related to cultural differences in health perception and communication. These associations deserve further exploration.
Analysis of factors contributing to the increase in the level of physical activity among school-aged children

Authors: Anna Matochkina, A.V.Malinin, D.N.Puhov

Abstract: Data from the World Health Organization (WHO) show the important role of a certain level of physical activity in maintaining health and well-being of children and adolescents. The HBSC study, conducted under the auspices of the WHO, demonstrates that there are a number of factors, such as family relationships, schooling conditions (the role of teachers and classmates), the use of modern communication opportunities and a number of others that affect students; interest and desire to engage in physical activity. At the same time, there is a lack of information on which of the factors are decisive and how researchers and teachers can use the results of the HBSC study to create specific approaches and technologies to increase interest and involve school-age children in physical activity. The study is aimed at applying of the application of an integrated approach and the use of elaborations created at the St. Petersburg Research Institute of Physical Culture to influence the level of physical activity of adolescents, taking into account the identified environmental factors, peer relations, family relationships and a pronounced tendency to increase of using mobile devices by adolescents. The use of these factors allowed to develop a scientifically based approach to influence the increase of interest and involvement of school-age children in physical activity. Questioning, methods of mathematical statistics, physical condition testing, pedagogical experiment. It is identified and statistically justified a number of factors affecting the level of physical activity of schoolchildren. In particular, the influence of family patterns on the indicators of the level of physical activity, social environment factors, such as peers and family culture, as well as the fact that socially active adolescents attach great importance to mobile devices. In this regard, the use of specially developed applications for mobile devices that allow to increase physical activity seems promising. The use of certain pedagogical techniques and applications for mobile devices can be a means of increasing the involvement of school-aged children in physical activity.
PART 2: POSTER PRESENTATIONS
Social indicators of health and wellbeing of Icelandic students according to sexual orientation: 2006 to 2018

Authors: Einar B. Thorsteinsson, Natasha M. Loi, Arsaell Arnarsson & Sigrun Sveinbjornsdottir

Abstract: A large proportion of Icelandic adolescents aged 16 years (class 10 at school) responded to the Health Behaviour in School-aged Children (HBSC) survey in 2006 (43.8%), 2010 (78.6%), 2014 (80.1%), and 2018 (50.4%). The participants were asked questions covering topics such as health, liking school, life satisfaction, and bullying. The objective was to examine changes to various health and social indicators over time according to an individual's sexual orientation. Questions relating to each of the health and social indicators of interest from the Icelandic HBSC survey were examined. Changes over time indicate that the situation for LGB adolescents, compared to heterosexual adolescents, was generally worse in 2010 than in 2006. However, some improvements in wellbeing from 2010 to 2014 and again from 2014 to 2018 has since been seen. The 2018 levels are generally much better than those seen in 2006. Life for sexual minority adolescents in Iceland appears to be improving across various health and social indicators.

Authors: Joanna Mazur, Anna Kowalewska, Anna Dzielska, Marta Malinowska-Cieślik

Abstract: Introduction: Looking and HBSC data, the process of decline in alcohol drinking has started in Poland in 2006, a little later than in some western countries. The gender gap has also disappeared and now girls are more likely to drink than boys. Less attention was paid to the changes in social groups. The aim of the study is to analyse trends in alcohol abuse depending on gender and the level of family wealth. The study covered 15-year-olds participating in four HBSC surveys in 2006-2018. The family wealth was analysed according to the relative distribution of FAS scale, in groups of tertiles distinguished separately for each year of data collection. As the main dependent variable, two or more episodes of getting drunk in the lifetime were selected. Among boys, a strong downward trend was found throughout the studied period, the strongest in the wealthiest families. Therefore, in 2018, the highest rate of alcohol abuse was recorded in the poorest families, while in 2006 the most affluent families were still at risk. Among girls, the systematic downward trend concerned only the poorest families. In the average affluent families the decline in drinking was delayed and observed only in 2018. In 2018, the gender gap didn’t exist in poor families (see figure below).

Young people from the wealthiest families can respond faster to a positive message of health promotion. The process of change in health behaviours is very complex and depends on gender and socio-cultural factors.
Impact of victimization and cybervictimization on generalized trust among Polish adolescents

Authors: Marta Malinowska-Cieślik, Mazur J., Małkowska-Szkutnik A., Dzielska A.

Abstract: Although many studies show that victimization causes problems in adolescents’ social health and wellbeing, little is known about role of bullying in their social competences, such as interpersonal trust. Objective(s): To exam the impact of traditional and cyberbullying victimization on the level of generalized trust among adolescents. Data from the Polish HBSC study in 2018 were used for 3693 pupils, 15-17 years old. The questionnaire included the Rosenberg Generalized Trust Scale adopted for the HBSC survey to measures generalized trust (GT). Univariate ANOVA was applied to test differences between groups in both genders and ages, by mean scores of GT, and linear regression to exam the impact of victimization to GT. In the study group 17.4% were cyberbullied, and 14.6% were bullied at least once in past two months. The mean score of GT was 8.64 points in 0-18 points scale; significantly higher in boys and younger pupils. Adolescents with no experience of bullying have got higher scores. Lower scores have been found in boys and girls who were bullied, and in case of cybervictimization GT decreased with a clear dose-response effect. Cybervictims have got lower scores comparing to other victims. Regression model showed that gender, age, and both forms of victimization predicted low GT, with stronger impact of cybervictimization. Generalized Trust Scale proved to be useful tool to understand psychological harms of peers’ violence among adolescents. Interventions should include psychological support to develop the trust as important personal resource of adolescents’ wellbeing.
Social Media Disorder and Related Factors: Preliminary Insights

Authors: Justė Lukoševičiūtė, Kastytis Šmigelskas, Judita Bulotaitė

Abstract: Social media takes increasing time in the daily life, especially among young people. Previous studies in this field show that social media disorder (SMD) is related to lower psychological wellbeing, poorer health outcomes, and unhealthy lifestyle. To evaluate the prevalence of SMD among Lithuanian adolescents and to assess the potential associations between SMD and psychological factors. The study sample comprised 3797 schoolchildren in Lithuania, aged 11–15 years. Social media disorder was considered if at least 5 of 9 symptoms were present. The associations of psychological factors were estimated using the logistic regression method, adjusting every factor by gender and grade. Internal consistency of the used scales was acceptable (minimum Cronbach alpha 0.77). In the whole sample, 12.3% of adolescents met the five criteria of SMD, 4.6% of them (0.4% of total sample) reported none of the negative outcomes (neglected activities, arguments with others, conflicts with parents). The prevalence among age and gender groups showed no clear pattern. The most common SMD symptoms were escape from negative feelings (31.2%) and failure to spend less time on social media (30.1%). The strongest associations with SMD were found for health complaints (OR=2.67), lower life satisfaction (OR=2.50), and worse sleep quality (OR=2.32). Other significant SMD-associated psychological factors were lower levels of wellbeing, self-rated health, and self-rated beauty (P<0.05). SMD is consistently related to psychological indicators. However, the causality of associations is controversial, since the factors may be the causes, the outcomes or concurrent conditions of SMD.
Perceived support from teachers and classmates: A comparative study between natives and immigrants in Spain.

Authors: Irene García-Moya, Pachón-Basallo, M., Jiménez-Iglesias, A., Moreno, C.

Abstract: Teacher and classmate support are an important area in adolescent research, since they are associated with risk behaviors and well-being. According to PISA, Spanish students have the highest school belonging among all participating OECD countries. Immigrant adolescents in Spain reported lower school belonging, but still their sense of belonging was higher than the average of immigrants in other OECD countries. The aim of the present study was to analyze adolescents’ perceptions of teacher and classmate support and to make comparisons: a) between natives, first-generation immigrants (they were not born in Spain and their parents are immigrants) and second-generation immigrants (they were born in Spain and their parents are immigrants); and b) between different zones of origin (Latin America, Eastern Europe and Central Asia, and Middle East and North Africa) in first-generation immigrants and second-generation immigrants. The sample consisted of 28,573 natives, 2,299 first-generation immigrants and 2,468 second-generation immigrants aged 11 to 18 years who had participated in the 2018 HBSC study in Spain. Mean comparisons (ANOVA) and Cohen’s d effect size tests were performed. There were significant differences with noticeable effect size in classmate support between natives and first-generation immigrants. We also found significant differences between first-generation immigrants from Latin America and first-generation immigrants from Middle East and North Africa in teacher support. First-generation immigrants reported lower levels of teacher and classmate support than natives and second-generation immigrants. Regarding zones of origin, first-generation immigrant adolescents from Latin America showed lower teacher support.
The process of knowledge transfer in the Spanish HBSC Study: A challenge to transmit information to society.


Abstract: Nowadays, knowledge transfer outside the academic sphere is becoming a challenge for research. The objective of knowledge transfer is to facilitate the use, application and exploitation of information in society in general. To describe the evolution of knowledge transfer achieved by the Spanish HBSC Study from 2002 to the present. Knowledge transfer has been evolving in the Spanish HBSC Study. At the beginning it was clearly aimed at public health professionals, but since 2010 the incorporation of new transfer mechanisms has expanded the potential audience. For example, the publication of technical, informative, and comparative reports, as well as personalized reports and infographics with the information of each participating educational center. Likewise, the use of social networks -such as Facebook and Twitter- have amplified the dissemination of results. This communication details the different ways in which the dissemination of the results of the Spanish HBSC study has been adapted to other recipients, such as teachers and directors of educational centers, political entities, project managers related to adolescent health, and society in general. This transfer process facilitates access to information from the HBSC Study in Spain and offers a better use of the resources invested in research about adolescent health.
How to classify gender identity on adolescence? Exploring the functioning of a single-item measure in Spanish school-aged adolescents

Authors: Ciria-Barreiro, E.m, Moreno-Maldonado, C., Moreno, C., & Rivera, F.

Abstract: Gender identity refers to the individual’s identification with sociocultural expectations associated with gender. In most instances, this identity is congruent with the sex assigned at birth (cisgender). Nevertheless, there are people whose gender identity that is not fully aligned with their sex (transgender, agender or genderqueer people). Estimating the prevalence of different gender identities during adolescence is not easy. The development of instruments to recognize the gender identity uses to be a methodological problem because the prevalence of these minority groups can be underestimated due to structures or contents’ biases. To examine how a single-item question can detect from a sensitive and inclusive perspective the different gender identities of adolescents. The sample is composed by 17644 adolescents aged 15 to 18 years old who participated in HBSC study in Spain in 2018. To estimate the prevalence of the gender identity categories, the Spanish team crossed the data on the demographic question about sex granted by the international team with a single-item question designed ad hoc on gender identity. Descriptive statistics were calculated. 97,81% of participants considered that their sex assigned at birth and their gender identity was congruent (cisgender); 0,50% of the adolescents judged that sex and identity was not congruent (transgender); 1,22% did not identify themselves with the binominal categories (genderqueer); and 0,45% of responses were irrelevant. Although this single-item question may help to detect different gender identities in adolescence, several limitations on its functioning were found.
Examining the mental health of young people in Spain: prevalence and relationship of bully-victim with internalizing and externalizing factors

Authors: Salado, V., Pérez-Moreno, P.; Moreno, C.; Ramos, P. y Rivera, F.

Abstract: Violence between equals, affects both internally and externally, in areas such as anxiety, depression, breaking rules, etc. Within this violence highlight a group of young people called bully-victim: boys / as responds to attacks received assaulting other partners / as. The objectives are: 1) to analyze the prevalence of bully-victim in Spanish adolescents according to sex, and 2) to examine internalizing and externalizing factors of mental health with respect to victims, aggressors and those who have not suffered or exercised violence. The sample consists of 5951 adolescents between 13 and 18 who are part of a sub-study of the Health Behavior in School-Aged Children in its 2018 edition. The instruments used were 112 items of the mental health screening questionnaire Youth Self-Report, belonging to the ASEBA (Achenbach System of Empirically Based Assessment). 94.3% of the adolescents studied have not suffered or mistreated. 2.2% of these young people have such violence and 2.6% suffer it. The bully-victim group represents 0.8% of the sample analyzed. At the global level, highlight a large effect size in the bully-victim group, with a greater impact on externalizing factors. In terms of sex, the boys in the bully-victim group obtain overall scores higher than the rest of the groups and the girls in social problems. The incidence of the factors studied in the bully-victim group usually outperform the rest of the groups in most cases. Importance of the different contexts of development as prevention of mental health of these young people Extracurricular physical activity involvement and family affluence as factors modifying adolescents’ academic achievements.
LGBTI+ equality, life satisfaction, and self-reported health of 15-year-old adolescents in eight European countries

Authors: András Költö, Saoirse Nic Gabhainn

Abstract: Our knowledge on the health risks of LGBTI+ youths in Europe is limited. It remains unclear how social and individual determinants contribute to health inequalities in Sexual Minority adolescents. We tested whether a country-level indicator of LGBTI+ equality predicts health of same-, opposite-, both-sex attracted and not attracted 15-year-old adolescents in eight European countries. Self-rated health of 13,624 adolescents participating in the nationally representative Health Behaviour in School-aged Children (HBSC) study were merged with Rainbow Score (RS), a country-level index of LGBTI+ equality that combines different aspects of social climate and legal protection (www.rainbow-europe.org). Country- and individual level regression analyses were performed with the RS, gender and family affluence as predictors, and life satisfaction and self-rated health as outcome variable. Contrary to our anticipation, RS was not a significant predictor of life satisfaction, either for the overall sample or stratified by romantic attraction categories. Associations between RS and self-rated health also contradicted our expectation, since higher RS predicted lower life satisfaction, overall and in different romantic attraction groups, on both country and individual level; although the slope of the regression was low (−0.01 ≤ B ≤ −0.006). Paradoxically, higher LGBTI+ equality in a given European country was not associated with life satisfaction and predicted lower self-rated health, in the overall sample as well as disaggregated for romantic attraction groups. Limited by the low number of countries, the pattern can still be related to cultural differences in health perception and communication. These associations deserve further exploration.
Action to reduce school bullying among adolescents in Ukraine

Authors: Daria Pavlova, Olga Balakireva, Tetiana Bondar

Abstract: Bullying remains an understudied problem in Ukraine. Conflict in the East of the country added to the level of aggression in society. Measures taken in the context of the economic and political crisis do not lead to a significant reduction in bullying among adolescents. In 2018 Ukrainian Institute for Social Research after Oleksandr Yaremenko conducted all-Ukraine survey within the framework of cross-national “Health Behavior in School-Aged Children” project, which is being implemented with the support of the UNICEF Ukraine. Research group covered 13,337 respondents aged 10-17 years, studying in secondary school (Grades 5–11), and vocational technical education institutions (Years 1 and 2) and pre-higher vocational education institutions (after nine years of general secondary education). In 2018 40% of boys and 30% of girls participated in bullying others during the last two months. In total, 38% of adolescents have been bullied by other students during the past 2 months. As a result of the schools initiatives, WHO support and implementation of local anti-bullying activities the number of those who reported being bullied during the last two months reduced from 50% in 2006 to 35% in 2018. To support the positive trend the President of Ukraine signed a Law against bullying in January, 2019, where actions of bullying are subjects of penalties. The organization of bullying prevention among adolescents should encompass, first of all, the system of psychological and pedagogical actions: the diagnostics of psycho-emotional environment, motivational and educational work with school administration, pedagogical staff as well as adolescents and parents.
The study of Russian adolescents' emotional state

Authors: T.V. Sviridova, S.B. Lazurenko, O.V. Komarova, A.I. Matochkina

Abstract: It is known that in adolescence, due to significant psychophysical changes, children are at risk of emotional disturbance, including depression and, as a consequence, suicidal thoughts or attempts. To study the emotional state of today's Russian adolescents and the social factors affecting it, the results of a survey of 4661 people from 8 regions of Russia were analyzed using the questionnaire's scales "Pupils behavior towards health" (Data from the Russia HBSC study). Spearman rank correlation analysis method was used for statistical processing. It was found that at least once a week, 24.4% of people complain of a bad mood and 14.15% of people experience depressed mood. What is more, there is a direct correlation between the negative emotional state of adolescents and the type of relationship with parents (misunderstanding situations by parents - $r=0.23$), peers (difficulty of making contact - $r=0.234$) and teachers (unfair marks - $r=0.205$). The growing emotional difficulties, which manifests itself as dissatisfaction with oneself and life ($r=0.4$), is seen in adolescents with age ($r=0.185$). Thus, about 1/3 of adolescents can be classified as being at risk for mood-lowering and depression, which convincingly proves that there is a need for complex medical and social support, which must include medical and social work with students and their immediate social environment (family and teachers).
Prospective associations between cannabis use and negative and positive health and social measures among emerging adults

Authors: Liat Korn, Denise L. Haynie, Jeremy W. Luk, Bruce G. Simons-Morton

Abstract: This study identified prospective associations between cannabis use during first-year post high-school and a wide range of positive and negative health and social measures one year later. Data were from Waves 4 (Time 1; 1st year after high-school) and 5 (Time 2; one year later) of the NEXT Generation Health Study, a national sample of emerging adults in the United States (n=1915; mean age=20.2; 61% female). Multinomial logistic regressions adjusting for pertinent covariates were conducted to examine odds of variables at Time 2. Compared with non-use, frequent use (20+ times in the past year) at Time 1 was associated with Time 2 negative health and social measures, including risky driving behaviors (AOR=1.78, CI-1.45–2.19), depressive symptoms (AOR=1.68, CI-1.43–1.98), unhealthy weight control behaviors (AOR=1.55, CI-1.31–1.84), psycho-somatic symptoms (AOR=1.55, CI-1.30–1.83), and low school achievement (AOR=1.46, CI-1.23–1.75). Frequent users relative to non-users had a lower probability of being overweight and obese (AOR=0.75, CI-0.60–0.92). Regarding positive measures frequent users relative to non-users had a higher probability of meeting recommendation of physical activity (AOR=1.28, CI-1.09–1.51), but a lower probability of consuming fruits and vegetables (AOR=0.82, CI-0.70–0.96) or attending college/university (AOR=0.57, CI-0.44–0.75). Results demonstrate complex prospective patterns in which significant prospective associations with most adverse measures were found for both occasional and frequent users, and with few significant associations of positive health measures mostly among occasional cannabis users.