









NATIONAL REPORT SURVEY IN ALBANIA

Health Behaviour in School-aged Children - 11, 13, and 15 years old 2021-2022

This report presents the findings of the 2022-2023 Healthy Behaviors of School Age Children (HBSC) Survey, which was conducted by the Faculty of Medicine in Tirana. United Nations Children's Fund (UNICEF), United Nations Population Fund(UNFPA) and Swiss Project "Schools for Health", provided technical and financial support for the realization of this survey.
The materials and information in this Report comprise solely the authors' views and do not necessarily represent the perspective of the Faculty of Medicine or other partners involved.
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Faculty of Medicine or other partners involved.









NATIONAL REPORT FROM THE 2021/22 SURVEY IN ALBANIA

Health Behaviour in School-aged Children - 11, 13, and 15 years old

TABLE OF CONTENTS

Background information on HBSC	8
Aim and objectives of the study	10
Methodology	10
Main areas of the hbsc study	14
Study results	23
1. Demographic characteristics	23
2. Social context	23
3. Family affluence	32
4. Health outcomes	38
5. Health behaviours	51
6. Risky behaviours	64
7. COVID-19	86
Discussion and conclusions	94
References	100

ACKNOWLEDGMENTS

Health Behaviour in School-aged Children - 11, 13, and 15 years old" 2021/2022 (HBSC), was conducted by experts from the Faculty of Medicine in Tirana (Department of Public Health) and the Institute of Public Health and was supported by the Swiss Project "Schools for Health," UNFPA, and UNICEF Albania.

Special thanks to all members of the working group for their contribution and valuable comments:

PROF. GENTIANA QIRJAKO, principal investigator and HBSC coordinator, Department of Public Health, Faculty of Medicine

PROF. XHELADIN DRAÇINI, Faculty of Medicine

PROF. ENVER ROSHI, Department of Public Health, Faculty of Medicine

ASSOC. PROF. ALKETA HOXHA QOSJA, Department of Paediatric, Faculty of Medicine

EUGENA TOMINI, PhD., Ministry of Health and Social Protection and Institute of Public Health

RUDINA ÇUMASHI, PhD., Health Promotion Expert, Institute of Public Health

MRS. ALBANA ÇELAJ, Ministry of Education and Sports

EDLIRA SINAJ, PhD., Agency for Pre-University Education Quality Assurance

MRS. MIRELA CAMI, Health Care Service Operator

PROF. GENC BURAZERI, Save the Children, "Schools for Health" project

MARIANA BUKLI, PhD., UNICEF Office, Tirana

MRS. ELSONA AGOLLI, UNFPA Office, Tirana

NELI DEMI, MD., WHO Office, Tirana

Thanks to all collaborative institutions which participated in the compilation of this report: Ministry of Education and Sports, Faculty of Medicine, and Institute of Public Health and Operator of Health Care Service.

Furthermore, a special thanks to all the children and adolescents who participated in the survey from all regions of Albania.





BACKGROUND INFORMATION ON HBSC

The study "Health Behaviours in School-aged Children - 11, 13, and 15 years old" (HBSC) is the only international study of the WHO Regional Office for Europe, that goes beyond its geographical boundaries. This study focuses on adolescent health-related behaviours in a large number of countries.

Being a fully-fledged member of this project has also made it possible to follow a periodic cycle of conducting this study, a cycle that is suggested and mandatory for all members of this network. This periodicity is applied every 4 years on the basis of the use of a standard questionnaire as the survey tool, distributed by the project management office in all member states. The International Protocol is reviewed during each survey cycle in preparation for the next phase of data collection. Following the review, the existing items may be retained, modified, or replaced. New topics may also be introduced.

The use of an international prototype questionnaire, unique to all member countries, with minor adjustments to the health and educational specificities of our country (and every other member) is a necessary condition for carrying out this study. Consequently, the questionnaire at hand, which is the main research instrument applied in Albania, is identical to the one used by all member states.

At the same time, the questionnaire is the same as the one used from the beginning of the study for our country until today. This fact makes it possible to compare data and draw conclusions about the behaviours of school-aged children between different countries applying this project, as well as to compare these data across different time periods within the same country, pointing to behavioural changes, as well as developmental trends for different behaviours in adolescents. Such data make it possible to anticipate adolescent behavioural developments with sound government policies in their respective countries, favouring the success of these policies and achieving national-level objectives.

Albania has become part of the network of countries participating in the HBSC study since 2007. In 2009, our country participated in the 2009-2010 HBSC study, along with 43 other countries from Europe and North America. Since 2013, Albania has been part of both HBSC European Reports^{1, 2}.

The study aims to achieve a set of objectives of a general nature for all member states, but also a set of objectives specific to each country in particular. Among these goals we can mention:

- To initiate and sustain national and international research on healthy behaviour in school-aged children and adolescents;
- To contribute to theoretical, conceptual, and methodological development in the area of research on health and well-being, health behaviour and the social context of health in school-aged children;
- To contribute to the global knowledge base on adolescent health, with a particular focus on health and well-being, health behaviour, and the social context of health;
- To disseminate findings to relevant audiences including researchers, health and education policy makers, health promotion practitioners, teachers, parents, and young people;
- To link to WHO objectives, especially in relation to Investing in Children: the European Child and Adolescent Health Strategy 2015-2020³;
- To inform and support the development of health promotion programmes and interventions with school-aged children;
- To promote and support the establishment of national expertise on healthy behaviour in children of this age; and
- To establish and strengthen an international network of experts in the field of healthy behaviour in school-aged children.

The end goal of the HBSC study is to improve the health and well-being of young people. There are a number of ways in which the survey could influence policy^{4,5} through:

- Increasing national and international research capacity
- → Generating evidence on adolescent health
- Benchmark for change
- Advocating

The main areas of HBSC include:

- → Family affluence
- Peer relationships
- School environment
- Health behaviours
- Risk behaviours
- Sexual behaviours
- Body image
- Bullying
- Health complaints
- → Injuries and violence
- Life satisfaction
- Oral health
- Self-rated health

 Market Self-rated health

 Mark
- ≥ COVID-19

The novelty of the HBSC study is that young people participating in this study are not only "subject" to the study, but at the same time they are partners in creating a database that will influence policymakers' decision-making, public health experts, teachers, parents, and other important stakeholders in the place where these young people live. Their participation provides a deep and comprehensible vision of what they would like to be, growing socially in this current period of development.

The HBSC study has been and will be an appeal for policymakers and professionals to hear more about their children's voice, stemming from the data of the study in question, and to ensure that these voices guide their efforts to cope with and confront health problems throughout its breadth, both presently and in the future. The periodic data of this study are important challenges for positive developments in the field of health and in all other areas such as social, economic, educational, etc., within which school-aged children grow and develop.

Content of the report

This report includes the main findings of the 2021/22 HBSC study conducted at a national level in Albania. It includes almost all topics addressed in the questionnaire. Each topic is detailed in the report with a brief description of the importance of the issue based on the background information from the 2021-22 HBSC internal study protocol. In the results part, it provides a description of each measured indicator explaining also the content of the questions.

Results are presented disaggregated by sex and age of the children. For the first time, this report contains data related to COVID-19 and its impact on adolescent life. Lastly, for the topics with sufficient data, comparisons were made with the previous HBSC rounds which were conducted in Albania in 2013/14 and 2017/18.

AIM AND OBJECTIVES OF THE STUDY

The study of the assessment of health behaviours in school-aged children aims to enhance our understanding of healthy adolescent behaviours, as well as adolescent health, and well-being in their social context.

Main objectives of this study include:

- To describe the social context of youth health: family life, peer relationships, and the school environment;
- To assess health-related behaviours: eating habits, physical activity, oral health.
- To describe the current state of mental health and well-being of young people: positive health, major health complaints, sleep patterns, sense of loneliness and anxiety disorders, weight and body image:
- To assess the prevalence of risky behaviours: smoking, alcohol and drug use, sexual intercourse at an early age, fighting and bullying, physical and emotional abuse;
- To assess the relationship between the social context of youth health / health status / youth-related health behaviours / youth risk behaviours and their demographic characteristics (age and sex).
- To describe the impact of COVID-19 on Albanian adolescent's life.

METHODOLOGY

HBSC is a school-based study, based on self-administration of questionnaires by children in classes. The international standard questionnaire developed and updated every four years enables the collection of common data across all participating countries and thus enables the quantification of patterns of key health behaviours, health indicators, and contextual variables. These data allow comparisons to be made between countries, enabling subsequent studies to analyse trends.

Study design

During May 2022, a cross-sectional study was conducted in all 12 prefectures of Albania among children aged 11, 13, and 15 years. Three age groups of children were sampled according to time periods that represent the onset of adolescence - age 11; the challenge of physical and emotional change - age 13; the years when very important life and career decisions are beginning to be made – age 15.

Target population

The specific population selected for the sample included children of school age (11, 13, and 15 years old), that is, those in their 12th, 14th and 16th. According to the study protocol, it was strongly recommended that the first priority should be to produce *a basic country sample*.

Sample size

Based on the HBSC international protocol, the minimum sample size needed for each age group was 1550, amounting to a total of 4650 students. To increase the power of the study and considering the possible rate of refusal to participate in the study, a sample of 5612 individuals was calculated. During fieldwork, the total number of students recruited was 5545, but the number of those involved in the study was 5454. The technique used for sampling was "cluster sampling," the cluster being the school class. The school classes

were randomly sampled. The recommended minimum sample size for each of the three age groups was 1550 children. This calculation assumes a confidence interval (CI) of +/-3% @ 95% and a design effect of 1.2 based on analyses of the 1993-94 and 1997-1998 survey.

Drawing the Sample

In terms of the sampling procedure, age was the first priority, assuring that each of the three age group samples was drawn from all those in the appropriate age group. The sampling technique consisted of a stratified multistage cluster sampling with probability proportional to size (PPS). The stratification was based on the prefectures of Albania, both in rural and urban areas. Of note, the size of the population is more or less equal in the urban and rural areas of the country.

Such stratification was used to ensure a fair representation of the sample at the national level. After the stratification process (12 strata/prefectures), the following stages were performed in the sampling process: The stratification was based on the prefectures of Albania, both in rural and urban areas. The size of the population is more or less equal in the urban and rural areas of the country.

Such stratification was used to ensure a fair representation of the sample at the national level. After the stratification process (12 strata/prefectures), the sampling process followed several stages. For all stages, the respective sample selected was extracted from the database of the Ministry of Education and Sport.

The study was conducted at the end of the 2021-2022 academic year, and children of a specific age group were likely to be found across two different grade levels. For instance, children belonging to the age group of 11 year olds were in the 5th and 6th grade. Children belonging to the age group of 13 year olds were both in the 7th and 8th grade, and children belonging to the age group of 15 years old were both the 9th and 10th grades.

As a result, the target population of the study (ages 11, 13, and 15 years) was distributed in six grades, specifically from 5th grade (11 years old) to 10th grade (15 years old), including in the study not only elementary schools, but also high schools (tenth grade).

After a previous calculation, we decided to carry on with the same distribution of children from the same age group for each grade (50% of children from the fifth grade and 50% from the sixth grade) making up the "equivalent classes." The main sampling unit consisted of the "equivalent class", i.e., classes formed by merging of children of the same age, but pertinent to different classes.

The overall number of the study participants was 5545, but 91 questionnaires were excluded from the analysis because they were incomplete or without valid data. The response rate in the study was: 5454/5545=98.3%. The distribution of children included in the survey (after cleaning the database) is presented in the table below:

Table 1. Number of young people by prefecture, school, class and place of residence (urban/rural)

No.	Prefectures	Number of lower and upper secondary schools in rural areas	Number of lower and upper secondaryschools in urban areas	Total number of schools	Total number of classes	Total number of students
1	Berat	2	8	10	33	210
2	Dibra	6	6	12	32	252
3	Durrës	6	11	17	73	722
4	Elbasan	7	9	16	52	462
5	Fier	8	9	17	46	392
6	Gjirokastra	2	3	5	11	89
7	Korça	5	6	11	31	217
8	Kukës	5	6	11	29	202
9	Lezha	6	6	12	28	213
10	Shkodra	7	11	18	48	358
11	Tirana	14	19	33	209	2040
12	Vlora	4	10	14	36	297
	Total	72	104	176	628	5454

Data collection

The data collection consisted of an anonymous and self-administered structured questionnaire which comprises mandatory and optional questions, detailed below by age-group:

- ≥ 40 mandatory and 14 optional questions for 11-year-olds only
- 41 mandatory and 15 optional questions for 13-year-olds only
- 46 mandatory and 19 optional questions for 15-year-olds only

The administration of the questionnaire was made in the school classroom and the average time to complete the questionnaire was 35-40 minutes. Confidentiality was extremely important, in order to ensure the anonymity of students through the process of data collection.

The interviewers, besides the instructions provided to the pupils at the beginning of the questionnaire, also verbally informed the students and further instructed them regarding the anonymity and confidentiality of the survey. The study included only those pupils who completed the questionnaire.

The mandatory questionnaire contains the following issues:

- Demographic factors and family affluence
- Family communication
- Peer Culture
- School experience
- Health and Well-being
- Health-related behaviours and BMI
- → Risk Behaviours
- Violence and Injuries
- Sexual Health (only for students aged 15)

For the first time, additional new mandatory questions are included in the mandatory questionnaire, as detailed below:

- 1. WHO-5 Wellbeing Index
- 2. E-cigarette use in lifetime and last 30 days
- 3. Loneliness
- 4. General self-efficacy
- 5. Cohen Perceived Stress Scale

The optional questions cover the following issues:

- Mental health (sleep disorder; emotional and social loneliness)
- ≥ COVID-19
- Eating and dieting
- Sexual health (only for students aged 15)
- Child maltreatment (only for students aged 15)

Steps for conducting the field work

Field work approach was based on the experience drawn from the previous three rounds of HBSC. An invitation letter was sent by the Dean of the Faculty of Medicine in June 2021 to all relevant institutions for the appointment of a representative as a member of the Working Group for conducting the HBSC study. The HBSC Working Group consisted of representatives from the Faculty of Medicine, the Institute of Public Health, the Ministry of Health and Social Protection, the Ministry of Education and Sports, Agency for Pre-University Education Quality Assurance (ASCAP), and Health Care Service Operator.

The main task of the working group was the finalization of the questionnaire that will be used in the study as well as the facilitation of the data collection process. During the preparatory work, several meetings were held with the members of the working group as well as with representatives from UNICEF, UNFPA, WHO, and the project "Schools for Health" during which the content of questionnaire and optional questions that can be included in the study were discussed.

After finalizing the questionnaire, a request was sent to MoES to facilitate the data collection process. After receiving the ethical approval of the study from the Ethics Council at UMT, the Ministry of Education and Sports informed all the Regional Directorates of Education about the HBSC survey and ensured an updated database of all schools at a regional (prefecture) level. Also, one week before starting the survey, the selected schools were notified about the timeline of the study and were asked to facilitate the data collection process.

The second step of the preparatory work was to train the interviewers. Before starting the field work, the research team organized a one-day training for all interviewers, who were mainly health promotion specialists at local level with experience in conducting population-based surveys. All interviewers had also participated in other school-based surveys conducted recently. They received detailed instructions and guidance on how to maintain confidentiality and how to avoid influenced responses.

A pilot study of the full (draft) national questionnaire was carried out prior to data collection. The purpose of the piloting was to prepare for national data collection by testing the pupils' capacity for completion within the given time, particularly for the youngest age group.

This process offered the final opportunity to observe the whole administration procedure within the school, ensuring that instructions for those administering and conducting the survey were adequate, and were being followed. The pilot study included all interviewers who were divided in 2 schools covering the three age-groups. The filed work was conducted during the period 9-30 May 2022.

Ethical issues of the survey

All students were informed about the aim and objectives of the study and were provided with sufficiently detailed explanations on the particular aspects related to the anonymity of the survey. The study was approved by the Ethical Council at the University of Medicine, Tirana on 5th April 2022 and the process was confirmed by the Ministry of Education and Sports. Additionally, the Faculty of Medicine informed the Commissioner for Information about the survey.

Data Analysis

Statistical analyses identified meaningful differences in the prevalence of health and social indicators by gender and age group. For categorical variables (nominal including also binary/dichotomous, and/or ordinal scale variables), absolute numbers and their respective proportions (percentages) were calculated and reported in tables. For the numerical variables, measures of central tendency and dispersion were calculated. The Chi-squared test and Fisher's exact test were used for the comparison of proportions of categorical variables (i.e., for the assessment of potential differences related to gender and age group). The Mann-Whitney test and Student's t-test were used to compare the median and mean values of numerical variables. In all cases, a p-value ≤0.05 was considered as statistically significant. All the statistical analyses were performed using SPSS (Statistical Package for Social Sciences, version 22.0).

MAIN AREAS OF THE HBSC STUDY

Social inequality

Assessment of adolescents' social and economic status (SES) is central to the investigation of social and economic inequalities in health. As adolescents taking part in the HBSC study have not completed their education and do not yet (fully) participate in the labour market, it is not possible to assess their SES based on their own income, occupation or level of education, as is regularly done for adults⁶. In addition, it cannot be expected of adolescents of all ages to reliably report on their parents' income, occupation or level of education.

A viable alternative to assessing adolescent SES lies in the Family Affluence Scale (FAS), based on simple indicators of affluence in the respondent's home ^{6,7}.

HBSC studies conducted in different countries have found family affluence to be associated with a number of outcomes. Young people from less affluent families show lower life-satisfaction8 and report worse parent-child relations)9, and less teacher connectedness10. Moreover, less affluent adolescents consume more sugar-sweetened soft drinks (Simon et al., 2018), fewer fruits and vegetables¹¹ and show lower levels of physical activity and higher rates of overweight/obesity^{12,13}.

Family communication

Communication with parents is considered to be an indicator of both social support from parents and family connectedness with parents remaining an important source of support throughout the adolescent period. Open communication is one aspect of good parent-child relationships that plays a critical role in maintaining the healthy function of the family system and children's development.

Various studies also suggest that an improvement in the quality of communication between a child and a parent reduces the risk of poor academic achievement and low self-esteem among children 14,15. The investigation of young people's views on how easy they find it to communicate with family members, and particularly with their parents, is a priority of the HBSC study¹⁶.

Peer culture

Peers fulfil important roles in the development of young people. Peer groups are an important source of support and a basic guide in this social learning process. During this period, adolescents are not only dealing with changes in their school environment, but also with transformations in their bodies, emotions, and social relationships. During this developmental stage, not only can the support they receive from peers have a strong impact on how they cope with these changes, but it can also affect their psychosocial wellbeing¹⁷. Highly supportive friendships are associated with better social competencies¹⁸), less feelings of loneliness¹⁹, wider peer acceptance, and even academic outcomes²⁰.

While research on peer groups has long focused on their role in reinforcing maladaptive behaviour (e.g., substance use), the peer group is also a place where self-enhancing and healthy behaviour can be reinforced. An in-depth understanding of the mechanisms and processes through which peers promote change in adolescents' health attitudes and behaviours (positively and negatively) is of great importance in order to develop policies that aim to promote health and prevent risk behaviours in adolescents.

Electronic Media Communication (EMC)

Social media, such as social network sites (e.g., Instagram) and instant messengers (e.g., Snapchat, WhatsApp), are strongly integrated into the daily lives of many adolescents. In 2017/18, 35% of adolescents between 11 and 15 years old in Europe and Canada reported having contact with peers and others via social media almost all the time throughout the day²¹.

There are concerns that intensive (i.e., highly frequent) social media use (SMU) is detrimental to several domains of adolescent well-being. Recent evidence suggests that moderate SMU is indicative of healthy adolescent behaviour, as both excessive as well as non-users of SMU report lower well-being than moderate users^{22,23}. At the same time, there is growing consensus that the aetiology of SMU is rather complex, with recent review studies concluding that the effect of SMU is dependent on the type of use (i.e., active or passive), the individual characteristics of the adolescent, as well as the adolescent's social context^{24,25}. In line with this proposition, longitudinal research suggests that the effect of SMU differs from adolescent to adolescent²⁶.

In addition, concerns have been raised about the addictive potential of social media. In 2017/18, about 7% of adolescents reported problematic SMU²¹. These adolescents report multiple symptoms of addiction regarding their SMU, such as loss of control or serious problems with family because of their SMU²⁷.

School experience

Children and adolescents spend a substantial amount of time in the school setting. School therefore constitutes a significant influence on children's cognitive, social, and emotional development^{28,29}.

A positive school experience is considered a resource for health and well-being, while a negative one may constitute a risk factor, affecting mental and physical health. Liking school consequently has been identified as a protective factor against health compromising behaviours, and not liking - or not feeling connected to - school is associated with health-risk behaviours, low self-rated health, and increased somatic and psychological symptoms ³⁰.

Measurement of school characteristics included assessment of school satisfaction, school pressure, peerto-peer support, as well as teachers' support.

- School satisfaction consistently been negatively associated with compromising health behaviours, such as cigarette smoking, alcohol consumption, marijuana use, and gambling behaviour³¹,³². Also, consistent associations between low school satisfaction, lower self-rated health and increased somatic and psychological symptoms have been documented³³.
- Schoolwork pressure, which is an indicator related to school-related stress, has shown consistent associations with more compromising health behaviours, as well as frequent health complaints

- (headache, abdominal pain, backache, dizziness) and psychological complaints, such as feeling sad, tense, nervous and depressed34. High levels of schoolwork pressure are also associated with poorer mental health across HBSC countries³⁵.
- School support, conceptualised as teacher support and classmate support, is often linked with positive health outcomes. Teacher support is related to better mental health36 as well as lower early alcohol use³⁷, lower risk of daily smoking, and lower risk of weekly cannabis use³⁸. Classmate support, which refers to the perceived acceptance and assistance offered to adolescents by their classmates, has also been linked with lower somatic complaints such as headache, abdominal pain, backache, and dizziness³⁹.

Eating habits

Healthy eating habits during childhood and adolescence promote optimal childhood health, growth and development. Healthy dietary patterns also prevent micronutrient deficiencies, obesity, eating disorders, and dental caries and help prevent non-communicable diseases, such as coronary heart disease, cancer, and stroke^{40,41}. Eating behaviours and habits acquired during childhood and adolescence often persist into adulthood⁴² where the association between diet, ill health and premature mortality is well recognised⁴³.

BREAKFAST CONSUMPTION

Skipping breakfast is common among youth, especially older adolescents and girls, and is associated with health compromising behaviours⁴⁴. The family environment influences dietary habits among adolescents, for example, living in single parent families and in a lower socioeconomic position have been associated with irregular breakfast consumption among adolescents^{44,45,46,47}. Cross-sectional and longitudinal studies show that breakfast consumption is inversely related to BMI and overweight in children and adolescents^{48,49,50,51}. Eating breakfast is thought to reduce snacking and consumption of energy-rich foods of poor nutrient density. On the other hand, regular and healthy breakfast habits in childhood can track into adulthood 52,45,53.

FOOD FREQUENCY

A healthy diet is well-balanced and varied. The WHO recommends a diet rich in fruit, vegetables, legumes (e.g. lentils and beans), nuts and whole grains, and limited in fats (e.g. saturated and trans fats), free sugars and salt. The indicators that have been used since the 2001/2002 survey are: fruit, vegetables, sugary soft drinks and sweets. Fruit and vegetables are of high priority for most countries as continued attention to increasing fruit and vegetable consumption is an important way to optimise diet/nutritional status and to reduce disease risk and maximise good health³⁸. Soft drinks (non-diet) and sweets (i.e. candy or chocolate) were selected due to their popularity in adolescents⁵⁴ and their associated risks with obesity⁵⁵, chronic diseases^{56,57}and dental health⁵⁸.

FAMILY MEALS

In many societies, eating together as a family is a real challenge for many adolescents and their parents, partly due to the busy schedules of parents and their children^{59,60}.

More recently the importance of family mealtime on adolescent well-being has emerged. Inverse associations between frequency of family meals and negative indicators of well-being, such as depression, suicide ideation, stress, disordered eating and risk behaviours, have been reported⁶¹,⁶². Family meals also promote positive family interactions, including family communication, child socialisation, and transmission of values and culture^{63,62}. In general, family meal frequency is positively associated with socio-economic status or affluence⁶⁴.

The causal mechanisms between the family setting and healthy meal habits is not clear but socio-cultural factors as well as demographic and environmental factors are likely to play a role. The HBSC study provides an opportunity to explore family mealtimes by region and cultures, the family setting/functioning and the associations with physical and mental health outcomes.

Oral heath

Oral diseases are very prevalent worldwide, causing pain, discomfort, increasing absenteeism from school and/or work and reducing quality of life. Poor oral hygiene has been shown to be associated with higher levels of cardiovascular diseases, inflammation⁶⁵, diabetes and hypertension⁶⁶, and metabolic syndrome⁶⁷. A strong association between inflammatory oral diseases (periodontal diseases) and the four main noncommunicable diseases - diabetes, cancer, cardiovascular diseases and respiratory diseases - has been confirmed⁶⁸. Smoking is considered a major risk factor for poor periodontal health⁶⁹,⁷⁰.

Irregular toothbrushing has been shown to be related to smoking and use of alcohol, whereas habitual brushers are more sport-oriented than adolescents who brush their teeth irregularly⁷¹. Interestingly, toothbrushing frequency in adolescence seems to predict educational level 30 years later.

During childhood and adolescence, family and especially parents play a dominant role in encouraging the adoption of brushing habits in their children^{72,73}. Relatively stable patterns of toothbrushing are established during childhood and adolescence and individuals who brush their teeth more than once a day seem to have a more stable habit than those who brush less often 74. Adolescents who brush more frequently seem to have more favourable oral hygiene conditions^{75,76,77}.

Physical activity

There are substantial health benefits of regular physical activity (PA) for adolescents⁷⁸. PA and physical fitness protect against high blood pressure, high blood cholesterol, metabolic syndrome, or low bone density⁷⁹. Moreover, regular PA prevents obesity and reduces body weight⁸⁰. PA also reduces anxiety and depression, contributing to better mental health and well-being in youth⁸¹ as well as enhances concentration and numerous social health outcomes⁸².

According to WHO (2020), children and youth aged 5-17 should accumulate at least 60 minutes of moderateto vigorous-intensity physical activity daily. However, international guidelines for health-enhancing PA levels at the population level, in terms of intensity and duration, have been widely debated in recent years. Based on the existing evidence, the WHO83 changed those recommendations as follows: firstly, children and adolescents should do at least an average of 60 minutes per day of moderate-to-vigorous intensity physical activity, across the week; most of this physical activity should be aerobic; secondly, vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone should be incorporated at least 3 days per week.

Mental health and wellbeing

The promotion of mental well-being and the prevention of mental illness in youth is part of 2021-2030 UN Sustainable Development Goals⁸⁴. For purposes of assessing mental health and well-being in children and adolescents, this round of HBSC included questions on self-rated health, life satisfaction, health complaints, the WHO 5 Well-Being Index, and Ioneliness.

SELF-RATED HEALTH

Capturing the WHO definition of mental health as a state of well-being, self-rated health (SRH) is an important and fundamental indicator of overall well-being. SRH provides a subjective assessment of overall health that captures the individual's understanding of their health and their sense of functioning in the context of physical, psychological, and social factors.

The general perception of a respondent's own health has been a focus area of public health research for decades for several reasons85. First and foremost, answers to such questions have been shown to be a strong predictor of a number of negative health outcomes, associations that persist after controlling for numerous other risk factors. Second, a single item measure requires respondents to weigh together different aspects of health status, putting the most emphasis on those aspects of health that they consider relevant.

Self-rated health is a subjective indicator of general health. In adolescence, it refers not only to the presence or absence of chronic disease or disability, but also to a more general understanding of self. Empirical studies have shown that self-rated health is an independent predictor of future morbidity and mortality even after controlling for other factors⁸⁶. Poor health in early childhood may result in long-term negative effects that can continue throughout adolescence into adulthood and may also influence use of health services⁸⁷. Adolescent self-rated health is influenced by a broad range of health indicators, including medical, psychological, socio-environmental and behavioural^{88,89}, and wider social contextual factors such as family, peers, school and cultural status.

LIFE SATISFACTION

Life satisfaction (LS) is another key measure of adolescent well-being, capturing mainly positive dimensions of mental health in youth⁹⁰. It is closely associated with subjective health and well-being⁹¹. Family structure and psychosocial factors play a role, especially in relation to self-perception and self-esteem^{92,93,94}. The school environment is also important to adolescent life satisfaction. Academic success has a strong positive effect on life satisfaction⁹⁵, while other factors, such as bullying, pose a risk and are associated with low life satisfaction and subjective health status^{96,97,98}. Better life satisfaction may act as a buffer against the negative effects of stress and the development of psychopathological behaviour.

MULTIPLE HEALTH COMPLAINTS

Having multiple health complaints is an important indicator for measuring subjective well-being, as it reflects individual burden and personal experience related to negative life events in the social context of family, school and peers^{99,100,101,102,103,104}. Multiple health complaints are highly prevalent among adolescents crossnationally¹. Age and gender differences and socioeconomic inequality in multiple health complaints have been recognized. Their recurrence negatively affects adolescents' everyday functioning and general well-being ^{105,106}. Multiple health complaints (also known as psychosomatic symptoms or subjective complaints) are one of the most long-standing measures within the HBSC survey. Health complaints are self-reported health symptoms, frequently occurring together¹⁰⁷, and provide an important indicator of mental health and well-being. Severe symptoms can limit daily functioning and negatively affect the quality of different life aspects¹⁰⁸

WORLD HEALTH ORGANISATION'S FIVE WELL-BEING INDEX

The WHO-5 Well-Being Index measures mental well-being in the previous two weeks and it can also be used as a screening tool for depression. Originally developed to assess both positive and negative well-being, this 5-item version uses only positively phrased statements to avoid symptom-related language.

SLEEP PATTERNS

Sleep is increasingly recognised as a pillar of health and well-being. The sleep patterns of adolescents differ on school and non-school days. Because of biological changes with age, adolescents experience a delay in their bed and wake-up times¹⁰⁹ that conflicts with early school start times, leading to shorter sleep on school days^{110,111}. Consistently across the countries, adolescents tend to sleep longer and later on week-ends and holidays^{112,113}. Poor sleep is associated with physical and mental health problems, risky behaviours, poor academic performance, and poorer quality of life in both children and adolescents¹¹⁴. Poor sleep is also related to physical inactivity, excessive screen time, and poor diet¹¹⁴, underscoring the need to include healthy sleep in youth health promotion efforts.

ANXIETY

Anxiety disorders are among the most prevalent psychiatric conditions in children and adolescents¹¹⁵, and thus the experience of anxiety symptoms among these age groups is prevalent. In children and adolescents, the most common symptoms of anxiety are feelings of tension, apprehension, need for reassurance, and

irritability. Severe symptoms of anxiety in adolescence can have long-term consequences and lead to, for example, poor self-perceived health, high general impairment, and low quality of life in adulthood¹¹⁶. Furthermore, severe symptoms of anxiety in adolescents are often comorbid with depression and social phobia¹¹⁷.

The COVID-19 pandemic has been a great challenge for everybody, especially adolescents. The worries about the coronavirus (e.g. either themselves or their close ones getting infected), social distancing measures (such as school closures and lockdowns) have disrupted the personal, family, and social lives of millions of adolescents. Early studies have shown a significant increase in anxiety among children and adolescents during the COVID-19 pandemic in some countries, but high prevalence of youth anxiety is likely worldwide and could persist well into the coming years.

EMOTIONAL AND SOCIAL LONELINESS

Loneliness is a painful experience of lacking desired social relationships resulting from a discrepancy between actual and desired social relationships¹¹⁸. Loneliness is a negative emotional response to perceived emotional and social isolation, which is distinct from objective social isolation¹¹⁹.

Most children experience short-term loneliness as a normal consequence of everyday life¹²⁰. However, during adolescence, developmental changes and identity exploration along with cognitive and physical maturation, increase the risk for perceived social isolation and feelings of loneliness 121,122. On average, about 10% of school-aged children experience frequent or prolonged loneliness that is associated with various physical and psychological health consequences^{123,124,125}, such as greater prevalence of psychosomatic symptoms^{126,127}, poor health behaviours, such as sedentary behaviours¹²⁵, medicine use¹²⁸ and sleep problems. While loneliness is a growing area of research, evidence regarding the risk factors and adverse health outcomes of loneliness in school-aged children is limited when compared to adults, and comparative international studies have been limited.

Body image

Body image consists of the self-perceived body shape and size and plays an important role in young people's self-esteem¹²⁹, as well as influences the eating habits and levels of physical activity¹³⁰. It is a complex psychological construct that involves body-related thoughts, beliefs, emotions, and behaviours¹³¹. Body image concerns may range from a mild desire to change one's body characteristics, to pathological body image disturbances, such as severe eating or body dysmorphic disorders. Positive body image refers to attitudes and behaviours that reflect a healthy acceptance of and appreciation for one's body, both physically and functionally, that go beyond the absence of body dissatisfaction¹³². The core features of positive body image include body appreciation, an internal orientation toward the body, and satisfaction with the body's capabilities¹³².

Given that high body dissatisfaction was found to predict a variety of adverse outcomes, including negative affect and eating pathology¹³³, it is thus essential to create favourable conditions for strengthening the factors that provide protection from negative body image among this age group. Particularly, intervention and prevention programmes that provide adolescents with alternative ways of thinking about ideals, beauty, and attractiveness may help to alleviate body image concerns. In addition, future interventions should teach adolescents how to accurately assess their body size, to prevent the potential onset of unfavourable bodyrelated feelings and experiences.

Body mass index

Body mass index (BMI) is commonly used as a measure of body fatness to evaluate underweight (or thinness), overweight and obesity¹³⁴. While BMI is commonly used to study health problems associated with weight status at the population level, it is however recognised that this measure has limitations linked

to the exact values of height and weight. Regardless of the limitations, considering the fact that the HBSC is a large population-based survey, the self-reported height and weight are collected to compute body mass index. Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Obesity has been related to several chronic diseases in adulthood, such as cardiovascular disease, type-2 diabetes mellitus, and metabolic syndrome¹³⁴. Childhood obesity is associated with higher risks of obesity, premature death and disability in adulthood. In addition, child and adolescent obesity is associated with breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance and psychosocial conditions such as depression, as well as impaired health-related quality of life 134,135. On the other hand, underweight (or thinness), defined as low weight for age in children and adolescents, is associated with a higher risk of infectious diseases, nutritional deficiencies (i.e. insufficient supply of protein, energy, or micronutrients), metabolic disorders, menstrual irregularity, decreased cognitive and physical abilities, and for girls of childbearing age, with adverse pregnancy outcomes (e.g. maternal mortality, delivery complications, preterm birth, intrauterine growth retardation)¹³⁶.

Alcohol consumption

Adolescence is a key period in the initiation of alcohol-related behaviours, with both drinking and drunkenness prevalence and frequency substantially increasing from early to late adolescence 137,138. Worldwide, more than a quarter (26.5%) of all 15-19-year-olds are current drinkers (approx. 155 million), with the WHO European Region showing the highest rates 139. It is important to bear in mind that the young adolescent brain is not yet fully developed and major structural and functional changes occur during the adolescent years. As such, the adolescent brain is more vulnerable to the effects of alcohol and other psychoactive substances than the adult brain 140.

Alcohol consumption, and risky drinking in particular, during adolescence has been shown to be associated with multiple short- and long- term adverse negative outcomes¹⁴¹ such as physical and mental health problems¹⁴², initiation of other risk behaviours¹⁴³, changes in the development of brain structure¹⁴⁰ and neurocognitive alterations¹⁴⁴, as well as with alcohol use disorders in adulthood¹⁴⁵. Furthermore, drunkenness (also called risky single occasion drinking, binge drinking, heavy episodic drinking, and drinking to intoxication) has been found to be associated with harmful, short-term social and health consequences¹⁴⁶. The burden of disease attributable to alcohol rises sharply in late adolescence and early adulthood, being responsible for 4% of incident disability-adjusted life-years (DALYs) in this age group¹⁴⁷.

Tobacco and e-cigarette use

Tobacco smoking continues to be a strong risk factor for respiratory and allergic diseases, cardiovascular diseases, and cancer¹⁴⁸. It remains one of the major risk factors of premature morbidity and mortality. Tobacco use, particularly cigarette smoking, is the largest cause of health inequalities based on socioeconomic differences¹⁴⁹; in adolescence, smoking initiation seems to be higher among those from disadvantaged backgrounds¹⁵⁰.

Adolescence is a crucial age for the initiation and development of tobacco use, so exact epidemiological data are necessary to support evidence-based preventive interventions¹⁵¹. Active cigarette smoking by adolescents has immediate adverse health consequences, including addiction, reduced lung function and impaired lung growth, and bronchial asthma⁶⁷.

The use of e-cigarettes has been increasing and has become a significant public health concern. While some consider them to be a safer alternative to cigarettes, e-cigarettes contain liquid nicotine, which is the highly addictive component of tobacco. Second-hand vapour from e-cigarettes contains both nicotine and other toxins. There is limited information on the effect of chronic e-cigarette use on respiratory health, although a recent study from the US found that teenagers who used e-cigarettes had twice the risk of respiratory symptoms such as persistent cough, bronchitis, and wheezing, as those who had never used them¹⁵².

Cannabis use

Cannabis use is most common among youth and young adults, and less so among older age groups¹⁵³. In Europe and North America, 15% of 15-year old boys and 11.0% of girls of the same age reported having used cannabis in their lifetime, and 8.0% of the boys and 5.0% of the girls had used it in the last 30 days¹⁵⁴. Scientific evidence demonstrates that cannabis can be a harmful substance, especially for children and young people who use it regularly¹⁵⁵. Cannabis use is a risk factor for mental disorders and may trigger psychosis and depression, particularly among those who are prone to these disorders¹⁵⁶. Early onset and heavy and accelerated use are related to problems such as impairment in brain development, low height and weight, anxiety attacks, short-term memory loss and other cognitive disorders¹⁵⁷, deteriorating school performance and dropout¹⁵⁸, risk-taking, aggression and delinquency, depression and anxiety¹⁵⁹, and the development of the so-called lack-of-motivation syndrome¹⁶⁰. The results of a plethora of studies showing that use of cannabis and harder drugs is connected to negative health risks and psychosocial outcomes makes assessing and monitoring illicit drug use and its cross-national determinants and consequences a crucial dimension of the HBSC work.

Sexual health

The risks associated with sexual behaviour among 15-year-olds are linked to the emotional and behavioural characteristics of adolescence. Early sex has implications for self-perception, well-being, social status and future health behaviour 161,162. Early sexual initiation can be seen as part of broader risk behaviour clusters including substance use and unprotected sex^{163,164}, although along with a direct causal relationship, general genetic and environmental factors may be important mediators 165. Unprotected and poorly protected intercourse increase the risk of unintended pregnancy with potentially negative outcomes for adolescents, including abortion and early parenthood 166. Not using barrier methods of protection increases the risk of sexually transmitted infections (STIs), with serious short- and long-term medical, health, and social consequences¹⁶⁷.

Early sexual intercourse, an older partner, and alcohol or drug use have been associated with a higher risk of non-use of contraceptive methods^{168,169,170}, which in turn has been associated with contraceptive nonuse at most recent intercourse¹⁷¹. Those factors have also been associated with regret or negative feelings about the timing of first intercourse¹⁷². Studies have documented that a negative experience of first sexual encounter was likely to impact young people's beliefs about sexuality, their self-confidence as a sexual partner, or their feelings toward future sexual relations¹⁷³. Engagement in risk behaviours, such as alcohol, tobacco and cannabis use, are predictive of early sexual initiation¹⁷⁴.

Bullying and cyberbullying

School bullying is one of the most prevalent forms of youth violence. Bullying has been defined as negative physical or verbal actions that have hostile intent, cause distress to victims, are repeated over time, and involve a power differential between bullies and their victims 175,176. In the past decade, cyberbullying or electronic bullying has emerged as an additional form of inflicting harm on another person. Cyberbullying can be defined as intentional behaviour aimed at harming another person or persons through computers, cell phones, and other electronic devices, and perceived as aversive by the victim¹⁷⁷. The results of different investigations show that cyberbullying is related to mental health risks, such as suicidal ideation or lower self-esteem^{178,179}.

Victims of bullying have been found to experience a range of problem behaviours, such as psychological maladjustment¹⁸⁰, psychosomatic health problems¹⁸¹, medicine use¹⁸², depression and anxiety, and in extreme cases, suicidal behaviour¹⁸³. Bullying can have particularly negative outcomes when it is experienced as being on the basis of elements of the young person's identity such as their ethnic background or their sexual tendencies^{184,185}. Most of these consequences can be seen even decades after, including worse socio-economic status, poorer job performance, and social-relationship difficulties¹⁸⁵. Students who engage in bullying others may be less interested in school and more likely to engage in health-risk behaviours such as smoking, drug use, and excessive drinking 186,187.

Fighting

Youth violence is a widespread problem that occurs in all countries and affects a significant number of children and adolescents. One common form of violence is physical fighting¹⁸⁸.

Involvement in fighting can be seen as part of a constellation of risk behaviours with clear health implications, as higher levels of physical fighting have consistently been associated with more frequent reports of negative physical and emotional health outcomes 189. Physical fighting has been associated with substance use and other problem behaviours 190,191,192 such as drug selling, theft and, handgun carrying 193, as well as health issues such as suicidal ideation¹⁹⁴ and short duration of sleep¹⁹⁵.

Child abuse and maltreatment

Violence against children is a major public health problem affecting an estimated one billion children annually 196. The experience of physical, emotional and sexual abuse and neglect in childhood is associated with long-term poor physical, mental, and reproductive health outcomes 197,198, reduced academic performance, social, and cognitive functioning and changes in brain development 199,200. Violence exposure in childhood is also associated with a number of high-risk behaviours, such as smoking, alcohol and drug use and sexually risky behaviours, which in turn increase the risk of cancer and other non-communicable diseases and sexually transmitted infections^{201,202}. Furthermore, violence exposure in childhood increases the risk of perpetration and re-victimization throughout the life span and the intergenerational transmission of violence^{203,204,205}.

COVID-19

The COVID-19 pandemic was one of the most important events that had a global impact on the context of well-being, health, and health behaviour for adolescents and their families. In both quantitative and qualitative data collected during the pandemic, adolescents reported distinct changes in their friendships and family dynamics²⁰⁶, related health behaviours²⁰⁷, as well as mental health²⁰⁸.

Direct exposure to COVID-19, exposure to COVID-19 in the family, and the measures implemented to contain the COVID-19 pandemic have potential short- and long-term impacts on adolescents' well-being, health, and health behaviours.

STUDY RESULTS

1. Demographic characteristics

Overall, the 2021/22 HBSC survey in Albania included 5454 students, of whom 2610 (47.9%) were boys and 2844 (52.1%) were girls. Regarding the age distribution, on the whole, there were 1784 (32.7% of valid responses) children aged 11 years, further 1785 (32.8%) children aged 13 years, and 1877 (34.5%) young people aged 15 years (table 1.1).

Table 1.1. Demographic data of young people

Demographic characteristics	N (%)
Sex:	
Male	2610 (47.9)
Female	2844 (52.1)
Age-group	
11 years old	1784 (32.7)
13 years old	1785 (32.8)
15 years old	1877 (34.5)

2. Social context

- 2 One in four girls and one in nine boys have difficulties in communicating with the father.
- 2 One in three of young people communicate online almost all of the time with their close friends.
- 2 One in two young people like the school very much.
- 2 One in eight young people perceive a lot of pressure from the school.
- Almost two in three young people are accepted as they are from their teachers.
- 2 One in two young people think that their teacher takes care of them.

The social context was assessed by assessing the communication in the family, peer-support and school support, which often serve as protective factors.

FAMILY COMMUNICATION

All young people who participated in the 2021-22 HBSC survey in Albania were asked about the easiness of communication with their parents. The main findings are summarized in table 2.1. Overall, about half of the young people (49.6%) reported a very easy communication with their fathers, whereas almost three quarters (72%) of them reported a very easy communication with their mothers. Conversely, a difficult and/or a very difficult communication with their fathers and mothers were reported respectively

by approximately 18% and 7% of the young people. Seemingly, Albanian young people do communicate more easily with their mothers than their fathers, a consistent finding in all three HBSC rounds conducted in Albania and also compatible with the reports from most of the other countries.

Regarding sex-differences, a difficult and/or a very difficult communication with their fathers was reported by about 12% of the boys and 27% of the girls, a finding which was highly statistically significant (P<0.001). Regarding the easiness of communication with children's mothers, a difficult and/or a very difficult communication was reported by 6% of the boys and slightly more than 8% of the girls. There was evidence of an age gradient: communication with mothers and especially with fathers was more difficult for older students compared with their younger counterparts (P<0.001).

Table 2.1: How easy is it for you to talk to the following persons about things that really bother you?

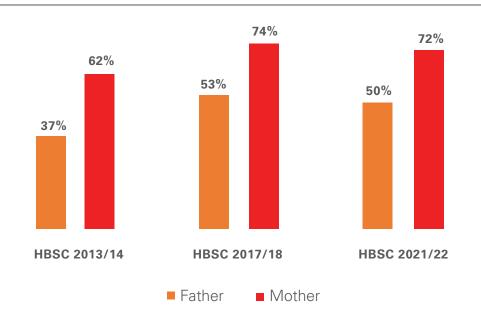
Parent/	Ger	nder		Age-group		Total
caregiver	Boys	Girls	11 years	13 years	15 years	iotai
Father:						
Very easy	1512 (59.5)	1133 (40.6)	1021 (58.7)	892 (51.2)	730 (39.6)	2645 (49.6)
Easy	650 (25.6)	923 (33.1)	479 (27.5)	488 (28.0)	603 (32.7)	1573 (29.5)
Difficult	239 (9.4)	454 (16.3)	164 (9.4)	217 (12.4)	312 (16.9)	693 (13.0)
Very difficult	69 (2.7)	189 (6.8)	32 (1.8)	81 (4.6)	143 (7.8)	258 (4.8)
Don't have/	70 (2.8)	93 (3.3)	43 (2.5)	65 (3.7)	55 (3.0)	163 (3.1)
see him Total	2540 (100.0%)	2792 (100.0%)	1739 (100.0%)	1743 (100.0%)	1843 (100.0%)	5332 (100.0%)
Stepfather (or mother's partner):						
Very easy	110 (5.3)	34 (1.5)	68 (4.5)	50 (3.6)	26 (1.7)	144 (3.3)
Easy	72 (3.5)	50 (2.1)	45 (3.0)	45 (3.2)	32 (2.1)	122 (2.8)
Difficult	54 (2.6)	38 (1.6)	46 (3.1)	26 (1.9)	20 (1.3)	92 (2.1)
Very difficult	21 (1.0)	21 (0.9)	19 (1.3)	14 (1.0)	9 (0.6)	42 (1.0)
Don't have/	1827 (87.7)	2191 (93.9)	1317 (88.1)	1270 (90.4)	1424 (94.2)	4018 (90.9)
see him Total	2084 (100.0%)	2334 (100.0%)	1495 (100.0%)	1405 (100.0%)	1511 (100.0%)	4418 (100.0%)

Mother:						
Very easy	1864 (73.8)	1953 (70.1)	1341 (77.3)	1314 (76.1)	1158 (62.8)	3817 (71.9)
Easy	468 (18.5)	569 (20.4)	301 (17.4)	259 (15.0)	476 (25.8)	1037 (19.5)
Difficult	106 (4.2)	166 (6.0)	51 (2.9)	91 (5.3)	127 (6.9)	272 (5.1)
Very difficult	45 (1.8)	63 (2.3)	16 (0.9)	33 (1.9)	59 (3.2)	108 (2.0)
Don't have/	43 (1.7)	35 (1.3)	25 (1.4)	29 (1.7)	24 (1.3)	78 (1.5)
see her	2526	2786	1734	1726	1844	5312
Total	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
Stepmother (or father's partner)						
Very easy	112 (5.4)	37 (1.6)	63 (4.2)	60 (4.4)	26 (1.7)	149 (3.4)
Easy	60 (2.9)	35 (1.5)	40 (2.7)	27 (2.0)	28 (1.9)	95 (2.2)
Difficult	47 (2.3)	38 (1.6)	47 (3.1)	21 (1.5)	17 (1.1)	85 (1.9)
Very difficult	38 (1.8)	21 (0.9)	27 (1.8)	16 (1.2)	16 (1.1)	59 (1.3)
Don't have/	1804 (87.5)	2188 (94.4)	1318 (88.2)	1245 (90.9)	1422 (94.2)	3992 (91.1)
see her	2061	2319	1495	1369	1509	4380
Total	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)

COMPARISON WITH PREVIOUS HBSC ROUNDS (HBSC 2013/14 AND HBSC 2017/18)

The recent HBSC round (2021/22), has evidenced pretty similar findings with the previous round conducted in 2017/18, which reported an increase in children and young people who communicate easily with their parents compared with the HBSC round conducted in 2013/2014. The findings from the three rounds are presented in figure 2.2.

Figure 2.2. Very easy communication with parents in the past three rounds of HBSC in Albania



PEER SUPPORT

Young people were asked about peer culture and support. Main findings related to peer-support are presented in table 2.3. On the whole, 56% of the young people strongly agreed that their friends really tried to help them. There were slight gender differences, but a significant age gradient: a higher proportion among the youngest children strongly agreed that their friends really tried to help, compared with the oldest students (P<0.001).

Very similar findings were evident for the other statement – on the whole, 53% of the young people very strongly agreed that they could count on their friends when things go wrong, with some small gender differences, but a significant age gradient.

About 67% of the young people very strongly agreed that they had friends with whom they could share their joys and sorrows (66% of the girls vs. 68% of the boys). A similar age relationship was also evident for this statement, with the oldest youth reporting the lowest rate of very strong agreement (P<0.001).

Lastly, 54% of the young people very strongly agreed that they could talk about their problems with their friends. There were gender differences (57% in boys vs. 52% in girls), and also a significant and graded age relationship: the proportion of young people who very strongly agreed with this statement was the highest among the youngest students (11 years) and the lowest among the oldest students (15 years).

Table 2.3. Distribution of peer support by gender and age of the young people

Door ournest	Ge	nder		Age-group		Total
Peer support	Boys	Girls	11 years	13 years	15 years	Total
My friends really try to help me:						
Very strongly agree	1481 (57.9)	1525 (54.4)	1177 (67.1)	960 (55.0)	864 (46.7)	3006 (56.1)
I can count on my friends when things go wrong:						
Very strongly agree	1403 (55.0)	1432 (51.1)	1094 (62.6)	907 (51.9)	831 (45.0)	2835 (53.0)
I have friends with whom I can share my joys and sor- rows:						
Very strongly agree	1672 (65.5)	1912 (68.2)	1293 (73.8)	1152 (65.9)	1134 (61.4)	3584 (66.9)
I can talk about my problems with my friends:						
Very strongly agree	1445 (56.7)	1440 (51.6)	1043 (59.7)	945 (54.2)	895 (48.6)	2885 (54.0)

Overall, "peer support" findings of the last HBSC round were generally similar with the results of the previous HBSC round conducted in 2017-18.

ONLINE CONTACTS WITH FRIENDS

Young people were also asked about the frequency of online contacts with their friends (table 2.4). On the whole, about 34% of the young people (similar in both sexes) reported online contacts with close friends almost all the time. The online contacts with close friends were significantly more prevalent among older students compared to their younger counterparts (P<0.001).

On the whole, the online contacts with friends exhibited an increase in this round compared with the 2017/18 HBSC round (34% vs. 28%, respectively), which goes in line with the information technology advancement worldwide.

About 20% of the young people reported online contacts with friends from a larger group, a finding which was higher in boys than in girls (about 23% vs. 18%, P<0.001), and lower among the youngest people compared with their older counterparts (P<0.001).

There was also an increase in the prevalence of online contacts with friends from a larger group in this round of HBSC survey compared with the previous round conducted in 2017/18 (20% vs. 13%, respectively).

Table 2.4. Online contacts with friends by gender and age of the young people

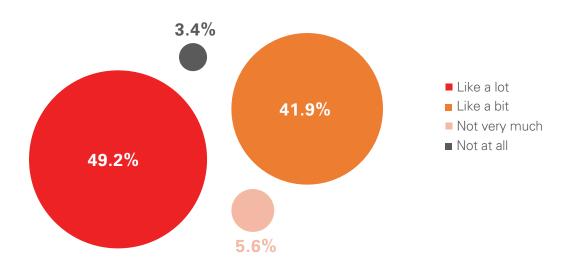
Online contacts	Gender			Age-group	Total	
Offilite Contacts	Boys	Girls	11 years	13 years	15 years	iotai
Close friends						
Almost all the time	856 (33.3)	959 (34.0)	358 (20.3)	650 (37.0)	803 (43.2)	1815 (33.7)
Friends from a larger group:						
Almost all the time	575 (22.8)	492 (17.6)	246 (14.2)	407 (23.5)	411 (22.2)	1067 (20.1)

SCHOOL CHARACTERISTICS

Measurement of school characteristics included an assessment of school satisfaction, school pressure, peer-to-peer support, as well as teachers' support. On the whole, similar to the previous HBSC round (in 2017/18), about half of the young people (49.2%) in the 2021/22 HBSC reported that they like the school a lot, whereas about 3% did not like the school at all (figure 2.2).

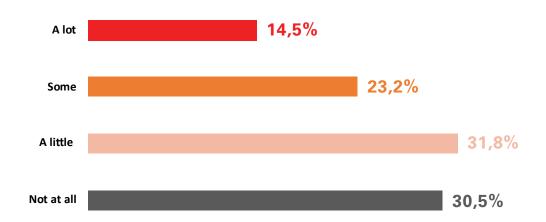
Girls (table 2.4) and boys were almost equally positive (like a lot: 50% vs. 49%, respectively). Similar to the previous HBSC round (in 2017/18), there was a considerable age gradient in the 2021/22 HBSC round, too (table 2.4), with the eldest students being far more negative than their younger counterparts (like a lot: 34% among 15-year young people, 42% among those aged 13 years and 73% among the youngest children; P<0.001).

Figure 2.2. School satisfaction



Regarding the schoolwork pressure, overall, about 31% of the young people did not feel any pressure at all, whereas 15% of them perceived a lot of pressure (figure 2.3). There were gender differences (P<0.01), with girls feeling "a lot of pressure" more than the boys (18% vs. 11%, respectively) and also a significant age relationship (P<0.001), with the eldest young people (table 2.4) reporting a substantially higher level of pressure (23%) compared with the other two age-groups (about 7%).

Figure 2.3. School pressure



About half of the young people (50.2%) enjoyed being together at school, while 2.7% of them strongly disagreed with this statement (table 2.4). Boys enjoyed more than the girls staying with their peers (54% vs. 47%, respectively, P<0.01). Also, there was evidence of a linear association with age, with the youngest students enjoying (P<0.001) being together with their peers at school (59% vs. 44% among 15-year old students) significantly more. These findings are generally compatible with the previous HBSC round conducted in 2017/18.

Less than half of the young people (47%) thought that their peers were kind and helpful, whereas 2.3% of the them strongly disagreed with this statement (table 2.4). There was a significant association with gender (50% in boys vs. 45% in girls), and a strong and significant relationship with age: only 39% of young people aged 15 years considered their peers as kind and helpful compared with 44% of those aged 13 years and 60% of children aged 11 years (P<0.001). These age-differences were also evident, more or less in the same magnitude, in the previous HBSC round conducted in 2017-18.

About 59% of the young people believed that they were well-accepted by their peers (table 2.4), whereas 2.4% of them strongly opposed such a statement (table 2.4). Boys were more positive on this aspect (P<0.01), as well as the youngest children (P<0.01) – similar to the previous HBSC round.

About 65% of the young people reported that they were well-accepted by their teachers, and only 1.6% strongly disagreed with this statement (table 2.4). There were no significant gender differences, but a strong and linear association with the age group: only 53% of the eldest young people considered that they were well-accepted by their teachers compared with 61% of those aged 13 years and 81% of the youngest children (P<0.001), findings which exhibit the same trend as in the previous HBSC round.

Similar findings were noted for the reported care of the teachers toward young people (table 2.4): overall, about 53% of the young people considered that their respective teachers did care about them, with no significant gender differences but a graded age relationship (39% of 15-year old people perceived that their teachers cared about them, compared with 48% among those aged 13 years and 72% among the youngest). These findings are also compatible with the previous HBSC round.

Likewise, 55% of the young people felt trust in their teachers, while 3.7% of them did not have trust at all in their teachers (table 2.5). There was a borderline gender difference (56% in boys vs. 54% in girls), but a fairly strong and highly significant association with age (39% among the eldest students, 49% in those aged 13 years and 79% among the youngest; P<0.001).

Table 2.5. School characteristics by gender and age of the young people

School	Ger	nder		Age-group		
characteristic	Boys	Girls	11 years	13 years	15 years	Total
Liking school:						
Like a lot	1252 (48.5%)	1406 (49.8%)	1278 (72.6%)	743 (42.0%)	636 (34.0%)	2658 (49.2%)
Like a bit	1067 (41.3%)	1197 (42.4%)	438 (24.9%)	839 (47.5%)	980 (52.4%)	2264 (41.9%)
Not very much	164 (6.3%)	138 (4.9%)	27 (1.5%)	111 (6.3%)	164 (8.8%)	302 (5.6%)
Not at all	100 (3.9%)	82 (2.9%)	17 (1.0%)	74 (4.2%)	91 (4.9%)	182 (3.4%)
Total	2583 (100.0%)	2823 (100.0%)	1760 (100.0%)	1767 (100.0%)	1871 (100.0%)	5406 (100.0%)
Pressured by						
schoolwork:	896 (34.7%)	754 (26.7%)	846 (47.9%)	450 (25.5%)	352 (18.8%)	1650 (30.5%)
Not at all	873 (33.8%)	848 (30.0%)	594 (33.7%)	596 (33.7%)	528 (28.2%)	1721 (31.8%)
A little	524 (20.3%)	732 (25.9%)	244 (13.8%)	453 (25.6%)	557 (29.8%)	1256 (23.2%)
Some	290 (11.2%)	494 (17.5%)	81 (4.6%)	269 (15.2%)	433 (23.2%)	784 (14.5%)
A lot Total	2583 (100.0%)	2828 (100.0%)	1765 (100.0%)	1768 (100.0%)	1870 (100.0%)	5411 (100.0%)
Children enjoy being together:						
Strongly agree	1381 (53.5%)	1333 (47.2%)	1034 (58.8%)	865 (49.1%)	813 (43.5%)	2714 (50.2%)
Agree	742 (28.8%)	815 (28.9%)	454 (25.8%)	497 (28.2%)	604 (32.3%)	1557 (28.8%)
Neither/nor	307 (11.9%)	497 (17.6%)	199 (11.3%)	271 (15.4%)	332 (17.7%)	804 (14.9%)
Disagree	78 (3.0%)	101 (3.6%)	38 (2.2%)	66 (3.7%)	74 (4.0%)	179 (3.3%)
Strongly disag.	71 (2.8%)	76 (2.7%)	35 (2.0%)	63 (3.6%)	48 (2.6%)	147 (2.7%)
Total	2579 (100.0%)	2822 (100.0%)	1760 (100.0%)	1762 (100.0%)	1871 (100.0%)	5401 (100.0%)
Students kind and helpful:						
Strongly agree	1285 (50.0%)	1263 (44.8%)	1054 (59.9%)	769 (43.7%)	723 (38.8%)	2548 (47.3%)
Agree	772 (30.1%)	881 (31.3%)	460 (26.2%)	548 (31.2%)	642 (34.5%)	1653 (30.7%)
Neither/nor	346 (13.5%)	480 (17.0%)	186 (10.6%)	288 (16.4%)	350 (18.8%)	826 (15.3%)
Disagree	110 (4.3%)	127 (4.5%)	39 (2.2%)	100 (5.7%)	97 (5.2%)	237 (4.4%)
Strongly	56 (2.2%)	68 (2.4%)	20 (1.1%)	53 (3.0%)	51 (2.7%)	124 (2.3%)
disag. Total	2569 (100.0%)	2819 (100.0%)	1759 (100.0%)	1758 (100.0%)	1863 (100.0%)	5388 (100.0%)

Students accept me:						
Strongly agree	1589 (62.3%)	1590 (56.8%)	1201 (68.8%)	984 (56.4%)	990 (53.5%)	3179 (59.4%)
Agree	649 (25.5%)	718 (25.6%)	375 (21.5%)	452 (25.9%)	538 (29.1%)	1367 (25.6%)
Neither/nor	193 (7.6%)	338 (12.1%)	110 (6.3%)	203 (11.6%)	217 (11.7%)	531 (9.9%)
Disagree	58 (2.3%)	88 (3.1%)	32 (1.8%)	56 (3.2%)	57 (3.1%)	146 (2.7%)
Strongly	60 (2.4%)	66 (2.4%)	28 (1.6%)	51 (2.9%)	47 (2.5%)	126 (2.4%)
disag. Total	2549 (100.0%)	2800 (100.0%)	1746 (100.0%)	1746 (100.0%)	1849 (100.0%)	5349 (100.0%)
Teacher accepts me:						
Strongly agree	1697 (65.6%)	1809 (64.2%)	1434 (81.2%)	1079 (61.0%)	989 (53.1%)	3506 (64.9%)
Agree	622 (24.0%)	690 (24.5%)	262 (14.8%)	465 (26.3%)	583 (31.3%)	1312 (24.3%)
Neither/nor	168 (6.5%)	226 (8.0%)	43 (2.4%)	155 (8.8%)	194 (10.4%)	394 (7.3%)
Disagree	54 (2.1%)	53 (1.9%)	14 (0.8%)	43 (2.4%)	50 (2.7%)	107 (2.0%)
Strongly disag.	47 (1.8%)	40 (1.4%)	13 (0.7%)	26 (1.5%)	48 (2.6%)	87 (1.6%)
Total	2588 (100.0%)	2818 (100.0%)	1766 (100.0%)	1768 (100.0%)	1864 (100.0%)	5406 (100.0%)
Teacher cares about me:						
Strongly agree	1370 (53.3%)	1469 (52.3%)	1264 (71.9%)	840 (47.8%)	732 (39.4%)	2839 (52.8%)
Agree	720 (28.0%)	844 (30.0%)	379 (21.6%)	540 (30.8%)	643 (34.6%)	1564 (29.1%)
Neither/nor	316 (12.3%)	359 (12.8%)	92 (5.2%)	260 (14.8%)	320 (17.2%)	675 (12.5%)
Disagree	95 (3.7%)	86 (3.1%)	14 (0.8%)	74 (4.2%)	93 (5.0%)	181 (3.4%)
Strongly disag.	68 (2.6%)	53 (1.9%)	8 (0.5%)	42 (2.4%)	71 (3.8%)	121 (2.2%)
Total	2569 (100.0%)	2811 (100.0%)	1757 (100.0%)	1756 (100.0%)	1859 (100.0%)	5380 (100.0%)
Feel trust in teacher:						
Strongly agree	1447 (56.5%)	1520 (54.4%)	1377 (78.6%)	857 (49.2%)	729 (39.4%)	2967 (55.4%)
Agree	577 (22.5%)	672 (24.1%)	279 (15.9%)	445 (25.6%)	525 (28.3%)	1249 (23.3%)
Neither/nor	332 (13.0%)	380 (13.6%)	72 (4.1%)	274 (15.7%)	364 (19.7%)	712 (13.3%)
Disagree	101 (3.9%)	124 (4.4%)	13 (0.7%)	93 (5.3%)	117 (6.3%)	225 (4.2%)
Strongly	103 (4.0%)	97 (3.5%)	11 (0.6%)	72 (4.1%)	117 (6.3%)	200 (3.7%)
disag. Total	2560 (100.0%)	2793 (100.0%)	1752 (100.0%)	1741 (100.0%)	1852 (100.0%)	5353 (100.0%)

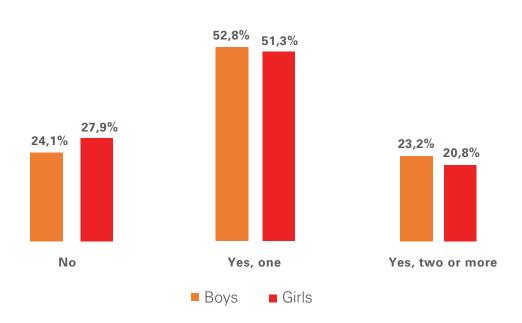
3. Family affluence

- Almost one in five young people aged 11, 13, and 15 years does not own their bedroom.
- About one in four young people does not have family car ownership.
- Nearly one in four young people does not have a computer at home.
- 2 Only one in two young people has been on holiday with their family in the last year.

The HBSC questionnaire administered to Albanian young people in 2022 consisted of an assessment of family car ownership, possession of children's own bedrooms, number of bathrooms in the house, possession of a dishwasher, possession of computers and number of times that children travelled with their family members for holiday/vacation during last year.

As for the family car, in total, 26% of the young people reported that their respective families did not own a car (table 3.1). On the other hand, slightly more than half (52%) of the young people stated that their families owned one car, whereas the remaining 22% of the young people owned two or more cars. Of note, similar to the previous HBSC round (in 2017/18), car ownership was more prevalent among boys' families than among girls' (28% of the girls reported no car ownership compared to 24% of the boys; P=0.003) [figure 3.1].

Figure 3.1. Family car ownership by gender of the young people



Regarding the age-group, (table 3.1) there were no statistically significant differences in the self-reported car ownership among children aged 11 years, 13 years, or 15 years (P=0.12), notwithstanding a slightly higher prevalence of car ownership (at least one car) among the youngest people (11 years of age).

Table 3.1. Family car ownership by age of the young people

Familia		Age		Total
Family car	11 years	13 years	15 years	Total
NI.	436	477	499	1412
No	24.6%	26.9%	26.6%	26.1%
Yes, one	967	899	952	2818
	54.6%	50.6%	50.8%	52.0%
Voc. true or more	367	400	422	1189
Yes, two or more	20.7%	22.5%	22.5%	21.9%
Total	1770	1776	1873	5419
	100.0%	100.0%	100.0%	100.0%

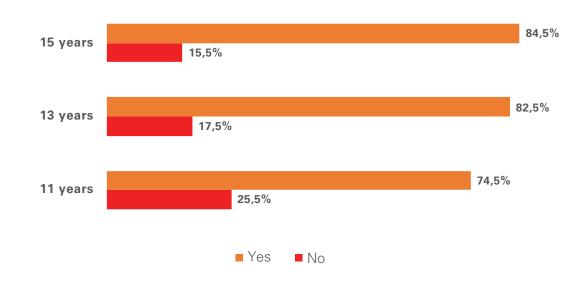
Regarding the availability of children's own bedrooms, about one-fifth (19.4%) of the young people did not have their own bedroom compared with the remaining 80.6% who reported having their own bedroom (table 3.2). There was a statistically significant difference between boys and girls (P=0.06), with the boys reporting a higher level of own bedroom (82.4%) compared to the girls (78.9%).

Table 3.2. Own bedroom by gender of the young people

Own bedroom	Gen	Gender			
Own beardom	Boy	Girl	Total		
No -	456	596	1052		
NO	17.6%	21.1%	19.4%		
Voc	2134	2225	4359		
Yes	82.4%	78.9%	80.6%		
Takal	2590	2821	5411		
Total	100.0%	100.0%	100.0%		

Regarding age differences (figure 3.2), there was evidence of a higher self-reported level of own bedrooms among the eldest teens (15 years old), compared with those aged 13 years and particularly with the youngest ones (11 years old): 84.5%, 82.5% and 74.5%, respectively (P<0.001). These findings are very similar to the previous HBSC round conducted in 2017/18.

Figure 3.2. Own bedroom by age of the young people



Regarding the number of bathrooms in the house, overall, only about 2% of the young people reported not having any, whereas the majority (65.2%) of them stated that they had one bathroom at their houses (table 3.3). Conversely, about 4% of the young people reported having more than two bathrooms. There were no gender differences for the number of bathrooms at children's houses (P=0.25).

Table 3.3. Number of bathrooms by gender of the young people

Number of bathrooms	Gender		Total
Number of bathrooms	Воу	Girl	Total
Nama	62	54	116
None -	2.4%	1.9%	2.1%
0	1674	1865	3539
One —	64.5%	65.9%	65.2%
T	743	798	1541
Two	28.6%	28.2%	28.4%
N/ ava 4h an 4ma	115	113	228
More than two	4.4%	4.0%	4.2%
Tatal	2594	2830	5424
Total —	100.0%	100.0%	100.0%

As for age differences (table 3.4), there was evidence of a slightly higher number of bathrooms at the houses of young people aged 15 years (4.6% of this age-group reported more than two bathrooms at their homes compared with 4.1% of children aged 13 years and 3.9% of those aged 11 years).

Table 3.4. Number of bathrooms by age of the young people

Number of bathrooms	Age			Total
	11 years	13 years	15 years	Total
None —	28	46	42	116
	1.6%	2.6%	2.2%	2.1%
One —	1221	1178	1132	3531
	68.9%	66.4%	60.5%	65.2%
Two	454	477	610	1541
	25.6%	26.9%	32.6%	28.5%
More than two	70	72	86	228
	3.9%	4.1%	4.6%	4.2%
Total	1773	1773	1870	5416
	100.0%	100.0%	100.0%	100.0%

Regarding the number of computers, on the whole, about 24% of the young people reported not having any at their homes, whereas 39% of the young people stated that they owned one computer. On the other hand, about 17% of the young people reported having more than two computers (table 3.5). There were some slight gender differences regarding the number of computers owned (P=0.025), with the boys reporting a higher number than the girls (about 18% of the boys reported having more than two computers vs. 15% of the girls).

Table 3.5. Number of computers by gender of the young people

Number of computers	Gender		T.A.I
	Boy	Girl	Total
None -	625	659	1284
	24.1%	23.3%	23.7%
One	991	1131	2122
	38.2%	40.0%	39.1%
Two	515	607	1122
	19.8%	21.5%	20.7%
More than two	466	430	896
	17.9%	15.2%	16.5%
Total –	2597	2827	5424
	100.0%	100.0%	100.0%

As for age differences (table 3.6), there was evidence of a higher number of computers owned by young people aged 15 years (only about 20% of this age group reported no computers at their homes compared with 24% of children aged 13 years and about 27% of those aged 11 years; P<0.001).

Table 3.6. Number of computers by age of the young people

Number of computers	Age			Total
	11 years	13 years	15 years	iotai
None —	476	428	379	1283
	26.9%	24.1%	20.3%	23.7%
One	725	667	726	2118
	40.9%	37.6%	38.8%	39.1%
Two	315	372	434	1121
	17.8%	21.0%	23.2%	20.7%
More than two	255	308	331	894
	14.4%	17.4%	17.7%	16.5%
Total	1771	1775	1870	5416
	100.0%	100.0%	100.0%	100.0%

Regarding the possession of a dishwasher, about two-thirds (65.4%) of the young people did not have a dishwasher at their homes, compared with 34.6% of them who reported having a dishwasher at home (table 3.7). There was a highly statistically significant difference between boys and girls (P<0.001), with the boys reporting a higher possession of a dishwasher (about 40%) compared to the girls (30%).

Table 3.7. Dishwasher at home by gender of the young people

Dishwasher at home	Gender		Table	
	Воу	Girl	Total	
No -	1564	1977	3541	
	60.5%	69.9%	65.4%	
Yes -	1020	852	1872	
	39.5%	30.1%	34.6%	
Total —	2584	2829	5413	
	100.0%	100.0%	100.0%	

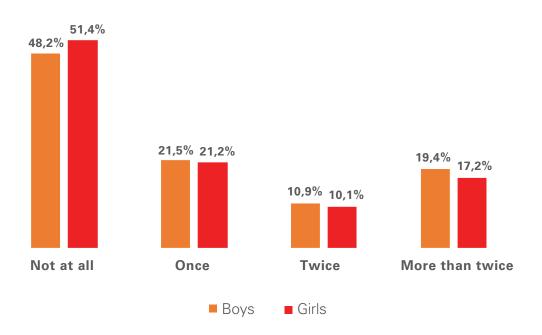
Regarding age differences (table 3.8), there was evidence of a lower dishwasher ownership among the youngest people (11 years old), compared with those aged 13 years and those aged 15 years: about 32%, 35%, and 36%, respectively (P=0.044).

Table 3.8. Dishwasher at home by age of the young people

Dishwasher at home		Age		Total
Dishwasher at nome	11 years	13 years	15 years	Total
No	1197	1151	1188	3536
No -	67.6%	64.9%	63.8%	65.4%
Voo	573	622	675	1870
Yes -	32.4%	35.1%	36.2%	34.6%
Total	1770	1773	1863	5406
	100.0%	100.0%	100.0%	100.0%

Regarding the number of family holidays, in total, about half of the young people reported not having had any during last year, whereas slightly more than one-fifth (21.4%) of the young people stated that they were once for holiday with their respective families. On the other hand, almost another fifth (18.3%) of the young people reported having had more than two holiday trips during the past year. There was a borderline significant gender difference in the number of family holidays (P=0.068), with the boys reporting a slightly higher number than the girls (figure 3.3).

Figure 3.3. Family holidays by gender of the young people



As for age differences (table 3.9), there was evidence of a slightly lower number of family holidays among young people aged 15 years (about 16% of this age group reported more than two holidays during the past year compared with about 18% of children aged 13 years and 20% of those aged 11 years; P=0.043).

Table 3.9. Family holidays by age of the young people

Family holidays		Age		Total
	11 years	13 years	15 years	Total
Not at all	885	870	950	2705
NOT at all	49.9%	48.9%	50.8%	49.9%
Once -	352	389	417	1158
	19.9%	21.9%	22.3%	21.4%
Twice -	175	192	200	567
iwice	9.9%	10.8%	10.7%	10.5%
Nava than tarias	361	327	303	991
More than twice -	20.4%	18.4%	16.2%	18.3%
Total -	1773	1778	1870	5421
	100.0%	100.0%	100.0%	100.0%

4. Health outcomes

- There is a significant improvement in health perception between the last two hbsc studies in albania. three in four young people in albania perceive their health as excellent.
- The main daily health complaints among young people aged 11, 13, and 15 years include feeling low, nervousness, irritation, and sleep disorders.
- One in four young people goes to bed at midnight or later on schooldays.
- Yes Two out of three girls and one in two boys feel lonely, at least occasionally.
- Ye Two in three young people believe they have a good body image.

Assessment of health and well-being consisted in the measurement of self-rated health, life satisfaction, different health complaints reported by the students for the past 6 months, as well as their perceptions of their own body image and the self-perceived body mass index (based on self-reported height and weight).

SELF-PERCEIVED HEALTH STATUS

Participants were asked about their self-perceived health status. Response options included very good; good; average; poor. Regarding the self-rated health, on the whole, about three-quarters of the young people (73%) perceived their current health status as excellent and further 22% as good (table 4.1). Conversely, only 0.6% of the young people rated their own health as poor. Boys had a more positive perception of their own health compared to the girls (about 77% of the boys perceived their health as excellent vs. 69% of the girls), a finding which was highly statistically significant (P<0.01).

Table 4.1. Self-rated health by gender of the young people

Calfanta di baalib	Ger	nder	Total
Self-rated health	Boy	Girl	Total
Excellent —	1994	1967	3961
Excellent	76.8%	69.4%	72.9%
Cand	487	700	1187
Good –	18.7%	24.7%	21.9%
Fair -	98	155	253
rair	3.8%	5.5%	4.7%
D	19	12	31
Poor –	0.7%	0.4%	0.6%
Takal	2598	2834	5432
Total —	100.0%	100.0%	100.0%

As for age comparisons, there was evidence of a graded inverse and statistically significant difference in self-rated health between young people of various ages (table 4.2). About 70% of the children aged 15 years rated their health as excellent compared to 73% of those aged 13 years and only 76% of the youngest people (P=0.001).

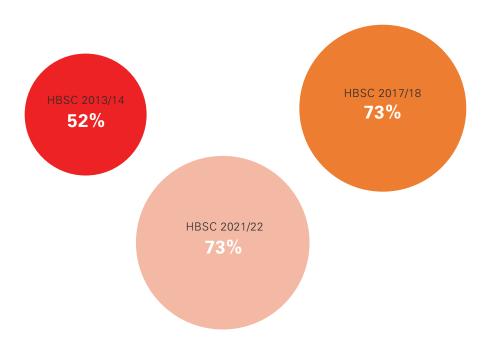
Table 4.2. Self-rated health by age of the young people

Self-rated health		Age			
	11 years	13 years	15 years	Total	
Excellent	1352	1293	1311	3956	
Excellent	76.2%	72.7%	70.1%	72.9%	
Good	340	399	446	1185	
	19.2%	22.4%	23.8%	21.8%	
F-:-	72	82	99	253	
Fair -	4.1%	4.6%	5.3%	4.7%	
Door	11	4	15	30	
Poor –	0.6%	0.2%	0.8%	0.6%	
Total	1775	1778	1871	5424	
	100.0%	100.0%	100.0%	100.0%	

COMPARISON WITH THE 2013/14 HBSC AND 2017/18 HBSC SURVEYS

There is evidence of an improvement in the perception of health status among young people in Albania in the past two HBSC rounds. Thus, in the 2013/14HBSC, only 52% of young people reported a very good self-perceived health status compared with 73% in the 2017/18 HBSC and/or the current HBSC round conducted in 2021/22 (figure 4.1).

Figure 4.1. Very good self-perceived health status in the last three rounds of the HBSC survey in Albania



LIFE SATISFACTION

Assessment of life satisfaction was based on a metric scale from 10 (best possible life for the children) to 0 (worst possible life). Young people were asked to indicate where, in general, they felt they stood on this scale at the moment (table 4.3). Overall, the mean score of life satisfaction was high (8.7±1.7). The median score was even higher (9) and the interquartile range was 8-10.

Table 4.3. Life satisfaction in the overall sample of the young people

Number	Valid	5225
Number	Missing	229
Mean		8.66
Std. Deviation		1.73
Minimum		0
Maximum		10
	25	8.00
Percentiles	50	9.00
	75	10.00

The mean score of life satisfaction was slightly higher in boys than in girls (8.8 vs. 8.5, respectively; P<0.01) [table 4.4].

Table 4.4. Life satisfaction by gender of the young people

Gender	N	Mean	Std. Deviation	Std. Error Mean
Boy	2471	8.84	1.574	.032
Girl	2754	8.49	1.854	.035

Furthermore, there was evidence of significant and graded age differences (table 4.5), with the eldest youth exhibiting a lower life satisfaction score (8.1) than their younger counterparts (8.7 among children aged 13 years and 9.2 among those aged 11 years).

Table 4.5. Life satisfaction by gender of the young people

Age	Number	Mean	Std. Deviation	Std. Error
11 years	1753	9.16	1.368	.033
13 years	1703	8.67	1.735	.042
15 years	1761	8.14	1.902	.045
Total	5217	8.66	1.734	.024

HEALTH COMPLAINTS

The health complaints assessed in the 2021/22 HBSC survey included the frequency of the following conditions in the past 6 months prior to the survey: headache, stomach-ache, backache, feeling low, irritability or bad temper, feeling nervous, difficulties in getting to sleep, or feeling dizzy. The distribution of these conditions (health complaints) in the overall sample of young people included in the survey is presented in table 4.6.

Table 4.6. Health complaints in the last 6 months

Health	Frequency o	Frequency of selected health complaints in the last 6 months: overall sample				
Complaints	About every day	More than once a week	About every week	About every month	Rarely or never	
Headache	463 (8.8%)	558 (10.6%)	495 (9.4%)	815 (15.4%)	2947 (55.8%)	
Stom- ach-ache	203 (3.9%)	250 (4.8%)	270 (5.2%)	940 (18.1%)	3524 (67.9%)	
Backache	364 (7.1%)	297 (5.8%)	344 (6.7%)	683 (13.3%)	3454 (67.2%)	
Feeling low	831 (16.0%)	735 (14.2%)	614 (11.8%)	981 (18.9%)	2029 (39.1%)	
Irritability or bad temper	814 (15.8%)	706 (13.7%)	622 (12.1%)	890 (17.3%)	2116 (41.1%)	

Feeling nervous	821 (16.0%)	633 (12.3%)	589 (11.5%)	849 (16.5%)	2248 (43.7%)
Difficulties in getting to sleep	506 (9.9%)	340 (6.6%)	308 (6.0%)	536 (10.5%)	3439 (67.1%)
Feeling dizzy	323 (6.3%)	280 (5.4%)	268 (5.2%)	539 (10.5%)	3738 (72.6%)

Overall, the prevalence of very frequent complaints (almost on a daily basis) was the highest for feeling low, feeling nervous and irritability or bad temper (all three at approximately 16%), followed by difficulties in getting to sleep (nearly 10%) and headache (almost 9%), whereas it was the lowest for stomach-ache (3.9%) and feeling dizzy (6.3%).

Similarly, the prevalence of *more than once a week* was the highest for *feeling low* and *irritability or bad temper* (both about 14%), and the lowest for *stomach-ache*, *feeling dizzy*, and *backache* (4.8%, 5.4%, and 5.8%, respectively). The distribution of health complaints among *boys* is presented in table 4.7 and among girls in table 4.8.

Table 4.7. Health complaints in the last 6 months in boys

Heelth	Frequen	cy of selected heal	th complaints in	the last 6 month	ns in boys
Health Complaints	Nearly every day	More than once a week	Nearly every week	Nearly every month	Rarely or never
Headache	138 (5.5%)	183 (7.3%)	183 (7.3%)	402 (16.1%)	1592 (63.7%)
Stom- ach-ache	91 (3.7%)	81 (3.3%)	124 (5.1%)	357 (14.5%)	1801 (73.4%)
Backache	152 (6.2%)	103 (4.2%)	143 (5.9%)	302 (12.4%)	1733 (71.2%)
Feeling low	298 (12.2%)	277 (11.3%)	284 (11.6%)	479 (19.6%)	1111 (45.4%)
Irritability or bad temper	248 (10.2%)	297 (12.2%)	293 (12.0%)	434 (17.8%)	1160 (47.7%)
Feeling ner- vous	276 (11.4%)	259 (10.7%)	269 (11.1%)	429 (17.7%)	1192 (49.2%)
Difficulties in getting to sleep	188 (7.8%)	135 (5.6%)	133 (5.5%)	240 (9.9%)	1721 (71.2%)
Feeling dizzy	120 (4.9%)	105 (4.3%)	103 (4.2%)	241 (9.9%)	1863 (76.6%)

Table 4.8. Health complaints in the last 6 months in girls

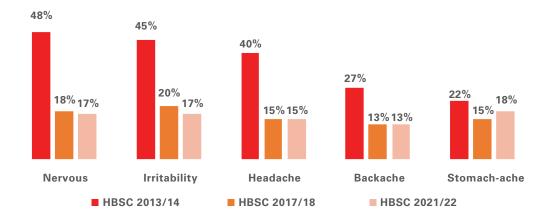
	Frequenc	y of selected heal	th complaints in	the last 6 month	s in girls
Health Complaints	Nearly every day	More than once a week	Nearly every week	Nearly every month	Rarely or never
Headache	325 (11.7%)	375 (13.5%)	312 (11.2%)	413 (14.9%)	1355 (48.7%)
Stom- ach-ache	112 (4.1%)	169 (6.2%)	146 (5.3%)	583 (21.3%)	1723 (63.0%)
Backache	212 (7.8%)	194 (7.2%)	201 (7.4%)	381 (14.1%)	1721 (63.5%)
Feeling low	533 (19.4%)	458 (16.7%)	330 (12.0%)	502 (18.3%)	918 (33.5%)
Irritability or bad temper	566 (10.2%)	409 (15.1%)	329 (12.1%)	456 (16.8%)	956 (35.2%)
Feeling nervous	545 (20.1%)	374 (13.8%)	320 (11.8%)	420 (15.5%)	1056 (38.9%)
Difficulties in getting to sleep	318 (7.8%)	205 (7.6%)	175 (6.5%)	296 (10.9%)	1718 (63.3%)
Feeling dizzy	203 (7.5%)	175 (6.4%)	165 (6.1%)	298 (11.0%)	1875 (69.0%)

Regarding gender differences (table 4.7 and table 4.8), there was evidence of a higher prevalence in girls compared to the boys in the daily frequency of headache (11.7% vs. 5.5%, respectively; P<0.001), feeling low (19.4% vs. 12.2%, respectively; P<0.001), feeling nervous (20.1% vs. 11.4%, respectively; P<0.001), and feeling dizzy (7.5% vs. 4.9%, respectively; P<0.001).

COMPARISON WITH THE 2013/14 HBSC AND 2017/18 HBSC SURVEYS

Overall, in the 2021/22 HBSC survey, there is evidence of an improvement of all health complaints compared to the 2013/14 HBSC round, whereas findings are similar with the previous round conducted in 2017/18. Thus, for the frequency once a month there is an improvement of the irritation (from 45% in 2013/14 to 17% in 2021/22). Similarly, for the complaint nervousness there is a significant improvement (from 48% in 2013/14 to 17% in 2021/22). The prevalence of the monthly frequency of the main health complaints for the last three HBSC rounds is presented in figure 4.2. However, of note, in all three rounds of the HBSC survey, girls reported a higher prevalence of health complaints compared to boys.

Figure 4.2. Monthly health complaints in the last three HBSC rounds



SLEEPING PATTERNS

In the HBSC round conducted in 2021/22, young people were also asked about the time they go to bed during schooldays and the time they wake up on school mornings.

Regarding the time to bed during schooldays, only 7% of young people reported going to bed no later than 21:00, whereas 6% reported going to bed at 2:00 or even later (table 4.9). Girls went to bed earlier than boys (no later than 21:00: 8% vs. 6% respectively, and at 2:00 or later: 5% vs. 8%, respectively; P<0.001). Worryingly, one in four children reported going to bed at midnight or later, an issue which should raise serious concerns to the parents/caregivers and educators.

Table 4.9. Time to bed on schooldays by gender of the young people

	Gend	der	
Time to bed on schooldays	Воу	Girl	Total
No later than 21:00	154	227	381
No later than 21:00	5.9%	8.0%	7.0%
24.20	260	376	636
21:30	10.0%	13.3%	11.7%
00.00	404	466	870
22:00	15.6%	16.5%	16.0%
00.00	388	400	788
22:30	15.0%	14.1%	14.5%
00.00	368	365	733
23:00	14.2%	12.9%	13.5%
00.00	288	325	613
23:30	11.1%	11.5%	11.3%
00.00	245	205	450
00:00	9.4%	7.2%	8.3%
00.00	117	134	251
00:30	4.5%	4.7%	4.6%
04-00	91	106	197
01:00	3.5%	3.7%	3.6%
04-00	81	88	169
01:30	3.1%	3.1%	3.1%
02.00 au latan	197	140	337
02:00 or later —	7.6%	4.9%	6.2%
Total	2593	2832	5425
IOTAI	100.0%	100.0%	100.0%

As for age differences (table 4.10), 11-year-old children went to bed earlier than their older counterparts (no later than 21:00: about 14% compared with 5% among 13-year-old children and 2.5% in the eldest children; at 2:00 or later: 2.5% compared with 4.8% among 13-year-old children and 11% in the eldest ones; P<0.001).

Table 4.10. Time to bed on schooldays by age of the young people

Time to bed on schooldays		Age		Total
	11 years	13 years	15 years	
	244	90	46	380
No later than 21:00	13.7%	5.1%	2.5%	7.0%
	395	167	73	635
21:30	22.2%	9.4%	3.9%	11.7%
	363	328	179	870
22:00	20.4%	18.6%	9.6%	16.1%
	273	282	232	787
22:30	15.4%	16.0%	12.4%	14.5%
	184	255	294	733
23:00	10.4%	14.4%	15.7%	13.5%
	122	223	267	612
23:30	6.9%	12.6%	14.3%	11.3%
	86	135	229	450
00:00	4.8%	7.6%	12.2%	8.3%
	27	82	142	251
00:30	1.5%	4.6%	7.6%	4.6%
	23	65	108	196
01:00	1.3%	3.7%	5.8%	3.6%
24.22	15	56	97	168
01:30	0.8%	3.2%	5.2%	3.1%
	45	85	206	336
02:00 or later —	2.5%	4.8%	11.0%	6.2%
	1777	1768	1873	5418
Total —	100.0%	100.0%	100.0%	100.0%

Regarding the time children wake up on school mornings (table 4.11), on the whole, only 0.7% of the children reported waking up no later than 5:00, whereas the majority (about 39%) woke up at 7:00 or at 6:30 (24%). Conversely, 4.4% of young people (5.2% of boys vs. 3.7% of girls; P<0.001) reported waking up at 9:30 or later.

Table 4.11. Time to rise on school mornings by gender of the young people

Time to rise on	Ge	nder	Total
school mornings	Boy	Girl	iotai
	20	16	36
No later than 5:00	0.8%	0.6%	0.7%
	56	43	99
5:30	2.2%	1.5%	1.8%
	153	277	430
6:00	5.9%	9.8%	7.9%
	504	793	1297
6:30	19.4%	28.0%	23.9%
	1008	1081	2089
7:00	38.9%	38.2%	38.5%
	487	309	796
7:30	18.8%	10.9%	14.7%
	117	84	201
8:00	4.5%	3.0%	3.7%
	50	63	113
8:30	1.9%	2.2%	2.1%
	62	59	121
9:00	2.4%	2.1%	2.2%
	135	105	240
9:30 or later	5.2%	3.7%	4.4%
	2592	2830	5422
Total	100.0%	100.0%	100.0%

As for age differences (table 4.12), 13-year-old children reported waking up less frequently (1.4%) at 9:30 or later on school mornings compared with 11-year-old children (5.7%) or 15-year-old children (6.1%; P<0.001). Conversely, there were no age differences in waking up very early in the morning (no later than 5:00).

Table 4.12. Time to rise on school mornings by age-group of the young people

Time to rise on		Ą	ge	Total
school mornings	11 years	13 years	15 years	
No lotouthou 5:00	13	10	13	36
No later than 5:00	0.7%	0.6%	0.7%	0.7%
F-20	25	37	37	99
5:30	1.4%	2.1%	2.0%	1.8%
C-00	118	159	147	424
6:00	6.7%	9.0%	8.0%	7.9%
C-20	404	462	412	1278
6:30	23.0%	26.2%	22.4%	23.8%
7.00	637	737	696	2070
7:00	36.2%	41.8%	37.8%	38.6%
7.00	224	272	293	789
7:30	12.7%	15.4%	15.9%	14.7%
0.00	102	38	60	200
8:00	5.8%	2.2%	3.3%	3.7%
0.00	64	13	35	112
8:30	3.6%	0.7%	1.9%	2.1%
0.00	75	9	37	121
9:00	4.3%	0.5%	2.0%	2.3%
0.00	98	26	111	235
9:30 or later	5.6%	1.5%	6.0%	4.4%
	1760	1763	1841	5364
Total	100%	100%	100%	100%

SENSE OF LONELINESS

In the HBSC round conducted in 2021/22, young people were also asked a series of questions about their perceived sense of loneliness and anxiety disorders.

About 43% of young people had never felt lonely, whereas 2.5% of them always felt lonely (table 4.13). The sense of loneliness (at least rarely and above) was considerably more prevalent among girls than boys (around 65% vs. 47%, respectively; P<0.001). Furthermore, the prevalence of always feeling lonely was more than double in girls compared to the boys (3.4% vs. 1.6%, respectively, P<0.001).

Table 4.13. Sense of loneliness by gender of the young people

Compa of Jamalinasa	Gen	der	Total
Sense of Ioneliness	Воу	Girl	Total
Never	1373	984	2357
ivever	52.8%	34.7%	43.4%
Davalis	666	746	1412
Rarely	25.6%	26.3%	26.0%
Sometimes	407	715	1122
Sometimes	15.7%	25.2%	20.7%
No at at the time	111	295	406
Most of the time	4.3%	10.4%	7.5%
Almana	41	95	136
Always	1.6%	3.4%	2.5%
Takal	2598	2835	5433
Total	100.0%	100.0%	100.0%

The age differences were also remarkable (table 4.14): the prevalence of the sense of loneliness (at least rarely and above) increased with age: was 46% in 11-year-old children, 57% in those aged 13 years and 66% among the eldest individuals (P<0.001). In addition, the prevalence of feeling always lonely was 1.3% among the youngest children, 2.5% in those aged 13 years and 3.6% in children aged 15 years (P<0.001).

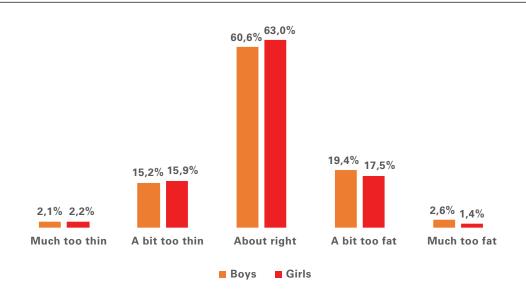
Table 4.14. Sense of loneliness by age of the young people

Sense of Ioneliness		Age		
	11 years	13 years	15 years	Total
Navav	958	764	632	2354
Never —	53.9%	43.1%	33.7%	43.4%
Rarely	453	482	475	1410
	25.5%	27.2%	25.3%	26.0%
	273	341	507	1121
Sometimes —	15.4%	19.2%	27.0%	20.7%
BA . C.I	70	141	194	405
Most of the time —	3.9%	8.0%	10.3%	7.5%
	24	44	67	135
Always	1.3%	2.5%	3.6%	2.5%
Total —	1778	1772	1875	5425
	100.0%	100.0%	100.0%	100.0%

BODY IMAGE

Regarding body image, overall, only 2.2% of the young people perceived their body as much too thin, as opposed to 2.0% of those who believed they were much too fat (figure 4.3). Almost two-thirds (62%) of the young people considered they were about right as far as their body weight is concerned. There were significant gender differences (P=0.007), with girls having a more favourable self-perceived body image than boys (about right: 63% in girls vs. 61% in boys).

Figure 4.3. Body image by gender of young people



As for age differences (table 4.15), there was a graded relationship, with younger children (11 years old) having a more negative view of their body image compared with their older counterparts (about right: 58% in 11 year olds compared with about 62% among the 13 year olds and 65% among the 15 year olds; P=0.002).

Table 4.15. Body image by age of the young people

Dody imogo		Age		Total
Body image	11 years	13 years	15 years	Total
Name to a thin	49	30	38	117
Much too thin	2.8%	1.7%	2.0%	2.2%
A bit too thin	294	265	287	846
A DIT too thin	16.5%	14.9%	15.3%	15.6%
A b a 4	1036	1109	1216	3361
About right	58.2%	62.4%	64.9%	61.9%
A 1.14.4	360	339	300	999
A bit too fat	20.2%	19.1%	16.0%	18.4%
NA	40	35	32	107
Much too fat	2.2%	2.0%	1.7%	2.0%
Total	1779	1778	1873	5430
	100.0%	100.0%	100.0%	100.0%

BODY MASS INDEX

The assessment of body mass was based on the self-reported weight (in kg) and height (in cm). The overall mean value of body weight (table 4.16) was 50.6±12.9 kg (median value: 50 kg; interquartile range: 40-59 kg; weight range: 20-114 kg). Mean weight was significantly higher among boys than girls (52.8 kg vs. 48.6 kg, respectively; P<0.001).

On the other hand, mean height (table 4.16) was 160.7±12.3 cm (median value: 161 cm; interquartile range: 152-169 cm; height range: 120-199 cm). Mean height was significantly higher among boys than girls (162.7 cm vs. 158.9 cm, respectively; P<0.001).

Table 4.16. Height and weight in the overall sample of the young people

Parameter		Weight (kg)	Height (cm)
Number	Valid	5037	4964
	Missing	417	490
Mean		50.58	160.69
Std. Deviation		12.93	12.26
Minimum		20	120
Maximum		114	199
	25	40.00	152.00
Percentiles	50	50.00	161.00
	75	59.00	169.00

Mean body mass index (BMI, calculated as weight/height²) (table 4.17) was 19.5±3.5 (median value: 19; interquartile range: 17-21; range: 11-43). Mean BMI was significantly higher among boys than girls (19.8 vs. 19.2, respectively; P<0.001).

Table 4.17. Body mass index in the overall sample of the young people

Parameter		Body mass index
Number	Valid	4837
	Missing	617
Mean		19.50
Std. Deviation		3.52
Minimum		11.02
Maximum		42.67
	25	17.15
Percentiles	50	19.04
	75	21.45

5. Health behaviours

- Almost one in three young people in Albania conducts physical activity on a daily basis.
- 2 One in four young people skips breakfast during weekdays.
- Almost one in two young people consumes fruit more than once per day.
- 2 One in three young people consumes vegetables more than once per day.
- 2 One in four young people consumes different types of sweets *more than once per day*.
- 24 One in five young people consumes artificially sweetened beverages daily.
- One in ten young people eats at a fast food restaurant every day.
- 2 One in three young people brushes his/her teeth daily.

The assessment of health-related behaviours included the measurement of physical activity, breakfast consumption, food consumption frequency aspects, family meals, tooth brushing.

PHYSICAL ACTIVITY

The engagement in physical activity was assessed through the following question: During the past 7 days, on how many days have you been physically active for at least 60 minutes/day? Regarding the frequency of physical activity (table 5.1), overall, about 29% of the young people exercised on a daily basis and only about 5% were completely inactive (pointing to an extremely sedentary lifestyle). The frequency of daily physical exercise was significantly higher among boys compared to the girls (about 36% vs. 22%, respectively; P<0.001).

Table 5.1. Frequency of physical activity by gender of the young people

Dove now wools	Gen	nder	Total
Days per week	Boy	Girl	Total
0 dave	100	174	274
0 days	3.9%	6.2%	5.1%
1 day	152	309	461
1 day —	6.0%	11.1%	8.7%
2 days	218	428	646
2 days	8.6%	15.3%	12.1%
2 days	312	419	731
3 days	12.3%	15.0%	13.7%
4 days	328	351	679
4 days	12.9%	12.6%	12.7%
E dave	266	273	539
5 days	10.5%	9.8%	10.1%
C days	249	215	464
6 days	9.8%	7.7%	8.7%
7 days	908	627	1535
7 days	35.8%	22.4%	28.8%
Total	2533	2796	5329
Total –	100.0%	100.0%	100.0%

As for age differences (table 5.2), the younger children (11 years old) reported a considerably higher frequency of daily physical activity compared with the 13year olds and especially the eldest (15 year olds) [about 37%, 29%, and 21%, respectively; P<0.001]. Conversely, the youngest children reported a lower completely sedentary behaviour compared with the 13 year olds and particularly with the 15-year-old individuals (3.4%, 4.7%, and 7.2%, respectively; P<0.001). These findings are fairly consistent with the previous HBSC round conducted in 2017/18.

Table 5.2. Frequency of physical activity by age of the young people

Davis man susak		Age		Total
Days per week	11 years	13 years	15 years	Total
0 days	60	82	132	274
0 days	3.4%	4.7%	7.2%	5.1%
1 day.	126	144	191	461
1 day	7.2%	8.3%	10.4%	8.7%
2 dave	169	210	265	644
2 days	9.7%	12.1%	14.4%	12.1%
2 4	179	250	301	730
3 days	10.3%	14.4%	16.4%	13.7%
4	209	230	240	679
4 days	12.0%	13.2%	13.1%	12.8%
Edava	191	170	178	539
5 days	10.9%	9.8%	9.7%	10.1%
C -1	162	151	150	463
6 days	9.3%	8.7%	8.2%	8.7%
7 4	650	505	377	1532
7 days	37.2%	29.0%	20.6%	28.8%
Takal	1746	1742	1834	5322
Total	100.0%	100.0%	100.0%	100.0%

Regarding the frequency of vigorous physical activity (table 5.3), on the whole, less than one-third of the young people (about 27%) exercised vigorously on a daily basis and only about 7% never engaged in such demanding activities. Similar to any type of physical activity, the frequency of daily vigorous physical exercise was significantly higher among boys compared to girls (about 35% vs. 21%, respectively; P<0.001). Also, these findings are very similar to the HBSC round carried out in 2017/18.

Table 5.3. Frequency of vigorous physical activity by gender of the young people

Dava navyvaak	Ge	nder	Total
Days per week	Воу	Girl	lotai
Every day —	890	585	1475
Every day	34.7%	20.8%	27.4%
4-6 times a week	598	457	1055
4-0 tilles a week	23.3%	16.2%	19.6%
3 times a week	412	474	886
3 tillies a week	16.1%	16.8%	16.5%
2 times a week	228	389	617
2 times a week	8.9%	13.8%	11.5%
Once a week	180	401	581
Once a week —	7.0%	14.2%	10.8%
Once a month	41	117	158
Once a month —	1.6%	4.2%	2.9%
l and them are a mouth	71	175	246
Less than once a month —	2.8%	6.2%	4.6%
Nover	144	220	364
Never —	5.6%	7.8%	6.8%
Total —	2564	2818	5382
iotai	100.0%	100.0%	100.0%

As for age differences (table 5.4), likewise the overall physical exercise, the younger children (11 years old) reported a considerably higher frequency of daily vigorous physical activity compared with the 13-year old and especially the eldest (15 years) individuals (34%, 28%, and 21%, respectively; P<0.001). On the other hand, the youngest and the 13-year-old children reported a lower complete absence of engagement in heavy exercise (5.8% and 5.5%, respectively) compared with the 15-year-old age group (8.9%, P<0.001).

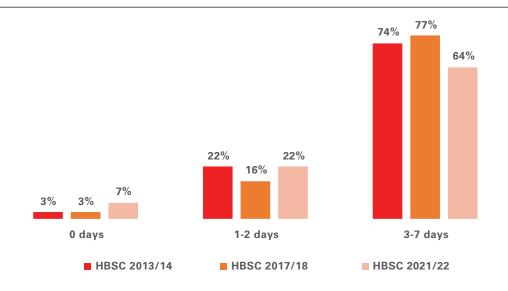
Table 5.4. Frequency of vigorous physical activity by age of the young people

B		Age		Total	
Days per week	11 years	13 years	15 years	Total	
Every day	597	487	387	1471	
	34.0%	27.7%	20.8%	27.4%	
4-6 times a week	388	334	332	1054	
t-o times a week	22.1%	19.0%	17.8%	19.6%	
	277	321	288	886	
3 times a week	15.8%	18.3%	15.5%	16.5%	
2 times a week	181	201	235	617	
	10.3%	11.5%	12.6%	11.5%	
	119	196	266	581	
Once a week	6.8%	11.2%	14.3%	10.8%	
O	40	44	74	158	
Once a month	2.3%	2.5%	4.0%	2.9%	
Less than once a	52	76	116	244	
month	3.0%	4.3%	6.2%	4.5%	
Never	102	96	165	363	
Never	5.8%	5.5%	8.9%	6.8%	
Takal	1756	1755	1863	5374	
Total	100.0%	100.0%	100.0%	100.0%	

COMPARISON WITH 2017/18 HBSC AND 2013/14 HBSC SURVEYS

In the 2017/18 HBSC there was evidence of an increase in the frequency of physical activity (3-7 days) compared with the 2013/14HBSC, whereas in the current HBSC conducted in 2021/22 there is evidence of a decrease in this indicator. Thus, in 2022, 64% of young people reported conducting physical activity 3-7 days per week compared with 77% in 2018 and 74% of young people in 2014 (figure 5.1).

Figure 5.1. Physical activity ≥ 3 days/week in the three last rounds of HBSC in Albania



Eating habits

BREAKFAST CONSUMPTION

The measurement of breakfast consumption included an assessment of this habit during weekdays and over weekend. On the whole, more than a quarter (27%) of the young people never had breakfast during weekdays which is a cause for concern, and around 12% never had breakfast over weekend. Conversely, about half (48%) of the young people consumed breakfast all weekdays and more than three out of four young people (77%) consumed breakfast in both weekend days (Table 5.5).

Boys reported consuming breakfast during weekdays more frequently than girls (P<0.001), whereas the opposite was found for breakfast consumption over weekend. Furthermore, the youngest children (11 years) reported a significantly higher frequency of breakfast consumption during weekdays compared with the 13 year olds and especially 15 year olds (frequency of "five days" consumption: 62%, 46%, and 38%, respectively; P<0.001).

Table 5.5. Frequency of breakfast consumption during weekdays and weekend by gender and age of the young people

	Frequency of breakfast consumption						
Breakfast consumption	Gen	der		Age-group		Total	
	Boys	Girls	11 years	13 years	15 years	IOtal	
Weekdays:							
Never	564 (23.2%)	819 (30.6%)	263 (16.0%)	491 (29.7%)	625 (34.7%)	1383 (27.1%)	
One day	126 (5.2%)	163 (6.1%)	97 (5.9%)	92 (5.6%)	100 (5.6%)	289 (5.7%)	
Two days	173 (7.1%)	210 (7.8%)	120 (7.3%)	106 (6.4%)	157 (8.7%)	383 (7.5%)	
Three days	182 (7.5%)	180 (6.7%)	73 (4.4%)	136 (8.2%)	152 (8.4%)	362 (7.1%)	
Four days	117 (4.8%)	110 (4.1%)	70 (4.3%)	73 (4.4%)	84 (4.7%)	227 (4.4%)	
Five days	1265 (52.1%)	1196 (44.7%)	1023 (62.2%)	754 (45.6%)	681 (37.9%)	2461 (48.2%)	
Total	2427 (100.0%)	2678 (100.0%)	1646 (100.0%)	1652 (100.0%)	1799 (100.0%)	5105 (100.0%)	
Weekend:							
Never	312 (13.3%)	270 (10.0%)	118 (7.2%)	199 (12.2%)	265 (15.0%)	582 (11.6%)	
One day	259 (11.1%)	313 (11.6%)	156 (9.6%)	182 (11.2%)	234 (13.2%)	572 (11.4%)	
Both days	1771 (75.6%)	2109 (78.3%)	1354 (83.2%)	1249 (76.6%)	1270 (71.8%)	3880 (77.1%)	
Total	2342 (100.0%)	2692 (100.0%)	1628 (100.0%)	1630 (100.0%)	1769 (100.0%)	5034 (100.0%)	

COMPARISON WITH 2013/14 HBSC AND 2017/18 HBSC SURVEYS

In the HBSC rounds conducted in 2013/14 and 2017/18, about 23% of young people always skipped breakfast during the weekdays, whereas in the current HBSC round conducted in 2021/22 breakfast skipping during weekdays has slightly increased to 27%. Similar findings are evident for the weekends, where in the two survey rounds conducted in 2013/14 and 2017/18, about 9% of the young people reported skipping breakfast, whereas in the current round carried out in 2021/22 this indicator has slightly increased to about 12%.

FRUIT AND VEGETABLE CONSUMPTION

Regarding fruit consumption (table 5.6), overall, a slightly less than half of the young people (45%) reported consuming fruits more than once daily, whereas only 2% reported no fruit consumption at all. There was evidence of a significant difference between boys and girls in the frequency of fruit consumption. Hence, girls reported more frequent fruit consumption than boys (more than once daily: about 47% vs. 42% respectively; P<0.001). As for the age groups, the frequency of more than once daily consumption of fruits was the highest among young people aged 11 years (52%), and the lowest among those aged 15 years (40%) [P<0.001].

Regarding vegetable consumption (table 5.6), on the whole, slightly less than one third of the young people (about 32%) reported consuming vegetables more than once a day, whereas about 5% of the young people did not consume vegetables at all. Similarly to fruit consumption, girls reported more frequent vegetable consumption than boys (more than once daily: 35% vs. 29% respectively; P<0.001). As for the age-group differences, the frequency of more than once daily consumption of vegetables was significantly higher among children aged 11 years (about 38%) compared with those aged 13 and/or 15 years (29% in each; P<0.001).

SWEET CONSUMPTION

Concerning the consumption of sweets, overall, about one-fourth (22%) of the young people reported eating different types of sweets more than once a day, whereas only about 4% did not consume sweets at all (table 5.6). Daily consumption of sweets was higher among girls than in boys (about 24% vs. 20%, respectively; P<0.001). Also, there was evidence of a gradient relationship with age, where young people aged 15 years reported the highest frequency of daily consumption, whereas the youngest children reported the lowest (P<0.001).

CONSUMPTION OF SOFT DRINKS

Intake of soft drinks among adolescents is associated with a greater risk of weight gain²⁰⁹, obesity^{210,211} and chronic diseases^{212,213} and directly affects dental health by providing excessive amounts of sugars ²¹⁴.

Regarding the frequency of soft drink consumption, on the whole, about 20% of the young people reported drinking artificially-sweetened beverages, and only 10% did not consume such drinks at all (table 5.6). Boys reported a slightly higher daily consumption than girls (about 21% vs. 19%, respectively; P<0.001). Similar to the consumption of sweets, there was a linear association with age, where young people aged 15 years reported the highest frequency of daily consumption of soft drinks, whereas the youngest children reported the lowest consumption (P<0.001).

Table 5.6. Frequency of food and beverage consumption by gender and age of the young people

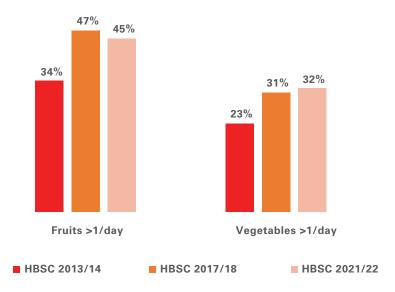
Food and		Frequenc	y of food and	beverage con	sumption	
beverage	Ge	nder		Age-group		Total
consumption	Boys	Girls	11 years	13 years	15 years	iotai
Fruits:						
Never	77 (3.0%)	29 (1.0%)	25 (1.4%)	37 (2.1%)	44 (2.4%)	106 (2.0%)
<once td="" week<=""><td>97 (3.8%)</td><td>125 (4.4%)</td><td>65 (3.7%)</td><td>73 (4.1%)</td><td>84 (4.5%)</td><td>222 (4.1%)</td></once>	97 (3.8%)	125 (4.4%)	65 (3.7%)	73 (4.1%)	84 (4.5%)	222 (4.1%)
Once/week	136 (5.3%)	162 (5.7%)	102 (5.8%)	95 (5.4%)	99 (5.3%)	298 (5.5%)
2-4 days/week	455 (17.7%)	466 (16.5%)	235 (13.3%)	305 (17.3%)	379 (20.3%)	921 (17.1%)
5-6 days/week	375 (14.6%)	305 (10.8%)	197 (11.1%)	247 (14.0%)	236 (12.7%)	680 (12.6%)
Once daily	356 (13.8%)	410 (14.5%)	227 (12.8%)	256 (14.5%)	282 (15.1%)	766 (14.2%)
>1 day	1078 (41.9%)	1330 (47.0%)	918 (51.9%)	748 (42.5%)	739 (39.7%)	2408 (44.6%)
Total	2574 (100.0%)	2827 (100.0%)	1769 (100.0%)	1761 (100.0%)	1863 (100.0%)	5401 (100.0%)
Vegetables:						
Never	162 (6.3%)	80 (2.8%)	80 (4.5%)	80 (4.6%)	82 (4.4%)	242 (4.5%)
<once td="" week<=""><td>173 (6.8%)</td><td>167 (5.9%)</td><td>111 (6.3%)</td><td>132 (7.5%)</td><td>97 (5.2%)</td><td>340 (6.3%)</td></once>	173 (6.8%)	167 (5.9%)	111 (6.3%)	132 (7.5%)	97 (5.2%)	340 (6.3%)
Once/week	225 (8.8%)	227 (8.0%)	129 (7.3%)	175 (10.0%)	143 (7.7%)	452 (8.4%)
2-4 days/week	494 (19.3%)	446 (15.8%)	246 (13.9%)	322 (18.4%)	372 (20.0%)	940 (17.5%)
5-6 days/week	435 (17.0%)	426 (15.1%)	255 (14.4%)	284 (16.2%)	322 (17.3%)	861 (16.0%)
Once daily	343 (13.4%)	500 (17.7%)	280 (15.8%)	259 (14.8%)	303 (16.3%)	843 (15.7%)
>1 day	729 (28.5%)	977 (34.6%)	666 (37.7%)	500 (28.5%)	538 (29.0%)	1706 (31.7%)
Total	2561 (100.0%)	2823 (100.0%)	1767 (100.0%)	1752 (100.0%)	1857 (100.0%)	5384 (100.0%)
Sweets:						
Never	133 (5.2%)	63 (2.2%)	96 (5.4%)	56 (3.2%)	44 (2.4%)	196 (3.6%)
<once td="" week<=""><td>441 (17.2%)</td><td>374 (13.3%)</td><td>377 (21.4%)</td><td>251 (14.3%)</td><td>187 (10.1%)</td><td>815 (15.1%)</td></once>	441 (17.2%)	374 (13.3%)	377 (21.4%)	251 (14.3%)	187 (10.1%)	815 (15.1%)
Once/week	411 (16.0%)	421 (14.9%)	371 (21.0%)	262 (14.9%)	197 (10.6%)	832 (15.4%)
2-4 days/week	521 (20.3%)	523 (18.5%)	279 (15.8%)	339 (19.3%)	424 (22.8%)	1044 (19.4%)
5-6 days/week	267 (10.4%)	321 (11.4%)	146 (8.3%)	217 (12.4%)	224 (12.1%)	588 (10.9%)
Once daily	285 (11.1%)	448 (15.9%)	221 (12.5%)	234 (13.3%)	278 (15.0%)	733 (13.6%)
>1 day	506 (19.7%)	672 (23.8%)	274 (15.5%)	397 (22.6%)	504 (27.1%)	1178 (21.9%)
Total	2564 (100.0%)	2822 (100.0%)	1764 (100.0%)	1756 (100.0%)	1858 (100.0%)	5386 (100.0%)

Total	2562 (100.0%)	2822 (100.0%)	1763 (100.0%)	1755 (100.0%)	1858 (100.0%)	5384 (100.0%)
>1 day	533 (20.8%)	538 (19.1%)	255 (14.5%)	355 (20.2%)	459 (24.7%)	1071 (19.9%)
Once daily	233 (9.1%)	278 (9.9%)	154 (8.7%)	169 (9.6%)	188 (10.1%)	511 (9.5%)
5-6 days/week	242 (9.4%)	214 (7.6%)	91 (5.2%)	163 (9.3%)	200 (10.8%)	456 (8.5%)
2-4 days/week	399 (15.6%)	365 (12.9%)	239 (13.6%)	242 (13.8%)	282 (15.2%)	764 (14.2%)
Once/week	390 (15.2%)	462 (16.4%)	296 (16.8%)	296 (16.9%)	258 (13.9%)	852 (15.8%)
<once td="" week<=""><td>509 (19.9%)</td><td>680 (24.1%)</td><td>478 (27.1%)</td><td>366 (20.9%)</td><td>344 (18.5%)</td><td>1189 (22.1%)</td></once>	509 (19.9%)	680 (24.1%)	478 (27.1%)	366 (20.9%)	344 (18.5%)	1189 (22.1%)
Never	256 (10.0%)	285 (10.1%)	250 (14.2%)	164 (9.3%)	127 (6.8%)	541 (10.0%)
Soft drinks:						

COMPARISON WITH 2013/14 HBSC AND 2017/18 HBSC SURVEYS

In the current HBSC round conducted in 2021/22, the findings related to fruit and vegetable consumption are generally similar to the previous round conducted in 2017/18 (figure 5.2). Of note, in the 2017/18 HBSC, compared with the 2013/14 HBSC, there was an improvement in the *daily* consumption of fruit and vegetables (including the categories 1 time/day and >1 time/day). Hence, in the 2017/18 HBSC, consumption of fruit >1 time/day had increased to 47% from 34% in 2014. In 2021/22, it is 45%, which is very similar to the previous round (in 2017/18).

Figure 5.2. Fruit and vegetable consumption > 1 time/day in the last three rounds of HBSC survey



On the other hand, consumption of sweets was similar in all three survey rounds. Thus, 22% of young people reported consuming sweets >1 time/day in all three HBSC rounds. Conversely, daily consumption of artificially sweetened beverages has slightly but gradually decreased (from 28% in the 2013/14 HBSC, to 25,6% in the 2017/18 HBSC, and further to 20% in the 2021/22 HBSC).

FAMILY MEALS

Young people were asked about the frequency of consuming family meals. On the whole, most of the young people (about 63%) reported having family meals together every day, whereas 1.4% of them never did so (table 5.7). There were no significant gender differences in this regard (P=0.08).

Table 5.7. Frequency of consuming family meals together by gender of the young people

Familiamonla	Ger	nder	Total
Family meals	Boy	Girl	Total
Event dev	1633	1730	3363
Every day	63.8%	61.3%	62.5%
Mast days	608	695	1303
Most days —	23.8%	24.6%	24.2%
A1 .	139	167	306
About once a week —	5.4%	5.9%	5.7%
Less often —	137	195	332
Less often	5.4%	6.9%	6.2%
Navas	41	37	78
Never	1.6%	1.3%	1.4%
Takal	2558	2824	5382
Total —	100.0%	100.0%	100.0%

As for age differences (table 5.8), the eldest adolescents (15 years old) had the lowest daily frequency of consuming family meals together (57%) compared with the other two age groups (64% in 13-year-old individuals and 68% among those aged 11 years), a difference which was highly statistically significant (P<0.001).

Table 5.8. Frequency of consuming family meals together by age of the young people

Family woods			Total	
Family meals	11 years	13 years	15 years	Total
Every day —	1193	1113	1052	3358
	67.8%	63.5%	56.6%	62.5%
Most days	369	418	515	1302
	21.0%	23.8%	27.7%	24.2%
About once a week	92	100	114	306
	5.2%	5.7%	6.1%	5.7%
l ann aftan	86	105	139	330
Less often -	4.9%	6.0%	7.5%	6.1%
Name	20	18	40	78
Never	1.1%	1.0%	2.2%	1.5%
Total –	1760	1754	1860	5374
	100.0%	100.0%	100.0%	100.0%

FOOD-RELATED LIFESTYLE ASPECTS

Young people were asked about the frequency of eating in a fast-food restaurant. Overall, only 7% of the young people reported never eating in a fast-food restaurant, whereas 10.6% of them eat almost every day (table 5.9). This was significantly more frequent in boys than in girls (about 12.6% vs. 8.9%, respectively; P<0.001).

Table 5.9. Frequency of eating in a fast-food restaurant by gender of the young people

Frequency of eating in	Gei	nder	Total
a fast-food restaurant	Boy	Girl	Total
Never —	204	176	380
	7.9%	6.2%	7.0%
Davale	557	684	1241
Rarely	21.5%	24.1%	22.9%
On an a manually	235	299	534
Once a month	9.1%	10.6%	9.9%
2-3 times a month	448	536	984
2-3 times a month	17.3%	18.9%	18.2%
Once a week	360	433	793
Once a week	13.9%	15.3%	14.6%
2.4.days a yyaali	456	454	910
2-4 days a week	17.6%	16.0%	16.8%
E days a week or mare	325	252	577
5 days a week or more	12.6%	8.9%	10.6%
Total	2585	2834	5419
Total	100%	100%	100%

As for age differences (table 5.10), the eldest youth (15 years old) had the highest daily frequency of consuming fast food (13.4%) compared with the other two age groups (9.9% in 13-year-old individuals and 8.2% among those aged 11 years), a difference which was highly statistically significant (P<0.001).

Table 5.10. Frequency of eating in a fast –food restaurant by age of the young people

Frequency of eating in a fast-food restaurant	11 years	Age 13 years	15 years	Total
	160	124	90	374
Never	9.1%	7%	4.9%	7%
Rarely –	515	372	344	1231
	29.3%	21.1%	18.7%	23.0%
Once a month	223	173	132	528
	12.7%	9.8%	7.2%	9.8%
2-3 times a month —	320	353	305	978
	18.2%	20.1%	16.5%	18.2%
	209	262	314	785
Once a week —	11.9%	14.9%	17.0%	14.6%
	188	300	411	899
2-4 days a week	10.7%	17.1%	22.3%	16.8%
	145	175	247	567
5 days a week or more -	8.2%	9.9%	13.4%	10.6%
	1760	1759	1843	5362
Total —	100%	100%	100%	100%

TOOTHBRUSHING

Dental care was measured indirectly by asking the young people about the frequency of brushing their teeth. Overall, only 0.8% of the young people did not brush their teeth at all (table 5.11). On the other hand, more than half (about 56%) of the young people brushed their teeth more than once a day and further 30% did so at least once a day. Toothbrushing was significantly more prevalent among girls than boys (prevalence of toothbrushing more than once a day: 66% vs. 46%, respectively; P<0.001).

Table 5.11. Frequency of toothbrushing by gender of the young people

To add bound to a	Ger	nder	Total
Toothbrushing	Boy	Girl	Total
More than once a day	1190	1855	3045
	46.1%	65.6%	56.3%
Once a day	905	739	1644
	35.1%	26.1%	30.4%
	375	203	578
Once a week	14.5%	7.2%	10.7%
	72	25	97
Less than weekly	2.8%	0.9%	1.8%
	39	5	44
Never —	1.5%	0.2%	0.8%
	2581	2827	5408
Total —	100.0%	100.0%	100.0%

Conversely, young people aged 13 years (table 5.12) reported a lower frequency of brushing their teeth more than once daily (53%) compared with those aged 11 years (58%) and children aged 15 years (57%).

Table 5.12. Frequency of toothbrushing by age of the young people

Taathhumhina		Age		Total	
Toothbrushing	11 years	13 years	15 years	Total	
	1028	941	1073	3042	
More than once a day —	58.3%	53.2%	57.4%	56.3%	
Once a day	453	583	604	1640	
	25.7%	33.0%	32.3%	30.4%	
Once a week	227	194	156	577	
	12.9%	11.0%	8.3%	10.7%	
	42	33	22	97	
Less than weekly —	2.4%	1.9%	1.2%	1.8%	
	12	18	14	44	
Never —	0.7%	1.0%	0.7%	0.8%	
Total –	1762	1769	1869	5400	
	100.0%	100.0%	100.0%	100.0%	

COMPARISON WITH 2013/2014 HBSC AND 2017/18 HBSC SURVEYS

There were no differences between the three HBSC rounds in terms of toothbrushing. Hence, more than 50% of young people washed their teeth more than once a day in all three survey rounds (55% in the 2013/14 HBSC, 57% in the 2017/18 HBSC, and 56% in the 2021/22 HBSC).

WEIGHT REDUCTION BEHAVIOUR

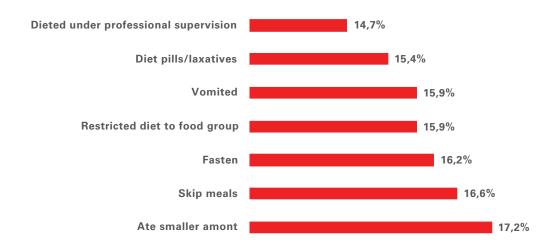
In the HBSC round conducted in 2021/22, young people were also asked whether they were on a diet or doing something else to lose weight. Only 10% of the young people reported being on diet for weight reduction, whereas 56.7% reported that their weight is fine (table 5.13). Girls reported a slightly higher rate of being on a diet than boys (11% vs. 8.6%, respectively; P<0.001)

Table 5.13. Being on a diet for weight reduction by gender of the young people

Being on a diet for	Ger	nder	Total
weight reduction	Boy	Girl	Total
No may waight in fine	1543	1512	3055
No, my weight is fine	60.2%	53.5%	56.7%
No, but I should	489	650	1139
lose some weight	19.1%	23.0%	21.1%
No, because I need	310	351	661
to put on weight	12.1%	12.4%	12.3%
V ₂ -	220	312	532
Yes —	8.6%	11.0%	9.9%
Tatal	2562	2825	5387
Total —	100%	100%	100%

Next, young people who reported being on a diet for weight reduction were asked which things they did to control their weight during the last 12 months (Figure 5.3). The majority of them (17.2%) reported that they ate smaller amounts, and more than 16% skipped meals or fasted. On the other hand, a considerable proportion of them (16%) reported unhealthy weight-reduction practices, such as vomiting (15.9%) or using diet pills/laxatives (15.4%).

Figure 5.3. Things that the young people did to control their weight during the last 12 months



6. Risky behaviours

- Almost one in ten children aged 11, 13, and 15 years has tried smoking at least 1-2 times during his/her lifetime.
- More than one in ten children aged 11, 13, and 15 are current e-cigarette smokers.
- Almost one in six children aged 11, 13, and 15 years has been drunk during his/her lifetime.
- One in 20 young people aged 15 years has tried cannabis in his/her lifetime.
- One in five young people aged 15 years has had sex in his/her lifetime.
- Two in three young people reported having used condoms during their last sexual intercourse.
- 2 One in five young people who have had sex reported using birth control pills during the last sexual intercourse.
- More than one in five children aged 11, 13, and 15 years were bullied at school.
- One in ten children 11, 13, and 15 years were bullied through the Internet.
- Almost one in ten young people aged 15 years had been physically or emotionally abused in the past year.

TOBACCO AND E-CIGARETTE USE

Cigarette smoking was based on two questions related to the frequency of lifetime smoking and smoking during the past month (past 30 days).

The overall prevalence of lifetime smoking (i.e., smoking at least 1-2 days in the life span) among young people included in this survey was about 12%. It was significantly higher in boys than in girls (about 15% vs. 9%, respectively; P<0.001). Furthermore, 1.6% of the girls reported having smoked 30 days or more in their lifetime, compared with 4% of the boys (table 6.1).

Table 6.1. Lifetime smoking by gender of the young people

Lifetime emoking	Ger	nder	Total	
Lifetime smoking	Boy	Girl	Total	
N.	2147	2533	4680	
Never	84.8%	90.7%	87.9%	
4.0 days	153	129	282	
1-2 days	6.0%	4.6%	5.3%	
0.5.1	52	28	80	
3-5 days	2.1%	1.0%	1.5%	
	31	21	52	
6-9 days	1.2%	0.8%	1.0%	
	29	22	51	
10-19 days —	1.1%	0.8%	1.0%	
	19	14	33	
20-29 days —	0.8%	0.5%	0.6%	
	102	46	148	
30 days or more	4.0%	1.6%	2.8%	
	2533	2793	5326	
Total -	100.0%	100.0%	100.0%	

The prevalence of lifetime smoking (at least 1-2 days in life span) was highest among the eldest teens (about 21%) compared with those aged 13 years (10%) and particularly those aged 11 years (about 4%) [P<0.001]. Also, the prevalence of smoking at least 30 days during their lifetime (table 6.2) was considerably higher among the eldest youth (6%) compared with the 13-year-old (1.7%) and the 11-year-old children (0.3%).

Table 6.2. Lifetime smoking by age of the young people

Lifetius e ausebius		Age		Total
Lifetime smoking	11 years	13 years	15 years	Total
Never	1677	1560	1438	4675
	95.7%	89.7%	78.8%	87.9%
40.1	41	92	148	281
1-2 days	2.3%	5.3%	8.1%	5.3%
3-5 days -	10	22	48	80
	0.6%	1.3%	2.6%	1.5%
	6	18	28	52
6-9 days	0.3%	1.0%	1.5%	1.0%
	12	9	30	51
10-19 days	0.7%	0.5%	1.6%	1.0%
	1	9	23	33
20-29 days -	0.1%	0.5%	1.3%	0.6%
30 days or more	6	30	110	146
	0.3%	1.7%	6.0%	2.7%
Total -	1753	1740	1825	5318
	100.0%	100.0%	100.0%	100.0%

The overall prevalence of past-month smoking (at least 1-2 days) was about 7%, a figure which was significantly higher in boys than in girls (about 9% vs. 5%, respectively; P<0.001). On the other hand (table 6.3), the overall prevalence of daily smoking was only 1.7%, which was also significantly higher among boys (table 6.3) than girls (2.6% vs. 0.9%, respectively; P<0.001).

Table 6.3. Days smoked in the past month by gender of the young people

Last month	Ger	nder	Total
	Boys	Girls	Total
Never -	2324	2677	5001
ivever	90.6%	95.1%	92.9%
1 2 days	87	64	151
1-2 days —	3.4%	2.3%	2.8%
2 E doue	28	16	44
3-5 days —	1.1%	0.6%	0.8%
	21	13	34
6-9 days	0.8%	0.5%	0.6%
10 10 days	26	15	41
10-19 days —	1.0%	0.5%	0.8%
00.00 d	14	6	20
20-29 days —	0.5%	0.2%	0.4%
20 1	66	24	90
30 days or more	2.6%	0.9%	1.7%
Takal	2566	2815	5381
Total –	100.0%	100.0%	100.0%

Similar to the lifetime prevalence, the proportion of past-month smoking (at least 1-2 days) was significantly higher among the eldest youth (12%) compared with children aged 13 years (6%) and especially those aged 11 years (2%) [P<0.001]. In addition, daily smoking was significantly more prevalent among the eldest teens (3.8%), whereas in children aged 13 years it was 0.9% and in those aged 11 years it was only 0.3% (table 6.4).

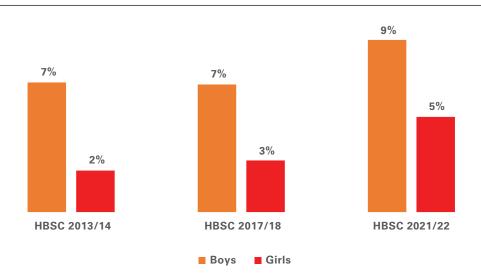
Table 6.4. Days smoked in the past month by age of the young people

Last month	Age			Total
Last month	11 years	13 years	15 years	Total
	1717	1655	1622	4994
Never	97.6%	93.9%	87.6%	92.9%
401	25	47	79	151
1-2 days	1.4%	2.7%	4.3%	2.8%
	4	16	24	44
3-5 days	0.2%	0.9%	1.3%	0.8%
6-9 days —	5	14	15	34
	0.3%	0.8%	0.8%	0.6%
	4	12	25	41
10-19 days	0.2%	0.7%	1.4%	0.8%
	0	3	16	19
20-29 days -	0.0%	0.2%	0.9%	0.4%
30 days or more	5	15	70	90
	0.3%	0.9%	3.8%	1.7%
Total -	1760	1762	1851	5373
	100.0%	100.0%	100.0%	100.0%

COMPARISON WITH 2013/14 HBSC AND 2017/18 HBSC SURVEYS

Prevalence of lifetime smoking was almost identical in all three HBSC rounds (about 13% in 2014 and/or in 2018, and 12% in 2022). Instead, smoking prevalence in the past month has slightly increased in the 2022 HBSC round in both boys and girls (figure 6.1).

Figure 6.1. Smoking in the past month in the last three rounds of HBSC in Albania



E-CIGARETTE USE

For the first time, in the mandatory questionnaire of the HBSC study, two questions on e-cigarette use among teenagers were included. They describe the frequency of lifetime and past month (past 30 days) e-cigarette smoking. The overall prevalence of lifetime e-cigarette smoking (i.e., smoking at least 1-2 days in their lifespan) among young people included in this survey was about 19.5%. It was significantly higher in boys than in girls (about 26.2% vs. 13.4%, respectively; P<0.001). Furthermore, 1.8% of the girls reported having smoked 30 days or more in their lifetime, compared with 5% of the boys (table 6.5).

Table 6.5. Lifetime e-cigarette smoking by gender of the young people

fetime e-cigarette	Ger	nder	Total
smoking	Boy	Girl	Total
Navan	1830	2391	4221
Never	73.8%	86.6%	80.5%
1 2 days	276	170	446
1-2 days	11.1%	6.2%	8.5%
2 E dava	109	66	175
3-5 days	4.4%	2.4%	3.3%
C O dave	52	37	89
6-9 days	2.1%	1.3%	1.7%
10 10 days	57	32	89
10-19 days —	2.3%	1.2%	1.7%
20.20 days	32	15	47
20-29 days —	1.3%	0.5%	0.9%
0 daya ay maga	123	51	174
0 days or more —	5%	1.8%	3.3%
	2479	2762	5241
Total	100%	100%	100%

The prevalence of lifetime smoking (at least 1-2 days in the lifespan) was the highest among the eldest teenagers (about 32%) compared with those aged 13 years (19.5%) and particularly those aged 11 years (about 7.5%) [P<0.001]. Also, the prevalence of smoking at least 30 days during lifetime (table 6.6) was considerably higher among the eldest youth (6.5%) compared with the 13-year-old (2.7%) and especially the 11-year-old children (0.6%).

Table 6.6. Lifetime e-cigarette smoking by age of the young people

Lifetime e-cigarette		Age		Total
smoking	11 years	13 years	15 years	
Never	1580	1387	1207	4174
Never	92.5%	81.5%	68.0%	80.5%
1.2 dovo	78	160	205	443
1-2 days	4.6%	9.4%	11.5%	8.5%
0.5.4	20	46	107	173
3-5 days	1.2%	2.7%	6.0%	3.3%
C O d	3	20	64	87
6-9 days	0.2%	1.2%	3.6%	1.7%
40.40	11	25	53	89
10-19 days	0.6%	1.5%	3.0%	1.7%
20.20	6	17	24	47
20-29 days	0.4%	1.0%	1.4%	0.9%
30 days or more	10	46	115	171
	0.6%	2.7%	6.5%	3.3%
Takal	1708	1701	1775	5184
Total	100%	100%	100%	100%

The overall prevalence of past month e-cigarette smoking (at least 1-2 days) was about 13%, a figure which was significantly higher in boys than in girls (about 17.6% vs. 8.8%, respectively; P<0.001). On the other hand, (table 6.7), the overall prevalence of daily smoking was only 1.7%, which was also significantly higher among boys than girls (2.6% vs. 0.9%, respectively; P<0.001).

Table 6.7. Days of E-cigarette smoking in the past month by gender of the young people

Last month	Ger	nder	Total
Last month	Boys	Girls	iotai
Never -	2075	2542	4617
ivevei	82.4%	91.2%	87.0%
1.2 days	204	125	329
1-2 days —	8.1%	4.5%	6.2%
2 E dovo	68	43	111
3-5 days —	2.7%	1.5%	2.1%
C O davia	41	25	66
6-9 days —	1.6%	0.9%	1.2%
10 10 days	42	20	62
10-19 days —	1.7%	0.7%	1.2%
00.00 dassa	23	9	32
20-29 days —	0.9%	0.3%	0.6%
20 1	66	24	90
30 days or more	2.6%	0.9%	1.7%
Takal	2519	2788	5307
Total –	100%	100%	100%

Similar to the lifetime prevalence, the proportion of past-month e-cigarette smoking (at least 1-2 days) was significantly higher among the eldest teens (about 21.7%) compared with those aged 13 years (12.6%) and especially those aged 11 years (4.5%) [P<0.001]. In addition, daily smoking was significantly more prevalent among the eldest youth (2.9%), whereas in children aged 13 years it was 1.7% and in those aged 11 years it was only 0.4% (table 6.8).

Table 6.8. Days smoked in the past month by age of the young people

Last month		Age		Total
Last month	11 years	13 years	15 years	Total
Nissan	1644	1511	1409	4564
Never	95.5%	87.4%	78.3%	86.9%
1.2 days	43	98	187	328
1-2 days	2.5%	5.7%	10.4%	6.2%
2 F days	14	38	59	111
3-5 days	0.8%	2.2%	3.3%	2.1%
6-9 days	5	21	40	66
	0.3%	1.2%	2.2%	1.3%
10-19 days –	4	22	36	62
	0.2%	1.3%	2.0%	1.2%
20.20.4	5	9	17	31
20-29 days —	0.3%	0.5%	0.9%	0.6%
30 days or more	7	30	52	89
	0.4%	1.7%	2.9%	1.7%
Total –	1722	1729	1800	5251
	100.0%	100.0%	100.0%	100.0%

ALCOHOL CONSUMPTION

The assessment of drinking frequency and drinking patterns was based on four questions inquiring about the lifetime and past month frequency of alcohol consumption (table 6.9), as well as the frequency of drunkenness (lifetime and in the past month).

Regarding the lifetime alcohol consumption, overall, 77% of the young people had never consumed alcoholic beverages during their lifespan, with a significant difference between boys and girls (about 73% vs. 81%, respectively; P<0.001). The proportion of the eldest youth who had never drank alcohol in their lifetime (60%) was considerably lower than among the 13-year-old children (81%) and particularly so compared with the youngest children (91%).

The overall prevalence of alcohol consumption in the past month was about 14%, a figure which was significantly higher in boys than in girls (about 17% vs. 11%, respectively; P<0.001). Also, the prevalence of alcohol consumption in the past month was higher among the eldest teens (25%) compared with the children aged 13 years (12%) and especially those aged 11 years (4%).

The overall lifetime prevalence of drunkenness was about 13% (15% in boys vs. 12% in girls; P<0.001). In addition, lifetime frequent drunkenness (>10 times) was more prevalent in boys than in girls (1.6% vs. 0.7%, respectively). There was a graded relationship of frequent lifetime drunkenness (>10 times) with age: it was the highest among the eldest youth (2.6%) and the lowest among their youngest counterparts (0.3%).

Similarly, the prevalence of drunkenness in the past month (at least one episode) was higher in boys than girls (about 8% vs. 5%, respectively; P<0.001) and among the eldest young people (about 10%) compared with the other age groups (P<0.001). Likewise, frequent drunkenness (>10 times) in the past month was more prevalent among boys and the eldest youth.

Table 6.9: Frequency of alcohol consumption and drunkenness by gender and age of the young people

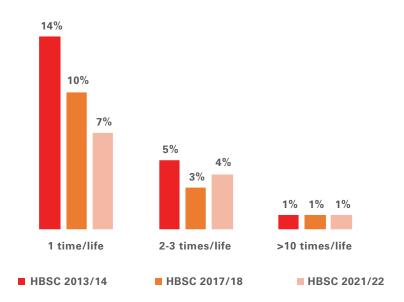
Alcohol	Gei	nder		Age group		Total
consumption	Boys	Girls	11 years	13 years	15 years	iotai
Days drunk alcohol in lifetime:						
Never	1838 (73.2%)	2225 (80.5%)	1587 (91.2%)	1387 (80.5%)	1084 (60.1%)	4063 (77.0%)
1-2 days	265 (10.6%)	228 (8.2%)	93 (5.3%)	161 (9.3%)	237 (13.1%)	493 (9.3%)
3-5 days	109 (4.3%)	93 (3.4%)	23 (1.3%)	59 (3.4%)	120 (6.7%)	202 (3.8%)
6-9 days	58 (2.3%)	54 (2.0%)	12 (0.7%)	32 (1.9%)	68 (3.8%)	112 (2.1%)
10-19 days	80 (3.2%)	57 (2.1%)	9 (0.5%)	37 (2.1%)	90 (5.0%)	137 (2.6%)
20-29 days	23 (0.9%)	21 (0.8%)	4 (0.2%)	6 (0.3%)	34 (1.9%)	44 (0.8%)
≥30 days	137 (5.5%)	86 (3.1%)	13 (0.7%)	40 (2.3%)	170 (9.4%)	223 (4.2%)
Total	2510 (100.0%)	2764 (100.0%)	1741 (100.0%)	1722 (100.0%)	1803 (100.0%)	5274 (100.0%)
Days drunk alcohol in the past 30 days:						
Never	2130 (83.5%)	2494 (88.8%)	1677 (95.9%)	1541 (88.0%)	1398 (75.5%)	4624 (86.3%)
1-2 days	212 (8.3%)	196 (7.0%)	43 (2.5%)	126 (7.2%)	239 (12.9%)	408 (7.6%)
3-5 days	79 (3.1%)	50 (1.8%)	11 (0.6%)	32 (1.8%)	86 (4.6%)	129 (2.4%)
6-9 days	49 (1.9%)	29 (1.0%)	3 (0.2%)	21 (1.2%)	54 (2.9%)	78 (1.5%)
10-19 days	22 (0.9%)	16 (0.6%)	3 (0.2%)	13 (0.7%)	22 (1.2%)	38 (0.7%)
20-29 days	17 (0.7%)	5 (0.2%)	4 (0.2%)	6 (0.3%)	12 (0.6%)	22 (0.4%)
≥30 days	43 (1.7%)	17 (0.6%)	8 (0.5%)	12 (0.7%)	40 (2.2%)	60 (1.1%)
Total	2552 (100.0%)	2807 (100.0%)	1749 (100.0%)	1751 (100.0%)	1851 (100.0%)	5359 (100.0%)

Lifetime drunken-						
ness Never	2174 (85.5%)	2463 (88.1%)	1675 (95.8%)	1558 (89.4%)	1396 (76.0%)	4637 (86.9%)
Once	187 (7.4%)	197 (7.0%)	50 (2.9%)	120 (6.9%)	214 (11.6%)	384 (7.2%)
2-3 times	100 (3.9%)	85 (3.0%)	13 (0.7%)	39 (2.2%)	133 (7.2%)	185 (3.5%)
4-10 times	40 (1.6%)	30 (1.1%)	6 (0.3%)	16 (0.9%)	48 (2.6%)	70 (1.3%)
>10 times	41 (1.6%)	20 (0.7%)	5 (0.3%)	9 (0.5%)	47 (2.6%)	61 (1.1%)
Total	2542 (100%)	2795 (100%)	1749 (100%)	1742 (100%)	1838 (100%)	5337 (100%)
Drunken- ness in the past 30 days:						
Never	2351 (92.3%)	2678 (95.5%)	1712 (97.6%)	1655 (94.7%)	1654 (89.7%)	5029 (94.0%)
Once	98 (3.8%)	87 (3.1%)	26 (1.5%)	52 (3.0%)	107 (5.8%)	185 (3.5%)
2-3 times	43 (1.7%)	24 (0.9%)	7 (0.4%)	16 (0.9%)	44 (2.4%)	67 (1.3%)
4-10 times	18 (0.7%)	6 (0.2%)	3 (0.2%)	9 (0.5%)	12 (0.7%)	24 (0.4%)
>10 times	37 (1.5%)	10 (0.4%)	6 (0.3%)	15 (0.9%)	26 (1.4%)	47 (0.9%)
Total	2547 (100%)	2805 (100%)	1754 (100%)	1747 (100%)	1843 (100%)	5352 (100%)

COMPARISON WITH 2013/14 HBSC AND 2017/18 HBSC SURVEYS

There is a decrease in the prevalence of lifetime drunkenness in the current HBSC round conducted in 2021/22 compared with the 2017/18 HBSC and especially with the 2013/14 HBSC (figure 6.2). Hence, in the 2013/14 HBSC, 14% of young people reported a lifetime episode of drunkenness compared with 10% of those in the 2017/18 HBSC and only 7% of children in the 2021/22 HBSC. On the other hand, about 5% of the children reported 2-3 episodes of drunkenness in 2013/14 vs. 3% in 2017/18 and vs. 4% in 2021/22. Conversely, about 1% of young people reported drunkenness >10 times in all three survey rounds (figure 6.2).

Figure 6.2. Prevalence of lifetime drunkenness in the last three rounds of the HBSC in Albania



CANNABIS USE

Young people (15 years old) were asked about lifetime cannabis use and use in the past 30 days before the survey. These questions were administered to young people aged 15 years.

Among the young people aged 15 years, only 7% of them reported use of cannabis during their lifetime, whereas 5% of them reported use of cannabis in the past 30 days (preceding the survey). In the analysis (table 6.10), there was evidence of a gender difference in cannabis use (at least 1-2 days in

the lifetime), with the boys reporting a significantly higher frequency of consumption compared with the girls (11% vs. 4%, respectively; P< 0.01).

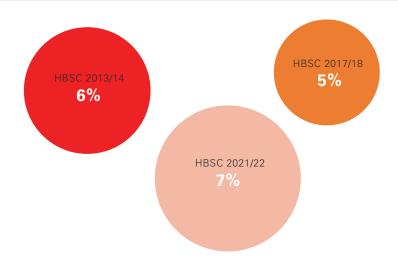
Table 6.10. Lifetime cannabis use

fatima a annahia wa	Ger	nder	Total
fetime cannabis use	Boys	Girls	Total
Never -	733	985	1718
	89.0%	96.0%	92.9%
1.2 days	35	19	54
1-2 days	4.2%	1.9%	2.9%
3-5 days	15	7	22
	1.8%	0.7%	1.2%
C O dave	10	5	15
6-9 days	1.2%	0.5%	0.8%
10 10 days	4	4	8
10-19 days —	0.5%	0.4%	0.4%
20.20 J	1	0	1
20-29 days —	0.1%	0.0%	0.1%
20 days av ava	26	6	32
30 days or more	3.2%	0.6%	1.7%
Takal	824	1026	1850
Total	100.0%	100.0%	100.0%

COMPARISON WITH 2013/14 HBSC AND 2017/18 HBSC SURVEYS

The frequency of Cannabis use is similar in all three HBSC rounds. Overall (figure 6.3), there is evidence of a slight increase in the prevalence of lifetime cannabis use in the HBSC 2021/22 (7%) compared with the previous two rounds (5% in 2017/18 and 6% in 2013/14).

Figure 6.3. Lifetime cannabis use in the last three rounds of the HBSC survey in Albania



SEXUAL HEALTH

The measurement of sexual health, restricted only to young people aged at least 15 years, included an assessment of sexual intercourse, age of commencement of sexual relationships, use of condoms and/or use of birth control pills during the last sexual intercourse. Initially, 15-year-olds were asked whether they had ever had sexual intercourse (formulated also in appropriate colloquial terms) in their lifetime. The prevalence of lifetime sexual intercourse (overall about 18%, table 6.11) was considerably higher in boys (34%) than in girls (only 5%), a difference which was highly statistically significant (P<0.001). Notwithstanding genuine gender differences, seemingly, there was evidence of differential reporting of sexual relationships between boys and girls in this survey, similar to the previous HBSC round conducted in 2017/18.

Table 6.11. Lifetime sexual intercourse by gender of the young people

Lifetime sexual	Gender		Total
intercourse	Boy	Girl	Total
Vaa	283	46	329
Yes	33.7%	4.5%	17.6%
NI-	557	981	1538
No -	66.3%	95.5%	82.4%
Total	840	1027	1867
	100.0%	100.0%	100.0%

Next, young people who reported having had sexual intercourse during their lifetime were asked about the age of commencement of sexual relationships. Of the 327 young people who reported valid data on the age of commencement of sexual intercourse, the majority of them had commenced their sexual activity at the age of 15 years (34%), followed by the age of 14 years (32%). Subsequently, young people who reported sexual intercourse were asked whether they or their respective partners had used a condom during the last time they had sexual intercourse (table 6.12). Of the 321 young people who provided valid information on this question, slightly more than half (56%) reported having used a condom (they or their partners) during the last time they had sex. Regarding gender differences, boys reported a considerably higher proportion of condom use during their first sexual intercourse compared to the girls (61% vs. 27%, respectively; P<0.001).

Table 6.12. Condom use during the first sexual intercourse by gender of the young people

Condom use	Ger	nder	Total
	Воу	Girl	Total
Vaa	167	12	179
Yes	60.5%	26.7%	55.8%
	85	25	110
No	30.8%	55.6%	34.3%
D/4 l	24	8	32
Don't know	8.7%	17.8%	10.0%
Total	276	45	321
	100.0%	100.0%	100.0%

In addition, young people who reported having had sex were asked whether they or their respective partners had used birth control pills during the last time they had sexual intercourse. Overall, about 13% of the young people who had had sex reported that they or their partners had used birth control pills during their last sexual intercourse (table 6.13). There were no significant gender differences in the self-reported level of use of birth control pills (13% in boys vs. 11% in girls; P=0.919). Interestingly, almost one in five (21%) young people did not know whether they or their partner had used birth control pills during their last sexual intercourse.

Table 6.13. Use of birth control pills by gender of the young people

Han of high control wills	Ger	nder	Total
Use of birth control pills	Boy	Girl	Total
v	35	5	40
Yes —	13.0%	11.1%	12.7%
	180	30	210
No —	66.7%	66.7%	66.7%
	55	10	65
Don't know	20.4%	22.2%	20.6%
	270	45	315
Total —	100.0%	100.0%	100.0%

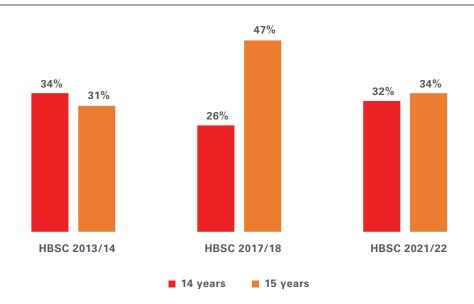
COMPARISON WITH THE 2013/14 HBSC AND THE 2017/18 HBSC SURVEYS

There is evidence of a slight decrease in the prevalence of sexual intercourse in the 2021/22 HBSC among young people aged 15 years. Thus, in the 2021/22 HBSC, 18% of young people reported having had sexual intercourse compared with 21% of children in the 2017/18 HBSC and 19.5% of young people in the 2013/14 HBSC.

The age of commencement of sexual intercourse in 2021/22 resembles the 2013/14 HBSC round, whereas in the previous round carried out in 2017/18, it had increased compared with 2013/14 (figure 6.4). Hence, in the 2013/14 HBSC, 34% of young people had first had sex at the age of 14 years compared with 26% in the 2017/18 HBSC and 32% in the current round (in 2021/22). On the other hand, 31% of young people in the 2013/14 HBSC had commenced sex at the age of 15 years compared with 47% in the 2017/18 HBSC and 34% in the 2021/22 HBSC (figure 6.4).

Condom use has somehow decreased in the 2021/22 HBSC to 61% in boys (from 66% in the 2013/14 HBSC and 71% in the 2017/18 HBSC), and girls to 27% (from 40% in the 2013/14 HBSC and 36% in the 2017/18 HBSC).

Figure 6.4. Age of commencement of sexual intercourse in the last three rounds of the HBSC in Albania



SUBSTANCE USE PRIOR TO FIRST SEXUAL INTERCOURSE

Subsequently, young people who reported sexual intercourse were asked whether the respondent had drunk alcohol or used drugs before she/he first had sexual intercourse (table 6.14). Of the 325 young people who provided valid information on this question, only about 16% reported having used alcohol or drugs before the first sexual intercourse. Of note, 10.8% of the young people who had sex did not remember this issue. The proportion of boys who had used alcohol or drugs during the first sexual intercourse was higher than girls (16% vs. 13.6%, respectively), but these differences were not statistically significant.

Table 6.14. Alcohol/drug use during the first sexual intercourse by gender of the young people

Alcohol/drug use	Ger	nder	
during the first sexual intercourse	Воу	Girl	Total
Yes —	45	6	51
tes —	16.0%	13.6%	15.7%
N	207	32	239
No —	73.7%	72.7%	73.5%
	29	6	35
I do not remember —	10.3%	13.6%	10.8%
Takal	281	44	325
Total —	100%	100%	100%

VIOLENCE AND INJURIES IN THE LAST TWO MONTHS

The measurement of violence and injuries included an assessment of bullying (both perpetration and victimization), cyberbullying, physical fights, as well as medically treated injuries.

Initially, young people were asked about the frequency of having taken part in bullying other persons at school in the past couple of months (referred to as bullying perpetration or bullying others). Overall, more than three-quarters of the young people (79%) had not taken part in bullying other persons in the past two months preceding the survey (table 6.16). However, 14% of them had bullied others once or twice and 4% had done so several times a week. The frequency of bullying perpetration was significantly higher among boys than girls (74% of the boys had not perpetrated bullying at all in the past couple of months compared with 84% of the girls; P<0.001). Also, bullying perpetration was positively related to age, with the highest prevalence among young people aged 15 years and the lowest among their youngest counterparts aged 11 years (P<0.001).

Next, young people were asked about the frequency of having been bullied at school in the past couple of months (table 6.16). Regarding the bullying victimization, overall, about 23% of the young people reported having suffered at least one episode of bullying at school. The prevalence of bullying victimization was slightly higher in girls than in boys (25% vs. 22%, respectively; P<0.001). In addition, it was significantly higher (P=0.007) among young people aged 13 years (about 25%) compared with the eldest (23%) and the youngest ones (21%).

Furthermore, all young people were asked about the frequency of having taken part in cyberbullying (referred to as perpetration of cyberbullying) in the past couple of months before the survey (table 6.16). About 13% of the young people had cyberbullied others, a condition which was more prevalent among boys compared to the girls (18% vs. 9%, respectively; P<0.001). In addition, perpetration of cyberbullying was significantly higher (P=0.002) among young people aged 13 years and/or 15 years (14%) compared with the youngest children (10%).

As for the frequency of cyberbullying victimization, about 12% of the young people reported having been cyberbullied in the past couple of months preceding the survey (table 6.16), an occurrence which was slightly higher in boys compared to the girls (about 13% vs. 11%, respectively; P=0.01). On the other hand, cyberbullying victimization was not significantly related to the age of the children (P=0.378).

Subsequently, young people were asked about the number of times they were engaged in a physical fight during the past 12 months (table 6.16). On the whole, slightly less than half (about 49%) of the young people reported having been involved in physical fights. This was more prevalent in boys than in girls (54% vs. 44%, respectively; P<0.001).

Additionally, the prevalence of physical fights was significantly higher (P<0.001) among young people aged 11 and 13 years (50%) compared with their oldest counterparts (46%). Finally, young people were asked about the frequency of medical treatments (performed by a doctor or nurse) due to the injuries experienced in the past 12 months before the survey (table 6.16). Overall, around 30% of the young people reported having received medical treatment for various injuries experienced in the past two months preceding the study. The prevalence of injuries experienced was significantly higher in boys than in girls (42% vs. 20%, respectively; P<0.001). Also, it was significantly higher (P<0.001) among young people aged 13 years (35%) than those aged 15 years (30%) and especially children aged 11 years (26%).

Table 6.16. Bullying, physical fights, and injuries by gender and age of the young people

	Ger	nder		Age group		
Characteristic	Boys	Girls	11 years	13 years	15 years	Total
Bullying others:						
Have not	1851 (73.6%)	2343 (84.0%)	1441 (83.8%)	1348 (78.0%)	1402 (75.8%)	4194 (79.1%)
Once or twice	411 (16.3%)	309 (11.1%)	200 (11.6%)	245 (14.2%)	272 (14.7%)	720 (13.6%)
2-3 times/ month	72 (2.9%)	39 (1.4%)	23 (1.3%)	33 (1.9%)	55 (3.0%)	111 (2.1%)
Once a week	52 (2.1%)	27 (1.0%)	19 (1.1%)	22 (1.3%)	38 (2.1%)	79 (1.5%)
Several times/	128 (5.1%)	72 (2.6%)	37 (2.2%)	80 (4.6%)	82 (4.4%)	200 (3.8%)
week	2514	2790	1720	1728	1849	5304
Total	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)	(100.0%)
Been bullied:						
Have not	2008 (78.4%)	2115 (75.2%)	1389 (78.8%)	1310 (74.6%)	1417 (76.7%)	4123 (76.7%)
Once or twice	337 (13.2%)	476 (16.9%)	256 (14.5%)	273 (15.5%)	283 (15.3%)	813 (15.1%)
2-3 times/ month	102 (4.0%)	88 (3.1%)	56 (3.2%)	71 (4.0%)	63 (3.4%)	190 (3.5%)
Once a week	41 (1.6%)	32 (1.1%)	20 (1.1%)	36 (2.1%)	17 (0.9%)	73 (1.4%)
Several times/ week	72 (2.8%)	103 (3.7%)	41 (2.3%)	66 (3.8%)	68 (3.7%)	175 (3.3%)
Total	2560 (100.0%)	2814 (100.0%)	1762 (100.0%)	1756 (100.0%)	1848 (100.0%)	5374 (100.0%)
Cyberbullied others:						
Have not	2109	2565	1589	1494	1586	4674
Once or twice	(82.1%)	(91.4%)	(90.0%)	(85.6%)	(85.5%)	(87.0%)
2-3 times/	314 (12.2%)	160 (5.7%)	121 (6.9%)	168 (9.6%)	183 (9.9%)	474 (8.8%)
month	58 (2.3%)	33 (1.2%)	25 (1.4%)	35 (2.0%)	30 (1.6%)	91 (1.7%)
Once a week	25 (1.0%)	17 (0.6%)	12 (0.7%)	15 (0.9%)	15 (0.8%)	42 (0.8%)
Several times/ week	63 (2.5%)	30 (1.1%)	18 (1.0%)	33 (1.9%)	42 (2.3%)	93 (1.7%)
Total	2569 (100.0%)	2805 (100.0%)	1765 (100.0%)	1745 (100.0%)	1856 (100.0%)	5374 (100.0%)

Been cyber- bullied:						
Have not	2224	2514	1563	1532	1636	4738
Once or twice	(86.6%)	(89.5%)	(88.6%)	(87.4%)	(88.2%)	(88.1%)
2-3 times/	239 (9.3%)	215 (7.7%)	140 (7.9%)	162 (9.2%)	152 (8.2%)	454 (8.4%)
month	45 (1.8%)	36 (1.3%)	21 (1.2%)	25 (1.4%)	35 (1.9%)	81 (1.5%)
Once a week	25 (1.0%)	23 (0.8%)	17 (1.0%)	18 (1.0%)	12 (0.6%)	48 (0.9%)
Several times/ week	36 (1.4%)	21 (0.7%)	23 (1.3%)	15 (0.9%)	19 (1.0%)	57 (1.1%)
Total	2569 (100.0%)	2809 (100.0%)	1764 (100.0%)	1752 (100.0%)	1854 (100.0%)	5378 (100.0%)
Physical						
fights: None	1179 (45.6%)	1592 (56.3%)	874 (49.3%)	885 (50.0%)	1009 (54.1%)	2771 (51.2%)
One time	645 (24.9%)	680 (24.0%)	412 (23.2%)	437 (24.7%)	473 (25.4%)	1325 (24.5%)
Two times	318 (12.3%)	267 (9.4%)	180 (10.2%)	208 (11.7%)	197 (10.6%)	585 (10.8%)
Three times	161 (6.2%)	130 (4.6%)	108 (6.1%)	96 (5.4%)	87 (4.7%)	291 (5.4%)
Four times or	284 (11.0%)	160 (5.7%)	199 (11.2%)	145 (8.2%)	99 (5.3%)	444 (8.2%)
more Total	2587 (100.0%)	2829 (100.0%)	1773 (100.0%)	1771 (100.0%)	1865 (100.0%)	5416 (100.0%)
Injuries						
treated: None	1475 (58.4%)	2238 (79.9%)	1296 (73.8%)	1120 (64.9%)	1293 (70.4%)	3713 (69.7%)
One time	484 (19.2%)	309 (11.0%)	242 (13.8%)	289 (16.7%)	261 (14.2%)	793 (14.9%)
Two times	237 (9.4%)	77 (2.8%)	80 (4.6%)	118 (6.8%)	114 (6.2%)	314 (5.9%)
Three times	108 (4.3%)	72 (2.6%)	49 (2.8%)	73 (4.2%)	58 (3.2%)	180 (3.4%)
Four times or	222 (8.8%)	104 (3.7%)	89 (5.1%)	126 (7.3%)	110 (6.0%)	326 (6.1%)
more Total	2526 (100.0%)	2800 (100.0%)	1756 (100.0%)	1726 (100.0%)	1836 (100.0%)	5326 (100.0%)

COMPARISON WITH THE 2013/14 HBSC AND THE 2017/18 HBSC SURVEYS

There is evidence of a very slight increase in the phenomenon of bullying in the recent HBSC round conducted in 2021/22. Thus, 23% of young people had been bullied at least once during the past month in the 2021/22 HBSC compared with 22% in the 2017/18 HBSC and 20% in the 2013/14 HBSC.

Likewise, boys were much more bullied through the Internet in the 2021/22 HBSC compared with 2017/18 HBSC and 2013/14 HBSC (18%, 11%, and 6%, respectively).

Importantly, in the 2021/22 HBSC there is evidence of an increase in the prevalence of physical fights among young people. Thus, 49% of the young people reported having been involved in physical fights in the 2021/22 HBSC compared with 30% in the 2017/18 HBSC and 34% in the 2013/14 HBSC.

CHILD ABUSE AND MALTREATMENT

The measurement of child abuse and maltreatment, restricted only to young people aged at least 15 years, included an assessment of lifetime and/or past-month physical abuse, emotional abuse, and sexual abuse. Initially, young people were asked whether a parent or other adult in the household had ever hit, beaten, kicked, or physically tried to hurt them in any way (table 6.17).

Overall, about two-thirds (67%) of the young people reported having never been physically hurt by their parents or other adults in their respective households. One in four young people (26%) reported having been physically abused once or twice in their lifetime, whereas 7% had experienced physical abuse many times during their lives. There were no significant gender differences in the levels of physical abuse (P=0.232).

The same question was asked about physical abuse regarding the frequency of occurrence in the past 12 months preceding the survey (table 6.17). Overall, about 11% of the young people reported having been physically hurt by their parents or other adults in their households during the past 12 months. Similar to lifetime violence, no significant gender differences were found in the levels of physical abuse during the past 12 months (P=0.537).

Subsequently, young people were asked whether a parent or other adult in the household had ever sworn at them, insulted them, humiliated them, threatened them, or made them felt unwanted (referred to as emotional abuse). Overall (table 6.17), the prevalence of lifetime emotional abuse was about 16%, with a significant difference between boys and girls (12% vs. 19%, respectively; P<0.001).

The same question was asked about emotional abuse regarding the frequency of occurrence in the past 12 months before the survey. The overall prevalence of past-year emotional abuse was about 10%, which was somehow higher in girls than in boys (about 12% vs. 8%, respectively; P=0.007).

Young people aged 15+ years were subsequently asked about sexual abuse in their respective contexts and household circumstances. More specifically, they were asked whether someone at least five years older and/or an adult had attempted or actually had sexual intercourse with them.

The overall prevalence of sexual intercourse was about 3% during adolescent' lifetime and/or in the past 12 months preceding the survey, a finding which was significantly more prevalent among boys than girls (lifetime: 5.2% vs. 2.7%, respectively, P<0.001; last 12 months: 5.2% vs. 1.4%, respectively, P<0.001).

Table 6.17. Child abuse (physical and/or emotional) by gender of the young people

	Ger			
Child abuse	Boys	Girls	Total	
Lifetime physical abuse:				
Never	565 (68.5%)	668 (65.6%)	1233 (66.9%)	
Once or twice	199 (24.1%)	281 (27.6%)	480 (26.0%)	
Many times	61 (7.4%)	69 (6.8%)	130 (7.1%)	
Total	825 (100.0%)	1018 (100.0%)	1843 (100.0%)	
Last 12 months' physical abuse:				
Never	708 (89.1%)	865 (88.4%)	1573 (88.7%)	
Once or twice	69 (8.7%)	96 (9.8%)	165 (9.3%)	
Many times	18 (2.3%)	17 (1.7%)	35 (2.0%)	
Total	795 (100.0%)	978 (100.0%)	1773 (100.0%)	
Lifetime emotional abuse:				
Never	724 (87.7%)	821 (80.6%)	1545 (83.8%)	
Once or twice	82 (9.9%)	140 (13.8%)	222 (12.0%)	
Many times	20 (2.4%)	57 (5.6%)	77 (4.2%)	
Total	826 (100.0%)	1018 (100.0%)	1844 (100.0%)	
Last 12 months' emotional abuse:				
Never	738 (92.4%)	860 (87.8%)	1598 (89.9%)	
Once or twice	43 (5.4%)	84 (8.6%)	127 (7.1%)	
Many times	18 (2.3%)	35 (3.6%)	53 (3.0%)	
, Total	799 (100.0%)	979 (100.0%)	1778 (100.0%)	
Lifetime sexual abuse:				
Never	789 (94.8%)	994 (97.3%)	1783 (96.2%)	
Once or twice	31 (3.7%)	23 (2.3%)	54 (2.9%)	
Many times	12 (1.4%)	5 (0.5%)	17 (0.9%)	
Total	832 (100.0%)	1022 (100%)	1854 (100.0%)	
Last 12 months' sexual abuse:				
Never	760 (94.8%)	970 (98.6%)	1730 (96.9%)	
Once or twice	29 (3.6%)	11 (1.1%)	40 (2.2%)	
Many times	13 (1.6%)	3 (0.3%)	16 (0.9%)	
Total	802 (100.0%)	984 (100%)	10 (0.0 70)	

EMOTIONAL NEGLECT

Similarly, only young people aged 15 years were asked about emotional neglect in their respective contexts and household circumstances (table 6.18). More specifically, young people were asked whether there were times when there was no adult living with them who made children felt loved.

Overall, about 16% of the young people aged 15 years reported having experienced emotional neglect during their lifetime (about 8% in boys vs. 22% in girls; P<0.001). Conversely, the prevalence of emotional neglect in the past 12 months was about 10% (6% in boys vs. 14% in girls; P<0.001).

Table 6.18. Emotional neglect by sex of the young people

For estimation along	Ger	nder	Total
Emotional neglect	Boys	Girls	Total
Lifetime:			
Never	768 (92.1)	800 (78.2)	1568 (84.4)
Once or twice	48 (5.8)	159 (15.5)	207 (11.1)
Many times	18 (2.2)	64 (6.3)	82 (4.4)
Total	834 (100.0)	1023 (100.0)	1857 (100.0)
In the last 12 months:			
Never	754 (94.1)	850 (86.1)	1604 (89.7)
Once or twice	29 (3.6)	99 (10.0)	128 (7.2)
Many times	18 (2.2)	38 (3.9)	56 (3.1)
Total	801 (100.0)	987 (100.0)	1788 (100.0)

WITNESSING OF FAMILY VIOLENCE

Only young people aged 15 years were asked about witnessing of family violence in their respective contexts and household circumstances. More specifically, the young people were asked whether they had seen or heard one of their parents/carers being slapped, kicked, punched, beaten, or deliberately hurt by a partner or ex-partner in their homes.

Overall, only 7% of the young people aged 15 years (table 6.19) reported having witnessed family violence during their lifetime, without evidence of any gender differences (P=0.676). On the other hand, boys were significantly more likely to have witnessed domestic violence in the past 12 months than girls (4.7% vs. 3.3%, respectively; P=0.034).

Table 6.19. Witnessing of family violence by gender of the young people

Witnessing of	Ge	Gender		
family violence	Boys	Girls		
Lifetime:				
Never	775 (93.5)	945 (92.5)	1720 (92.9)	
Once or twice	41 (4.9)	57 (5.6)	98 (5.3)	
Many times	13 (1.6)	20 (2.0)	33 (1.8)	
Total	829 (100.0)	1022 (100.0)	1851 (100.0)	
In the last 12 months:				
Never	757 (95.3)	953 (96.7)	1710 (96.1)	
Once or twice	20 (2.5)	26 (2.6)	46 (2.6)	
Many times	17 (2.1)	7 (0.7)	24 (1.3)	
Total	794 (100.0)	986 (100.0)	1780 (100.0)	

Findings related to the violence are generally similar with the previous HBSC round conducted in 2017/18.

7. COVID-19

- More than one-third of young people (about 38%) have always adhered to social distancing.
- About two-thirds of young people (63%) have always washed their hands.
- 2 One in two young people have used face masks for protection.
- 2 One in two young people have used regularly hand sanitizers.
- 2 One in five young people reported a "very negative" impact of COVID-19 on their lives.
- About 15% of young people reported that the pandemic had a very negative impact on their health in general and mental health in particular.
- About 13% of young people reported a very negative impact of COVID-19 on relationships with friends.
- The main sources of information on COVID-19 has been media/social media, and health authorities.

COVID-19 CONTROL AND PREVENTIVE MEASURES

In the current HBSC round conducted in 2021/22, young people were asked about a series of questions aimed at assessing the degree of compliance and adherence to a range of control and preventive measures against COVID-19. This included an assessment of the level of adherence to social distancing, frequency of handwashing, use of face masks for protection, and use of hand sanitizers. Findings are summarized in table 7.1, separately for boys and girls and each of the three age groups. Regarding adherence to social distancing, overall, more than one-third of young people (about 38%) reported having always adhered to social distancing, whereas about 8% had never done so at all. Adherence to social distancing was more prevalent among girls than boys ("always": 41% vs. 34%, respectively; "never": 5% vs. 12%, respectively; P<0.001). Furthermore, there was evidence of an inverse age-gradient: the adherence to social distancing was more frequent among the youngest children and the lowest among the eldest ones ("always": 55% in 11-year-olds, 33% in 13-year-olds, and 26% in 15-year-olds; P<0.001) [table 7.1].

As for handwashing practices, on the whole, about two-thirds of young people (63%) reported always washing their hands, whereas slightly less than 3% never did so. Regular handwashing was more frequent in girls than in boys (69% vs. 58%, respectively, P<0.001). Also, regular handwashing was more prevalent among the youngest children (75%) and the lowest among the eldest ones (56%; P<0.001) [table 7.1].

About 56% of young people reported always having used face masks for protection. This was significantly more prevalent in girls than in boys (63% vs. 48%, respectively; P<0.001). In addition, regular use of face masks was more prevalent in the youngest children (67%), and the lowest among the eldest ones (46%; P<0.001) [table 7.1].

Lastly, regular use of hand sanitizers was reported by 54% of young people (60% in girls vs. 47% in boys; P<0.001). Similar to the other preventive measures, use of hand sanitizers was inversely related to the age of the children (P<0.001), i.e., regular use of sanitizers was the highest among the youngest children (68%) and the lowest among the eldest ones (43%) [table 7.1].

Table 7.1. Adherence to control and preventive measures against COVID-19 by gender and age of the young people, 2021/22 HBSC, Albania

COVID-19	Gen	der	Age group			Total
adherence	Boys	Girls	11 years	13 years	15 years	iotai
Adhered to social distancing:						
Never	302 (11.8%)	141 (5.0%)	102 (5.8%)	168 (9.6%)	172 (9.3%)	443 (8.3%)
Rarely	314 (12.3%)	241 (8.6%)	109 (6.2%)	210 (12.0%)	234 (12.7%)	555 (10.3%)
Sometimes	451 (17.7%)	468 (16.6%)	194 (11.0%)	303 (17.3%)	420 (22.7%)	919 (17.1%)
Often	614 (24.1%)	811 (28.8%)	389 (22.1%)	501 (28.6%)	534 (28.9%)	1425 (26.6%)
Always	868 (34.1%)	1156 (41.0%)	967 (54.9%)	568 (32.5%)	487 (26.4%)	2024 (37.7%)
Total	2549 (100.0%)	2817 (100.0%)	1761 (100.0%)	1750 (100.0%)	1847 (100.0%)	5366 (100.0%)
Regular handwashing:						
Never	107 (4.2%)	42 (1.5%)	38 (2.2%)	53 (3.0%)	58 (3.1%)	149 (2.8%)
Rarely	143 (5.6%)	58 (2.1%)	32 (1.8%)	95 (5.4%)	74 (4.0%)	201 (3.7%)
Sometimes	227 (8.9%)	151 (5.4%)	75 (4.3%)	144 (8.2%)	158 (8.6%)	378 (7.0%)
Often	605 (23.8%)	630 (22.4%)	301 (17.1%)	405 (23.2%)	526 (28.5%)	1235 (23.0%)
Always	1465 (57.5%)	1934 (68.7%)	1315 (74.7%)	1049 (60.1%)	1031 (55.8%)	3399 (63.4%)
Total	2547 (100.0%)	2815 (100.0%)	1761 (100.0%)	1746 (100.0%)	1847 (100.0%)	5362 (100.0%)

COVID-19 IMPACT ON YOUNG PEOPLE

In addition to control and preventive measures, all survey participants in the 2021/22 HBSC were asked about their perceptions, opinions and beliefs regarding the impact of COVID-19 pandemic on their life, health status, and relationships with friends and family.

Table 7.2 presents the impact of COVID-19 on life as whole, according to the perceptions and opinions of young people. Overall, about 19% of children reported a "very negative" impact of COVID-19 on their lives, and further 24% reported a "negative impact" of COVID-19. Conversely, about 13% of young people reported a "very positive" impact of COVID-19 on their lives. Boys were more positive than girls: 15% vs. 11%, respectively; P<0.001. However, this finding was inconsistent considering that the "very negative" perception was also higher among boys compared to girls (22% vs. 16%, respectively).

Table 7.2. Impact of COVID-19 on life as a whole by gender of the young people

Impact of COVID-19	Ger	nder	Total
on life as a whole	Boy	Girl	Total
	555	441	996
Very negative	21.9%	15.8%	18.7%
0.11	529	729	1258
Quite negative —	20.8%	26.0%	23.6%
Neither positive	797	1023	1820
nor negative	31.4%	36.5%	34.1%
0.11	285	306	591
Quite positive	11.2%	10.9%	11.1%
	372	300	672
Very positive	14.7%	10.7%	12.6%
	2538	2799	5337
Total	100.0%	100.0%	100.0%

There was evidence of a linear association with age (P<0.001): the prevalence of a "very negative" impact of COVID-19 on life as a whole was 25% in the youngest children, 16% in those aged 13 years and 15% in the eldest children (table 7.3). An opposite trend, however, was evident for a "very positive" perception of COVID-19 impact on life as whole: 15% in children aged 11 and/or 13 years vs. 7% in those aged 15 years (table 7.3).

Table 7.3. Impact of COVID-19 on life as a whole by age of the young people

Impact of COVID-19		Age		Total
on life as a whole	11 years	13 years	15 years	Total
Vame panativa	436	285	274	995
Very negative	24.9%	16.4%	14.8%	18.7%
Quite negative	350	394	513	1257
	20.0%	22.7%	27.8%	23.6%
Neither positive	509	585	721	1815
nor negative	29.1%	33.7%	39.1%	34.1%
0-4	185	203	202	590
Quite positive -	10.6%	11.7%	10.9%	11.1%
V	268	268	136	672
Very positive	15.3%	15.4%	7.4%	12.6%
Takal	1748	1735	1846	5329
Total	100.0%	100.0%	100.0%	100.0%

Regarding the self-perceived health impact of COVID-19, overall, 15% of young people reported that the pandemic had a very negative impact on their health, whereas 21% reported a very positive health impact of COVID-19 (table 7.4). Similar to the life impact, the perceived health impact of COVID-19 was both more positive and more negative in boys than in girls (P<0.001). Hence, about 23% of the boys reported a very positive health impact compared with 20% of the girls. Conversely, 18% of the boys reported a very negative health impact of COVID-19 compared with 13% of the girls (table 7.4).

Table 7.4. Health impact of COVID-19 by gender of the young people

lookh immost of COVID 10	Ger	nder	Total
lealth impact of COVID-19	Boy	Girl	Total
V	442	351	793
Very negative	17.6%	12.7%	15.1%
0 '' ''	339	514	853
Quite negative	13.5%	18.6%	16.2%
Neither positive	829	1011	1840
nor negative	33.1%	36.6%	34.9%
0 14 141	313	344	657
Quite positive	12.5%	12.5%	12.5%
	585	540	1125
Very positive	23.3%	19.6%	21.4%
Tatal	2508	2760	5268
Total	100.0%	100.0%	100.0%

As for age differences, the youngest children reported a higher prevalence of "very negative" health impact of COVID-19 (24%) compared with those aged 13 years (12%) and especially children aged 15 years (9%; P<0.001) [table 7.5]. The prevalence of "very positive" perception about health impact of COVID-19 was similar among 11-year-old children and those aged 13 years (26%), which was double compared with children aged 15 years (13%; P<0.001) [table 7.5].

Table 7.5. Health impact of COVID-19 by age of the young people

Health impact		Age		Total
of COVID-19	11 years	13 years	15 years	IOtal
V	410	214	168	792
Very negative	23.7%	12.4%	9.3%	15.1%
Quite negative	225	271	353	849
	13.0%	15.8%	19.5%	16.1%
Neither positive	482	564	791	1837
nor negative	27.8%	32.8%	43.7%	34.9%
Ovita manitiva	167	229	261	657
Quite positive	9.6%	13.3%	14.4%	12.5%
Mama manitima	447	441	237	1125
Very positive	25.8%	25.7%	13.1%	21.4%
Takal	1731	1719	1810	5260
Total	100.0%	100.0%	100.0%	100.0%

Regarding the impact of COVID-19 on relationships with friends (table 7.6), overall, 13% of the children (16% in boys vs. 11% in girls; P<0.001) reported a very negative impact, whereas 27% of children (28% in boys vs. 26% in girls) reported a very positive impact.

Table 7.6. Impact of COVID-19 on relationships with friends by gender of the young people

Impact of COVID-19 on	Ger	nder	Total
elationships with friends	Воу	Girl	Total
Vome no notice	392	301	693
Very negative	15.6%	10.9%	13.2%
Ouite negative	381	463	844
Quite negative	15.2%	16.8%	16.0%
Neither positive	660	785	1445
nor negative	26.3%	28.5%	27.4%
Ovita vanitiva	372	484	856
Quite positive —	14.8%	17.5%	16.3%
Mama manishina	704	725	1429
Very positive —	28.1%	26.3%	27.1%
Total	2509	2758	5267
Total —	100.0%	100.0%	100.0%

The "very negative" perception of COVID-19 impact on relationships with friends was more prevalent among the youngest children (18%) and the lowest among the eldest children (10%; P<0.001) [table 7.7]. Likewise, the "very positive" perception of COVID-19 impact on relationships with friends was more prevalent among the youngest children (34%) and the lowest among the eldest children (20%). Seemingly, the youngest children are much more emotional about the COVID-19 consequences compared to their older counterparts.

Table 7.7. Impact of COVID-19 on relationships with friends by age of the young people

Impact of COVID-19 on		Age		Total
relationships with friends	11 years	13 years	15 years	IOLAI
Vome pogotine	310	207	174	691
Very negative	17.9%	12.2%	9.5%	13.1%
Ovita magativa	224	259	360	843
Quite negative	12.9%	15.3%	19.7%	16.0%
Neither positive	354	467	622	1443
nor negative	20.4%	27.5%	34.0%	27.4%
Ouite mediting	265	277	312	854
Quite positive	15.3%	16.3%	17.1 %	16.2%
Vanna na aidina	580	487	361	1428
Very positive	33.5%	28.7%	19.7%	27.2%
Tatal	1733	1697	1829	5259
Total	100.0%	100.0%	100.0%	100.0%

On the other hand, about 16% of young people (17% in boys vs. 16% in girls) reported a very negative impact of COVID-19 on mental health (table 7.8). Conversely, 19% of young people (21% in boys vs. 18% in girls) reported a very positive impact of COVID-19 on mental health.

Table 7.8. Impact of COVID-19 on mental health by gender of the young people

Impact of COVID-19	Ger	nder	
on mental health	Boy	Girl	Total
Vorus no motivo	432	428	860
Very negative	17.3%	15.5%	16.4%
Ovite menetice	381	583	964
Quite negative	15.2%	21.1%	18.3%
Neither positive	814	842	1656
nor negative	32.5%	30.5%	31.5%
0 '' '''	353	420	773
Quite positive	14.1%	15.2%	14.7%
	521	485	1006
Very positive	20.8%	17.6%	19.1%
Tabel	2501	2758	5259
Total	100.0%	100.0%	100.0%

As for age-differences (table 7.9), 18% of the youngest children reported a very negative of COVID-19 on mental health compared with 12% of their counterparts aged 13 years and 10% of the eldest children. Furthermore, 34% of the youngest children reported a very positive impact of COVID-19 on mental health compared with 29% of children aged 13 years and 20% of those aged 15 years (P<0.001).

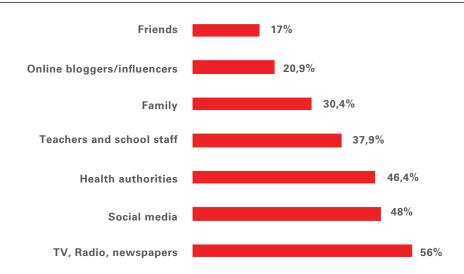
Table 7.9. Impact of COVID-19 on mental health by age of the young people

Impact of COVID-19		Age		Total
on mental health	11 years	13 years	15 years	Total
Vanue na nativa	310	207	174	691
Very negative	17.9%	12.2%	9.5%	13.1%
0	224	259	360	843
Quite negative	12.9%	15.3%	19.7%	16.0%
Neither positive	354	467	622	1443
nor negative	20.4%	27.5%	34.0%	27.4%
Outle outleton	265	277	312	854
Quite positive	15.3%	16.3%	17.1%	16.2%
	580	487	361	1428
Very positive	33.5%	28.7%	19.7%	27.2%
T . I	1733	1697	1829	5259
Total	100.0%	100.0%	100.0%	100.0%

COVID-19 INFORMATION SOURCES

All survey participants were asked about the main sources of information on COVID-19. Figure 7.1 shows that the main sources of information on COVID-19 have been media/social media, and health authorities.

Figure 7.1. Main sources of information on COVID-19



DISCUSSION AND CONCLUSIONS

The study "Health behaviours in school-aged children - 11, 13, and 15 years" sheds light on behaviours related to children's health during adolescence, a period of not only significant physical changes but also of increased independence that may affect their health development and health behaviours. The study aims to show how social determinants affect youth health and well-being.

The main findings highlight the key issues affecting young people's health today in Albania. As such, the HBSC report provides a rich source of data that can be used to compare the health of adolescents, prioritize health spending and monitor progress towards improving the health of young people and building societies in which they can thrive.

A new special focus area on COVID-19 was included in the 2021/2022 HBSC survey to better understand how the pandemic has impacted the young people's lives. The report also includes data from the last surveys conducted in Albania in 2013/2014 and 2017/18, to show where key changes have occurred in young people's health and health behaviours, as well as the wider circumstances in which they live and grow. The main findings of the survey are summarized below:

Social context

The HBSC study showed that family, school environment, and peer relationships play an important role in promoting children's health and well-being. These contexts also seem to have a profound effect on adolescent health, which is explained by the significant gender differences observed. Similar to the other countries, in Albania, as the age increases, the supportive role of family and school fades away, while peer relationships remain more stable. The increasing pressure from school with the increase in age seems to also influence the emergence of stress-related health complaints. As for gender differences, it is noticed that girls, especially the younger ones, like school more than boys, which highlights the need to develop gender sensitive policies in order to bring boys closer. There is also a need to increase the school's supportive role in improving the health and health behaviours of young people. Revitalizing the Health Promoting Schools network can be a good alternative to improving youth behaviours, as well as improving those indicators that are closely related to not only physical, but also social and psychological well-being. As with other previous HBSC studies, most young people reported an easier communication with mothers than their fathers, which was higher for girls and diminished with age. Interestingly, almost one in five girls had difficulty communicating with their father, indicating that our society remains a patriarchal society. Such findings emphasize the need to implement positive parenting programs that should improve parental responsibility and parent-child interaction. On the whole, the online contacts with friends exhibited an increase in this round compared with the 2017/18 HBSC round (34% vs. 28%, respectively), which aligns with the information technology advancement worldwide.

Online communication with peers is high especially among older youth. The use of social networks as a means of communication among young people has now become quite common in most European countries, reflecting what is happening in all societies. In addition to the positive effect of social networking communication on friendships, it is now being recognized that excessive use of social media can have adverse effects on children's mental and physical health, through online bullying or lack of physical activity².

Health outcomes

In general, young people report good health because of the enthusiasm that characterizes this age. However, even among them there are inequalities in reported health indicators or perceptions of health. Girls report more health complaints, such as irritability, feeling nervous, and headaches. On the other hand, boys report more injuries as a result of their greater involvement in physical activity. There is evidence of an improvement in the perception of health status among young people in Albania in the past two HBSC rounds. Thus, in the 2013/14 HBSC, only 52% of young people reported a very good self-perceived health status compared with 73% in the 2017/18 HBSC and/or the current HBSC round conducted in 2021/22. Boys report higher life satisfaction and better mental well-being. The older adolescents have lower levels of life satisfaction, are less likely to report excellent health, and experience more frequent health complaints. At age 15, girls report poorer mental well-being than boys. The most common health complaints are feeling low, felling nervous, and irritability or bad temper (all three around 16%), followed by difficulties in getting to sleep (nearly 10%) and headache (almost 9%), whereas it was the lowest for stomach-ache (3.9%) and feeling dizzy (6.3%).

Worryingly, one in four children reported going to bed at midnight or later, an issue which should raise serious concerns to the parents/caregivers and educators. Poor sleep is associated with physical and mental health problems, risky behaviours, poor academic performance, and poorer quality of life in both children and adolescents¹¹⁴. Poor sleep is also related to physical inactivity, excessive screen time, and poor diet underscoring the need to include healthy sleep in youth health promotion efforts.

On the other hand, the sense of loneliness (at least rarely and above) was considerably more prevalent among girls than boys (around 65% vs. 47%) and is greater among the eldest adolescents. The coexistence of physical and psychological symptoms suggests the need to rethink school-based interventions aimed at developing the skills and competencies of young people to better cope with the challenges associated with adolescence.

Health-related behaviours

Similarly, as in the previous HBSC round, overall, with age, there is a decline in healthy behaviours among adolescents. These changes are related not only to age but also to gender. Thus, younger children and boys consume breakfast more frequently than older adults and girls. In Albania, we still have low reports on breakfast consumption by school-aged children, and this is demonstrated by all the HBSC rounds conducted so far. In fact, during this round this indicator has worsened. Hence, in the HBSC rounds conducted in 2013/14 and 2017/18, about 23% of young people always skipped breakfast during the weekdays, whereas in the current HBSC round conducted in 2021/22 breakfast skipping during weekdays has slightly increased to 27%. Similar findings are evident for the weekends, where in the two survey rounds conducted in 2013/14 and 2017/18, about 9% of the young people reported skipping breakfast, whereas in the current round carried out in 2021/22 this indicator has slightly increased to about 12%.

Compared to other countries, the prevalence of breakfast consumption in Albania continues to be lower than in many other European countries, where breakfast consumption is considered a very important factor for children's health and well-being. This reality and these facts pose before the responsible structures the task of finding solutions that facilitate the students' consumption of breakfast. New interventions planned to take place in the coming years in schools should carefully address this troubling problem as well as provide solutions based on local context.

In the current HBSC round conducted in 2021/22, the findings related to fruit and vegetable consumption are generally similar to the previous round conducted in 2017/18. Of note, in the HBSC 2017/18, compared with the HBSC 2013/14, there was an improvement in the daily consumption of fruit and vegetables (including the categories 1 time/day and >1 time/day). Hence, in HBSC 2017/18, consumption of fruit >1 time/day had increased to 47% from 34% in 2014. In 2021/22, it is 45%, which is very similar to the previous round (in 2017/18). Similarly, in the HBSC 2017/18, consumption of vegetables >1 time/day had increased to 31% from 23% in 2013/14. In the current round of 2021/22, vegetable consumption has slightly increased to 32%. On the other hand, girls reported consuming more fruit than boys, a result comparable to HBSC studies conducted in other European countries, which ranks Albania in the first place in terms of daily fruit consumption by young people aged 11, 13 and 15 years². In addition, regarding food-related lifestyle aspects, in the last round of the 2021/22 HBSC it was reported that 10.6% of adolescents eat at a fast-food restaurant every day. Eating out-of-home has become habitual for many, and is considered a risk factor for obesity²¹⁵.

Since eating habits develop during adolescence and are usually maintained during adolescence, it is important to take early and continuous measures. These measures should keep in mind that child nutrition profiles vary from age 11 to 15, indicating that this is a key age for intervention development and that efforts should be sustained. Also, gender differences indicate that boys and girls have different needs and tend to respond to interventions differently²¹⁶. Family and school involvement can also play an important role in the interventions to be undertaken, as may be the case, for example involving young people in preparing healthy meals based on fruits and vegetables.

Regarding *weight reduction behaviours*, our data show that only 10% of adolescents are currently on a diet for losing weight, where girls reported a slightly higher rate of being on a diet than boys (11% vs. 8.6%, respectively; P<0.001). Among those on a diet, the majority of them (17.2%) reported that they ate smaller amounts. But a considerable proportion of them (16%) reported unhealthy weight-reduction practices, which is a concern that needs to be addressed. Moreover, inappropriate use of weight-reduction methods is associated with family and peer-related problems such as poor communication with parents, lower perceived support, and peer pressure²¹⁷. It also predicts significant weight gain over time²¹⁸ and may contribute to the risk of developing a range of eating disorders²¹⁹.

Behaviours used to lose weight may predispose adolescents to risky behaviours and decreased self-esteem and can cause a range of psychological and emotional disorders. Appropriate methods of weight control - a balanced diet and sufficient physical activity - are proven to be important in healthy weight management and overweight prevention.

Performing *physical activity* is considered a protective factor for maintaining optimal body weight as well as against cardiovascular disease. As in many previous studies, our study also found that boys perform more physical activity than girls, and the level of physical activity decreases with age. In the 2017/18 HBSC there was evidence of a decrease in the frequency of physical activity (3-7 days) compared with the 2017/18 and 2013/14 HBSCs. Thus, in 2022, 64% of young people reported conducting physical activity 3-7 days per week compared with 77% in 2018 and 74% of young people in 2014.

These findings emphasize the need for interventions aimed at increasing physical activity, especially in older teenagers and girls. Such interventions also recommended at previous rounds of HBSC might be: providing a range of activities that particularly attract girls; providing suitable sports facilities for children and adolescents²²⁰; educating the public through media campaigns emphasizing the need for physical activity; developing school programs that promote classes with high sports activity; involving parents in supporting and encouraging young people to engage in physical activity²²¹; monitoring television and mobile usage²²².

There were no changes between the three HBSC rounds in terms of toothbrushing. Hence, more than 50% of young people brushed their teeth more than once a day in all three survey rounds (55% in the 2013/14 HBSC, 57% in the 2017/18 HBSC, and 56% in the 2021/22 HBSC).

Inequalities exist for both age and gender. Thus, the engagement of more boys and more young adults in this process remains a challenge, as it has been found that with the increase in age, the prevalence of toothbrushing decreases. These concerns should be addressed in order to target the groups most at risk for oral health. Oral health is essential for overall health and well-being in young people²²³. It has been shown that children who brush their teeth more than once a day, at the age of 12, are more likely to continue doing so during adolescence and into adulthood²²⁴.

Since poor toothbrushing is associated with other risky behaviours such as smoking, unhealthy eating habits and lack of physical activity²²⁵, it is recommended that oral disease prevention interventions be integrated into general health promotion program²²⁶. The National Oral Health program that started in Albania in 2022 for school-aged children seems to have a significant improvement in the oral health indicators of children in Albania.

Risky behaviours

As in the previous HBSC studies conducted in Albania, this round also showed that, in comparison to girls, boys are more involved in risky behaviours related to tobacco use, alcohol, drugs, early sexual intercourse, physical fights, and injuries.

Concerning tobacco, the results of this round show that the prevalence of lifetime smoking was almost identical in all three HBSC rounds (about 13% in 2014 and/or in 2018, and 12% in 2022). Instead, the prevalence of current smoking (in the past month) has slightly increased in the 2022 HBSC round in both boys and girls.

The use of e-cigarettes has been increasing and has become a significant public health concern. While some consider them to be a safer alternative to cigarettes, e-cigarettes contain liquid nicotine which is the highly addictive part of tobacco. Second-hand vapour from e-cigarettes contains both nicotine and other toxins. There is limited information on the effect of chronic e-cigarette use on respiratory health, although a recent study from the US found that teenagers who used e-cigarettes had twice the risk of respiratory symptoms such as persistent cough, bronchitis, and wheezing as those who had never used them²²⁷

The use of e-cigarettes among teenagers is increasing dramatically worldwide. A study of 15-16-year-olds in Sweden found that one quarter had used e-cigarettes, and a fifth had used liquids containing nicotine or were not sure if they contained nicotine²²⁸. A recent study from the US (Miech et al., 2016) reported that 20% of 12th and 10th graders, and 13% of 8th graders used a vaporizer including nicotine at last use. Increases in e-cigarette use have been reported in Poland, New Zealand, and the United States¹⁵².

Concerning alcohol use among teenagers, in Albania there is a decrease in the prevalence of lifetime drunkenness in the current HBSC round conducted in 2021/22 compared with the 2017/18 HBSC and especially with the 2013/14 HBSC. Hence, in the 2013/14 HBSC, about 14% of young people reported one lifetime episode of drunkenness compared with 10% of those in the 2017/18 HBSC and only 7% of children in the 2021/22 HBSC. On the other hand, about 5% of the children reported 2-3 episodes of drunkenness in 2013/14 vs. 3% in 2017/18 and vs. 4% in 2021/22.

Compared to other psychoactive substances, alcohol is the most frequently used substance among adolescents in Europe (ESPAD, 2016). The latest HBSC data from 2018 showed that 59% of 15-year-olds have ever drunk alcohol compared with 28% for cigarette-smoking and 13% for cannabis use. Although in Albania the figures on the use of alcohol among adolescents are low, in order to better understand adolescent behaviour in the context of alcohol consumption, it is essential to analyse patterns of alcohol use considering multiple factors such as age, sex, and time, as well as other related factors.

The frequency of Cannabis use among teenagers aged 15 years is similar in all three HBSC rounds. Overall, there is evidence of a slight increase in the prevalence of lifetime cannabis use in the HBSC 2021/22 (7%) compared with the previous two rounds (5% in 2017/18 and 6% in 2013/14). On the other hand, according to the latest data on cannabis use among adolescents in Europe, the lifetime prevalence of cannabis use is almost double compared with Albania (13% vs. 7%)².

In any case, due to the addiction that cannabis use causes to adolescents, more attention is needed from all institutions and policymakers for improving the interventions. School-based and family-based interventions can help alleviate the problem. School interventions that focus on enhancing drug knowledge through curriculum revision, improved decision-making skills, self-esteem and resistance to peer pressure, effectively reduce cannabis use²²⁹. Regarding the commencement of sexual intercourse, this round resulted in a slight decrease in the prevalence of sexual intercourse in the 2021/22 HBSC among young people aged 15 years. Thus, in the 2021/22 HBSC, 18% of young people reported having had sexual intercourse compared with 21% of children in the 2017/18 HBSC and 19.5% of young people in the 2013/14 HBSC.

Anyway, there is need to implement integrated programs within school, community, and health care settings. An important role in this area is played by health promotion specialists and health educators working with young people (peer education). On the other hand, within programs that focus on contraceptive use, different messages may be needed for boys and girls, as the reasons for condom use or potential barriers may vary by gender. For example, boys are more susceptible to HIV/AIDS-related messages, while girls are more likely to respond to pregnancy prevention interventions²³⁰.

There is evidence of a very slight increase in the phenomenon of bullying in the recent HBSC round conducted in 2021/22. Thus, 23% of young people had been bullied at least once during the past month in the 2021/22 HBSC compared with 22% in the 2017/18 HBSC and 20% in the 2013/14 HBSC. Likewise, boys were much more bullied through the Internet in the 2021/22 HBSC compared with the 2017/18 HBSC and 2013/14 HBSC (18%, 11% and 6%, respectively).

The existence of bullying in school settings suggests the need for continued preventive interventions. Evidence indicates that school-based interventions can be successful in reducing bullying-related behaviours if these interventions are based on a broad multidisciplinary approach and the participation of the entire school community²³¹. On the other hand, the involvement of school staff in preventive interventions plays an essential role in the success of these programs⁹¹.

Importantly, in the 2021/22 HBSC there is evidence of an increase in the prevalence of physical fights among young people. Thus, 49% of the young people reported having been involved in physical fights in the 2021/22 HBSC compared with 30% in the 2017/18 HBSC and 34% in the 2013/14 HBSC. Additionally, the prevalence of physical fights was significantly higher (P<0.001) among young people aged 11 and 13 years (about 50%) compared with their older counterparts (46%). These results demonstrate a disturbing problem that is happening in Albania, which must be addressed. Involvement in fighting can be seen as part of a constellation of risk behaviours with clear health implications, as higher levels of physical fighting have consistently been associated with more frequent reports of negative physical and emotional health outcomes¹⁸⁹. Physical fighting has been associated with substance use and other problem behaviours ¹⁹⁰, ^{191, 192} such as drug selling, theft and handgun carrying as well as health issues such as suicidal ideation¹⁹⁴ and short duration of sleep¹⁹⁵.

Child abuse and neglect is another dimension measured in the HBSC study 2021/22. Our results demonstrated the presence of different forms of child maltreatment. Thus, 30% of 15-year-olds reported being physically abused during their lifetime, a figure higher comparable to the last survey (HBSC 2017/18: 26%), but still lower than in 2017/18 ADHS, in which physical abuse of children reported by parents was 32%²³². On the other hand, the young people aged 15 reported low figures of sexual abuse during their lifetime (3.8%), a finding which was significantly more prevalent in boys than in girls (lifetime: 5.2% vs. 2.7%, respectively, P<0.001; last 12 months: 5.2% vs. 1.4%, respectively, P<0.001).

Additionally, gender differences between other forms of abuse are present. Thus, girls are more emotionally abused and boys more physically abused. This difference is particularly noticeable in the case of neglect, with almost twice as many girls reporting being neglected compared to boys.

Children can be psychologically and emotionally damaged when they witness domestic violence. Our study indicates a slight increase in the prevalence of domestic violence (7%) compared to previous the HBSC study in 2017/18 (5%). Programs based on parenting practices and family functioning have been successful in reducing the prevalence of domestic and child violence. There is an urgent need to implement these programs in Albania, under the guidance of both health and social professionals.

On the other hand, a great opportunity for intervention is through cooperation with schools for the prevention of dangerous behaviours in children. Life Skills Education enables young people to develop personal skills; teaches respect for oneself and for others; teaches them how to express their feelings and how to negotiate for what they want without the need for physical or psychological violence.

COVID-19

In the 2021/22HBSC study, 43% of children reported a negative impact of COVID-19 on their lives and boys were more positive than girls. Regarding the adherence to social distancing, overall, more than one-third of young people (about 38%) reported having always adhered to social distancing, which was more prevalent among girls than boys and among the youngest children.

The main sources of information on COVID-19 have been media/social media, and health authorities. As a conclusion, direct exposure to COVID-19, exposure to COVID-19 in the family, and the measures implemented to contain the COVID-19 pandemic have potential short- and long-term impacts on adolescents' well-being, health, and health behaviours. There is need for more time and in-depth analysis to better understand the impact of COVID-19 on adolescent's life.

Study limitations

Theoretically, this study could be affected by the possibility of selection bias. But in practice, this study involved a large and nationally representative sample, with a very high response rate. Therefore, there is no evidence of the presence of any selection bias, which makes it possible to generalize the results of this study to all students of this age group in Albania.

Regarding the possibility of information bias, as we have explained in the study methodology, the questionnaire used in the study was based on information obtained from self-reports by students. Based on this fact, we need to be careful in interpreting some of the outcomes related to sensitive issues such as: having sex, substance abuse, bulling, living with both parents, family well-being, life satisfaction, etc. It should be noted that the Albanian society continues to be highly patriarchal, therefore issues such as living with both parents are still taboo. From this point of view, we should not be surprised that the cohabitation rate with both parents in our study was very high (90%). Also, similarly to previous studies conducted in Albania, the self-reporting of sexual intercourse poses problems of differentiated validity, especially related to the gender of respondents (e.g., there is systematically higher self-reporting than any other factor in young males compared to females).

Finally, the interpretation of all study results should be carefully considered, also depending on the study design. As this was a cross-sectional study, the findings obtained from this study are not subject to causal relationships. As we have recommended in previous HBSC studies, prospective cohort studies should be undertaken in the future as the only methodologically plausible alternative to confirm (or reject) the presence of causal links between the independent factors and the health-related behaviours of children and young people attending school.

ENDNOTES

- Inchley J., et al. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: International Report from the 2013/2014 survey.
- Inchley J., et al. Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada: International Report.
- Investing in children: the European Child and Adolescent Health Strategy 2015–2020. http://www.euro.who. int/ data/assets/pdf file/0010/253729/64wd12e InvestCAHstrategy 140440.pdf?ua=1.
- Budisavljevic S, Arnarsson A, Hamrik Z, Roberts C, Godeau E, Molcho M, Weber MW. Improving adolescent health: translating Health Behavior in School-Aged Children evidence into policy. Journal of Adolescent Health 2020, 66, S9-S11
- 5 Barnekow V and Muijen M. Child and adolescent health and development in a European perspective. International Journal of Public Health 54 (2009) S128-S130. DOI 10.1007/s00038-009-5403-y.
- Currie, C., Molcho, M., Boyce, W., Holstein, B., Torsheim, T. and Richter, M (2008) Researching health inequalities in adolescents: the development of the Health Behaviour in School-Aged Children (HBSC) Family Affluence Scale. Social Science & Medicine 66(6):1429-1436
- Torsheim, T., Cavallo, F., Levin, K.A., Schnohr, C., Mazur, J., Niclasen, B., Currie, C. and FAS Development Study Group (2016). Psychometric validation of the revised family affluence scale: a latent variable approach. Child Indicators Research, 9(3), pp.771-784.
- 8 Zaborskis, A. and Grincaite, M., 2018. Gender and age differences in social inequality on adolescent life satisfaction: A comparative analysis of health behaviour data from 41 countries. International Journal of Environmental Research and Public Health, 15(7), p.1297.
- 9 Ramdahl, M.E., Jensen, S.S., Borgund, E., Samdal, O. and Torsheim, T., 2018. Family wealth and parent-child relationships. Journal of Child and Family Studies, 27(5), pp.1534-1543.
- Garcia-Moya, I., Brooks, F.M. and Spencer, N.H., 2018. School-level factors associated with teacher connectedness: a multilevel analysis of the structural and relational school determinants of young people's health. Journal of Public Health, 40(2), pp.366-374.
- Zaborskis, A., Grincait, M., Kavaliauskien, A. and Tesler, R., 2020. Family structure and affluence in adolescent eating behaviour: a cross-national study in forty-one countries. Public Health Nutrition, pp.1-12.
- Sigmund, E., Badura, P., Sigmundová, D., Vorá ová, J., Zacpal, J., Kalman, M., Pavelka, J., Vokacová, J. and Hamrik, Z., 2018. Trends and correlates of overweight/obesity in Czech adolescents in relation to family socioeconomic status over a 12-year study period (2002–2014). BMC Public Health, 18(1), p.122.
- Sigmundová, D., Sigmund, E., Tesler, R., Ng, K.W., Hamrik, Z., Mathisen, F.K.S., Inchley, J. and Bucksch, J., 2019. Vigorous physical activity in relation to family affluence: time trends in Europe and North America. International journal of public health, 64(7), pp.1049-1058.
- Hartos, J. L., & Power, T. G. (2000). Association between mother and adolescent reports for assessing relations between parent-adolescent communication and adolescent adjustment. Journal of Youth and Adolescence 29(4): 441-450.
- Riesch, S. K., Anderson, L. S., & Krueger, H. A. (2006). Parent-Child Communication Processes: Preventing Children's Health-Risk Behavior. Journal for Specialists in Pediatric Nursing 11(1): 41-56.
 - Brooks F, Zaborskis A, Tabak I, Alcón MD, Zemaitiene N, de Roos S & Klemera E. (2015). Trends in adoles-

cents' perceived parental communication across 32 countries in Europe and North America from 2002 to 2010. The European Journal of Public Health, 25(suppl 2): 46-50.

- Bokhorst CL, Sumter SR, Westenberg PM (2010) Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: Who is perceived as most supportive? Social Development 19(2): 417-426.
- 18 Lenzi M, Vieno A, Perkins DD, Pastore M, Santinello M, Mazzardis S (2012) Perceived neighbourhood social resources as determinants of prosocial behaviour in early adolescence. American Journal of Community Psychology 50(1-2): 37-49.
- Cavanaugh AM, Buehler C (2016) Adolescent loneliness and social anxiety: The role of multiple sources of support. Journal of Social and Personal Relationships 33(2): 149-170.
- Vitoroulis I, Schneider BH, Vasquez CC, de Toro MDPS, Gonzáles YS (2012) Perceived parental and peer support in relation to Canadian, Cuban, and Spanish adolescents' valuing of academics and intrinsic academic motivation. Journal of Cross-Cultural Psychology 43(5): 704-722.
- Inchley J, Currie D, Budisavljevic S, Torsheim T, Jåstad A, Cosma A, Kelly C, Arnarsson ÁM, Barnekow V, and Weber MM (2020). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 1. Key findings. Copenhagen, WHO.
- 22 Dienlin T, Johannes N (2020) The impact of digital technology use on adolescent well-being. Dialogues Clin. Neurosci. 22: 135-142. https://doi.org/10.31887/DCNS.2020.22.2/tdienlin
- Przybylski AK and Weinstein N (2017) A Large-Scale Test of the Goldilocks Hypothesis: Quantifying the Relations Between Digital-Screen Use and the Mental Well-Being of Adolescents. Psychol. Sci. 28: 204-215. https://doi. org/10.1177/0956797616678438
- Odgers CL and Jensen MR (2020) Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. J. Child Psychol. Psychiatry Allied Discip 61: 336-348. https://doi.org/10.1111/jcpp.13190
- Yin XQ, de Vries DA, Gentile DA, and Wang JL (2019). Cultural Background and Measurement of Usage Moderate the Association Between Social Networking Sites (SNSs) Usage and Mental Health: A Meta-Analysis. Soc. Sci. Comput. Rev 37: 631-648. https://doi.org/10.1177/0894439318784908
- Beyens I, Pouwels JL, Valkenburg PM, and Van Driel II (2020). The effect of social media on well being differs from adolescent to adolescent. Sci. Rep: 1-11. https://doi.org/10.1038/s41598-020-67727-7
- Van den Eijnden RJJM, Lemmens J, and Valkenburg PM (2016) The Social Media Disorder Scale: Validity and psychometric properties. Comput. Human Behav 61: 478-487. https://doi.org/10.1016/j.chb.2016.03.038
- Wells J. Promoting emotional well-being in schools. In: Buchanan A, Hudson B, editors. Promoting children's emotional well-being. London: Oxford University Press; 2000:161-92.
- Wang MT, Dishion TJ. The trajectories of adolescents' perceptions of school climate, deviant peer affiliation, and behavioural problems during the middle school years. J Res Adolesc. 2012;22:40-53.
- Bond L, Butler H, Thomas L, Carlin J, Glover S, Bowes G et al. Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. J Adolesc Health 2007;40(4):357.
- Vogel M, Rees CE, McCuddy T, Carson DC. (2015) The highs that bind: school context, social status and marijuana use. Journal of Youth and Adolescence 44(5): 1153-1164.
- Rossen FV, Lucassen MF, Fleming TM, Sheridan J, Denny SJ. (2016) Adolescent gambling behaviour, a single latent construct and indicators of risk: findings from a national survey of New Zealand high school students. Asian Journal of Gambling Issues and Public Health 6(1): 7

- 33 symptoms in adolescents: A multilevel analysis. Children and Youth Services Review 39: 101-107.
- 34 R, Gaspar de Matos M, Gaspar T, Schnohr CW, Ravens-Sieberer U, and the Positive Health Focus Group. (2012) The Role of Individual- and Macro-Level Social Determinants on Young Adolescents' Psychosomatic Complaints. Journal of Early Adolescence 32(1): 126-158.
- Cosma A, Stevens G, Martin G, Duinhof EL, Walsh SD, García-Moya I, Költo A, Gobina I, Canale N, Catunda C, Inchley J, & de Looze M (2020) Cross-national time trends in adolescent mental well-being from 2002 to 2018 and the explanatory role of schoolwork pressure. Journal of Adolescent Health 66: S50-S58.
- García-Moya I, Brooks F, Morgan A & Moreno C. (2015) Subjective well-being in adolescence and teacher connectedness. A health asset analysis. Health Education Journal 74(6): 641-654.
- McCarty CA, Rhew IC, Murowchick E, McCauley E & Vander Stoep A. (2012) Emotional health predictors of substance use initiation during middle school. Psychology of Addictive Behaviors 26(2): 351-357.
- Perra O, Fletcher A, Bonell C, Higgins K & McCrystal P. (2012) School-related predictors of smoking, drinking and drug use: evidence from the Belfast Youth Development Study. Journal of Adolescence 35(2): 315-324.
- Torsheim T, Wold B. (2001a) School-related stress, support, and subjective health complaints among early adolescents: a multilevel approach. Journal of Adolescence 24(6): 701-713.
- Centers for Disease Control and Prevention (1997). Guidelines for school health programs to promote lifelong healthy eating. J Sch Health. 67(1): 9-26.
- Story M, Neumark-Sztainer D and French SA (2002). Individual and environmental influences on adolescent eating behaviors. J Am Diet Ass. 102(3): s40-s51.
- Craigie AM, Lake AA, Kelly SA, Adamson AJ and Mathers JC (2011). Tracking of obesity- related behaviours from childhood to adulthood: A systematic review. Maturitas. 70: 266-84.
- World Health Organization Regional Office of Europe (2015). European Food and Nutrition Action Plan 2015-2020. Copenhagen, WHO Regional Office for Europe.
- Vereecken C, Dupuy M, Rasmussen M, Kelly C, Nansel TR, Al SH, et al (2009). Breakfast consumption and its socio-demographic and lifestyle correlates in schoolchildren in 41 countries participating in the HBSC study. Int J Public Health 54(Suppl 2): 180-90.
- Pearson N, Biddle SJ and Gorely T (2009). Family correlates of breakfast consumption among children and adolescents. A systematic review. Appetite 52(1): 1-7.
- Levin KA, Kirby J and Currie C (2012). Family structure and breakfast consumption of 11-15 year old boys and girls in Scotland, 1994-2010: a repeated cross-sectional study. BMC Public Health 12: 228.
- Lazzeri, G, Ahluwalia N, Niclasen B, Pammolli A, Vereecken C, Rasmussen M, Pedersen TP and Kelly C (2016). Trends from 2002 to 2010 in daily breakfast consumption and its socio-demographic correlates in adolescents across 31 countries participating in the HBSC study. PLoS ONE 11(3): e0151052
 - 48 Affenito SG. Breakfast: a missed opportunity. J Am Diet Assoc. 2007;107:565-69.
- Haug E, Rasmussen M, Samdal O, Iannotti R, Kelly C, Borraccino A et al. Overweight in school-aged children and its relation with demographic and lifestyle factors: results from the WHO-collaborative Health Behaviour in Schoolaged Children (HBSC) Study. Int J Public Health 2009;54(2):167-79.
- Keski-Rahkonen A, Kaprio J, Rissanen A, Virkkunen M, Rose RJ. Breakfast skipping and health-compromising behaviors in adolescents and adults. Eur J Clin Nutr. 2003;57:842-53.
- Rampersaud GC, Pereira MA, Girard BL, Adams J, Metzl JD. Review breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. J Am Diet Assoc. 2005;105:743-60.

- 52 Leidy HJ, Ortinau LC, Douglas SM, Hoertel HA. Beneficial effects of a higher-protein breakfast on the appetitive, hormonal, and neural signals controlling energy intake regulation in overweight/obese, "breakfast-skipping", late-adolescent girls. Am J Clin Nutr. 2013;97(4):677-88.
- 53 Pedersen TP, Holstein BE, Flachs EM, Rasmussen M. Meal frequencies in early adolescence predict meal frequencies in late adolescence and early adulthood. BMC Public Health 2013;13(1):445.
- Kerr MA, Rennie KL, McCaffrey TA, Wallace JM, Hannon-Fletcher MP and Livingstone MB (2009). Snacking patterns among adolescents: a comparison of type, frequency and portion size between Britain in 1997 and Northern Ireland in 2005. British Journal of Nutrition 101(1): 122-31.
- Malik VS, Pan A, Willett WC and Hu FB (2013). Sugar-sweetened beverages and weight gain in children and adults: a systematic review and meta-analysis. AJCN. 98(4): 1084-102.
- Vartanian LR, Schwartz MB and Brownell KD (2007). Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. Am J Public Health. 97(4): 667-75.
- Hu FB (2013). Resolved: there is sufficient scientific evidence that decreasing sugar-sweetened beverage consumption will reduce the prevalence of obesity and obesity-related diseases. Obes Rev.14: 606-19.
- Palacios C, Joshipura K and Willett W (2009). Nutrition and health: guidelines for dental practitioners. Invited medical review. Oral Diseases 15: 369-81.
- Neumark-Sztainer D, Hannan PJ, Story M, Croll J and Perry CL (2003). Family meal patterns: associations with sociodemographic characteristics and improved dietary intake among adolescents. J Am Diet Ass. 103(3): 317-22.
- Bauer KW, Hearst MO, Escoto K, Berge JM and Neumark-Sztainer D (2012). Parental employment and work-family stress: associations with family food environments. Soc Sci Med 75 (3): 496-504.
- Skeer MR and Ballard EL (2013). Are family meals as good for youth as we think they are? A review of the literature on family meals as they pertain to adolescent risk prevention. J Youth Adolescence 42: 943-63.
- Harrison ME, Norris ML, Obeid N, Fu M, Weinstangel H and Sampson M (2015). Systematic review of the effects of family meal frequency on psychosocial outcomes in youth. Can Fam Physician 61(2): e96-e106.
- Larson RW, Branscomb KR and Wiley AR (2006). Forms and functions of family mealtimes: multidisciplinary 63 perspectives. New Dir Child Adolesc Dev. 111: 1-15.
- Neumark-Sztainer D, Larson NI, Fulkerson JA, Eisenberg ME and Story M (2010) Family meals and adolescents: what have we learned from Project EAT (Eating Among Teens)? Public Health Nutrition 13(7): 1113-21.
- 65 de Oliveira C, Watt R and Hamer M. (2010) Toothbrushing, inflammation, and risk of cardiovascular disease: results from Scottish Health Survey. British Medical Journal, 340: c2451. DOI: https://doi.org/10.1136/bmj.c2451.
- Fujita M, Ueno K and Hata A. (2009). Lower frequency of daily teeth brushing is related to high prevalence of cardiovascular risk factors. Experimental Biology and Medicine 234(4): 387-94.
- Kobayashi Y, Niu K, Guan L, Momma H, Guo H, Cui Y and Nagatomi R. (2012), Oral health behavior and metabolic syndrome and its components in adults. Journal of Dental Research, 91(5), pp. 479-84.
- United Nations. Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases. Resolution A/66/L.1. United Nations, New York, 2011. Available at: https:// www.un.org/en/ga/ncdmeeting2011/
- Stoltenberg JL, Osborn JB, Pihlstrom BL, Herzberg MC, Aeppli DM, Wolff LF and Fischer GE. (1993) Association between cigarette smoking, bacterial pathogens, and periodontal status. Journal of Periodontology, 64(12), pp. 1255-30.
- Edman K, Öhrn K, Nordström B, Holmlund A and Hellberg D. (2015) Trends over 30 years in the prevalence and severity of alveolar bone loss and the influence of smoking and socio-economic factors - based on epidemiological

surveys in Sweden 1983-2013. International Journal of Dental Hygiene 13(4): 283-291.

- Koivusilta L, Honkala S, Honkala E and Rimpela A. (2003) Toothbrushing as a part of adolescent lifestyle predicts educational level. Journal of Dental Research, 82(5), pp. 361-366.
- Honkala E, Paronen O and Rimpela M (1983). Familial aggregation of dental health habits in Finland. Journal of Pedodontics, 7(4), pp. 276-90.
- Choo A, Delac DM & Messer LB (2001). Oral hygiene measures and promotion: review and considerations. Australian Dental Journal 46(3): 166-73.
- Kuusela S, Honkala E and Rimpelä A (1996) Toothbrushing frequency between the ages of 12 and 18 years longitudinal prospective studies of Finnish adolescents. Community Dental Health, 13(1), pp. 34-39.
- 75 Honkala E, Nyyssönen V, Knuuttila M and Markkanen H (1986). Effectiveness of children's habitual toothbrushing. Journal of Clinical Periodontology, 13(1), pp. 81-85.
- Ricsson JS, Östberg AL, Wennström JL and Abrahamsson KH (2012) Oral health-related perceptions, attitudes, and behavior in relation to oral hygiene conditions in an adolescent population. European Journal of Oral Sciences, 120(4), pp. 335-341.
- Kay E and Locker D (1998). A systematic review of the effectiveness of health promotion aimed at improving oral health. Community Dental Health, 15(3), pp. 132-44.
- Biddle, Stuart J. H.; Gorely, Trish; Stensel, David J. (2004) Health-enhancing physical activity and sedentary behaviour in children and adolescents. Journal of Sports Sciences 22(8): S679-701. DOI: https://doi.org/10.1080/02640 410410001712412.
- 79 Janssen I, Leblanc AG. (2010) Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. Int J Behav Nutr Phys Act 7:40. DOI: https://doi.org/10.1186/1479-5868-7-40.
- Bleich SN, Vercammen KA, Zatz LY, Frelier JM, Ebbeling CB, Peeters A. (2018) Interventions to prevent global childhood overweight and obesity: A systematic review. The Lancet Diabetes & Endocrinology 6:332-46. DOI: https:// doi.org/10.1016/S2213-8587(17)30358-3.
- McMahon EM, Corcoran P, O'Regan G, Keeley H, Cannon M, Carli V, et al., (2017) Physical activity in European adolescents and associations with anxiety, depression and well-being. Eur Child Adolesc Psychiatry 26:111-22. DOI: https://doi.org/10.1007/s00787-016-0875-9.
- Eime RM, Young JA, Harvey JT, Charity MJ, Payne WR. (2013) A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. Int J Behav Nutr Phys Act. 10:98. DOI: https://doi.org/10.1186/1479-5868-10-98.
- Bull FC, Al-Ansari SS, Biddle S, Borodulin K, Buman MP, Cardon G, et al., (2020) World Health Organization 2020 guidelines on physical activity and sedentary behaviour. Br J Sports Med 54:1451-62. DOI: https://doi. org/10.1136/bjsports-2020-102955.
 - 84 United Nations (2015) Sustainable Development Goals 2030. https://sdgs.un.org/goals
- 85 Bjorner JB, Fayers P and Idler E (2005). Self-rated health. In: Fayers, P. M., Hays, R., & Hays, R. D. (Eds.). Assessing Quality of Life in Clinical Trials - methods and practice. Oxford: Oxford University Press, 2nd edition. pp.309-23.
- Idler EL, Benyamini Y. Self-rated health and mortality: a review of 27 community studies. J Health Soc Behav. 1997;38(1):21-37.
- 87 Addressing the socioeconomic determinants of healthy eating habits and physical activity levels among adolescents: report from the 2006 HBSC/WHO Forum. Copenhagen: WHO Regional Office for Europe; 2006 (http://www. euro.who.int/__data/assets/pdf_file/0005/98231/e89375.pdf,accessed 24 August 2015).
 - Breidablik HJ, Meland E, Lydersen S. Self-rated health in adolescence: a multifactorial composite. Scand J

Public Health 2008;36(1):12-20.

- de Matos MG, Barrett P, Dadds M, Shortt A. Anxiety, depression and peer relationships during adolescence: results from the Portuguese national health behaviour in school-aged children survey. Eur J Psychol Educ. 2003;18(1):3–14.
- Mazur J, Szkultecka-D bek M, Dzielska A et al. (2018). What does the Cantril Ladder measure in adolescence?. Archives of Medical Science 14(1): 182-189. https://doi.org/10.5114/aoms.2016.60718
- Huebner ES, Suldo SM, Smith LC, McKnight CG. Life satisfaction in children and youth: empirical foundations and implications for school psychologists. Psychol Sch. 2004;41(1):81–93.
- Zullig K, Valois R, Huebner ES, Drane JW. Associations among family structure, demographics, and adolescent perceived life satisfaction. J Child FamStud. 2005;14(2):195-206.
- Piko BF. Satisfaction with life, psychosocial health and materialism among Hungarian youth. J Health Psychol. 2006;11(6):827-31
- Levin KA, Currie C. Reliability and validity of adapted version of the Cantril ladder for use with adolescent sample. Soc Indic Res. 2014;119(2):1047-63
- Katja R, Paivi AK, Marja-Terttu T, Pekka L. Relationships among adolescent subjective well-being, health behavior, and school satisfaction. J SchoolHealth 2002;72(6):243-9.
- Gobina I, Zaborskis A, Pudule I, Kalnins I, Villerusa A. Bullying and subjective health among adolescents at schools in Latvia and Lithuania. Int J PublicHealth 2008;53(5):272-6.
- Torsheim T, Wold B. School-related stress, school support, and somatic complaints: a general population study. J Adolescent Res. 2001;16(3):293-303.
- Gaspar T, Matos MG, Ribeiro JP, Leal I, Albergaria F. Psychosocial factors related to bullying and victimization in children and adolescents. HealthBehav Policy Rev. 2014;1(6):452-9.
- Gaspar T, Matos MG, Ribeiro JP, Leal I, Albergaria F. Psychosocial factors related to bullying and victimization in children and adolescents. HealthBehav Policy Rev. 2014;1(6):452-9.
- 100 Due P, Holstein BE, Lynch J, Diderichsen F, Gabhain SN, Scheidt P et al. Bullying and symptoms among schoolaged children: internationalcomparative cross sectional study in 28 countries. Eur J Public Health 2005;15(2):128-32.
- 101 Hjern A, Alfven G, stberg V. School stressors, psychological complaints and psychosomatic pain. Acta Paediatr. 2008;97(1):112-7.
- 102 Moreno C, Sanchez-Queija I, Munoz-Tinoco V, de Matos MG, Dallago L, Bogt TT et al. Cross-national associations between parent and peercommunication and psychological complaints. Int J Public Health 2009;54(2):235-42.
- 103 Eriksson U, Sellstrom E. School demands and subjective health complaints among Swedish schoolchildren: a multilevel study. Scand J Public Health2010;38(4):344-50.
- 104 Ottova-Jordan V, Smith OR, Augustine L, Gobina I, Rathmann K, Torsheim T et al. Trends in health complaints from 2002 to 2010 in 34 countries andtheir association with health behaviours and social context factors at individual and macro-level. Eur J Public Health 2015;25(Suppl. 2):83-9.
 - 105 Vingilis E, Wade T, Seeley J. Predictors of adolescent health care utilization. J Adolesc. 2007;30(5):773–800
- 106 Shannon RA, Bergren MD, Matthews A. Frequent visitors: somatization in school-age children and implications for school nurses. J Sch Nurs.2010;26(3):169-82.
- 107 Brill SR, Patel DR and MacDonald E (2001). Psychosomatic disorders in pediatrics. The Indian Journal of Pediatrics 68: 597-603.
 - 108 Svedberg P, Eriksson M and Boman E (2013). Associations between scores of psychosomatic health symp-

toms and health-related quality of life in children and adolescents. Health and Quality of Life Outcomes 11:176.

- 109 Randler C, Faßl C, Kal N (2017) From Lark to Owl: developmental changes in morningness-eveningness from new-borns to early adulthood. Scientific Reports. 7, 45874.
- 110 Wheaton AG, Chapman DP, Croft JB (2016) School start times, sleep, behavioral, health, and academic outcomes: A review of the literature. Journal of School Health. 86(5), pp. 363-381.
- Gariépy G, Janssen I, Sentenac M, Elgar FJ (2017) School start time and sleep in Canadian adolescents. Journal of Sleep Research. 26, pp. 195-201.
- 112 Gradisar M, Gardner G, Dohnt H (2011) Recent worldwide sleep patterns and problems during adolescence: A review and meta-analysis of age, region, and sleep. Sleep Medicine. 12(2), pp. 110-118.
- Gariepy G, Danna S, Gobi a I, Rasmussen M, De Matos MG, Tynjälä J, Janssen I, Kalman M, Villeruša A, Husarova D, Brooks F, Elgar FJ, Klavina-Makrecka S, Šmigelskas K, Gaspar T, Schnohr C (2020) How are adolescents sleeping? Adolescent sleep patterns and sociodemographic differences in 24 European and North American countries. Journal of Adolescent Health. 66, pp. S81-S88.
- 114 Matricciani L, Paquet C, Galland B, Short M, Olds T (2019) Children's sleep and health: A meta-review. Sleep Medicine Reviews, 46, pp. 136-150.
- Kessler RC, Keller MB, Wittchen HU (2001) The epidemiology of generalized anxiety disorder. Psychiatric Clinics of North America. 24(1), pp. 19-39.
- 116 Wittchen HU, Carter RM, Pfister H, Montgomery SA, Kessler RC (2000) Disabilities and quality of life in pure and comorbid generalized anxiety disorder and major depression in a national survey. International Clinical Psychopharmacology. 15(6), pp. 319-328.
- 117 Moffitt TE, Harrington H, Caspi A, Kim-Cohen J, Goldberg D, Gregory AM, Poulton R (2007) Depression and generalized anxiety disorder: cumulative and sequential comorbidity in a birth cohort followed prospectively to age 32 years. Archives of General Psychiatry. 64(6), pp. 651-660.
- Peplau L and Perlman D (1982). Perspective on loneliness. In L. Peplau & D. Perlman (eds.) Loneliness: A sourcebook of current theory, research, and therapy. New York: Wiley, pp. 1-18.
- Rokach A (2004). Loneliness then and now: reflections on social and emotional alienation in everyday life. Current Psychology 23: 24 40.
- 120 Junttila M, Vauras M (2009) Loneliness of school-aged children and their parents. Scandinavian Journal of Psychology. 50(3), pp. 211-219.
- 121 Laursen B and Hartl AC (2013). Understanding loneliness during adolescence: developmental changes that increase the risk of perceived social isolation. Journal of Adolescence 36(1): 1261 1268.
- 122 Salo A E, Junttila N, Vauras M (2020) Social and emotional loneliness: Longitudinal stability, interdependence, and intergenerational transmission among boys and girls. Family Relations. 69(1), pp. 151-165.
- 123 Vancampfort D, Ashdown-Franks G, Smith L et al. (2019). Leisure-time sedentary behavior and loneliness among 148,045 adolescents aged 12-15 years from 52 low-and middle-income countries. Journal of Affective Disorders 251: 149-155.
- 124 Ladd GW and Ettekal I (2013). Peer-related loneliness across early to late adolescence: normative trends, intra-individual trajectories, and links with depressive symptoms. Journal of Adolescence 36: 1269-1282.
- 125 Hawkley LC, Cacioppo JT (2010) Loneliness matters: a theoretical and empirical review of consequences and mechanisms. Annals of Behavioral Medicine. 40(2), pp. 218-227.
- 126 Lyyra N, Välimaa R and Tynjälä J (2018). Loneliness and subjective health complaints among school-aged children. Scandinavian Journal of Public Health 46(20):87-93.

- Eccles AM, Qualter P, Madsen KR and Holstein BE. (2020). Loneliness in the lives of Danish adolescents: Associations with health and sleep. Scandinavian Journal of Public Health 48: 877-887 https://doi. org/10.1177/1403494819865429
- Lyyra N, Junttila N, Tynjälä J and Välimaa R (2019). Nuorten yksinäisyys on yhteydessä lisääntyneeseen oireiluun ja lääkkeiden käyttöön (Loneliness of adolescents associated with increased symptoms and medicine use). Lääkärilehti (Finnish Medical Journal) 32: 1670-1673.
- 129 Davison, T.E. and McCabe, M.P. (2006) Adolescent body image and psychosocial functioning. The Journal of Social Psychology, 146: 15-30.
- Abbott, B.D. and Barber, B.L. (2010) Embodied image: Gender differences in functional and aesthetic body image among Australian adolescents, Body Image, 7: 22-31.
- 130 Huang, J.S., Norman, G.J., Zabinski, M.F., Calfas, K. and Patrick, K. (2007). Body image and self-esteem among adolescents undergoing an intervention targeting dietary and physical activity behaviors. Journal of Adolescent Health, 40: 245-251.
 - 131 Cash TF and Smolak L, editors. (2011) Body image: A handbook of science, practice, and prevention. Guilford Press.
- 132 Webb JB, Wood-Barcalow NL and Tylka TL. (2015) Assessing positive body image: Contemporary approaches and future directions. Body image 30(14): 130-45.
- 133 Voelker D, Reel J and Greenleaf C. (2015) Weight status and body image perceptions in adolescents: current perspectives. Adolescent Health, Medicine and Therapeutics 6: 149-158.
- 134 WHO Regional office for Europe (2020) Body mass index BMI. [online] Available at: https://www.euro.who. int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi
- 135 Neumark-Sztainer D, Croll J, Story M, Hannan PJ, French SA and Perry C (2002) Ethnic/racial differences in weight-related concerns and behaviors among adolescent girls and boys: findings from Project EAT. Journal of Psychosomatic Research 53(5): 963-974.
- NCD Risk Factor Collaboration (NCD-RisC) (2017) Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128.9 million children, adolescents, and adults. The Lancet 390(10113): 2627-2642.
- Inchley J, Currie D, Budisavljevic S, Torsheim T, Jåstad A, Cosma A, Kelly C, Arnasson A (2020). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 2. Key data. [online] Copenhagen: WHO Regional Office for Europe. Available at https://apps.who.int/iris/bitstream/handle/10665/332104/9789289055017-eng.pdf
- 138 Miech R, Johnston L, O'Malley P, Bachman J, Schulenberg J, Patrick M (2020). Monitoring the Future national survey results on drug use, 1975-2019: Volume I, Secondary school students. [online] Ann Arbor: Institute for Social Research, The University of Michigan. Available at http://monitoringthefuture.org/pubs/monographs/mtf-vol1_2019.pdf
- 139 World Health Organization (2018). Global status report on alcohol and health 2018. [online] Geneva: World Health Organization. Available at: http://apps.who.int/iris/bitstream/handle/10665/274603/9789241565639-eng.pdf?ua=1
- 140 Feldstein-Ewing S, Sakhardande A, Blakemore S-J (2014). The effect of alcohol consumption on the adolescent brain: A systematic review of MRI and fMRI studies of alcohol-using youth. Neuroimage-Clin 5: 420-437. DOI: https://doi.org/10.1016/j.nicl.2014.06.011
- 141 Hall W, Patton G, Stockings E, Weier M, Lynskey M, Morley K, Degenhardt L (2016). Why young people's substance use matters for global health. The Lancet Psychiatry 3(3): 265-279. DOI: https://doi.org/10.1016/S2215-0366(16)00013-4.
- Newbury-Birch D, Walker J, Avery L, Beyer F, Brown N, Jackson K, Lock C, McGovern R, Kaner E, Gilvarry E, McArdie P, Ramesh V, Stewart S (2009). Impact of Alcohol Consumption on Young People: A Systematic Review of

Published Reviews. Newcastle: Newcastle University. Available at: https://dera.ioe.ac.uk/11355/1/DCSF-RR067.pdf

- 143 Lavikainen H, Salmi V, Aaltonen M, Lintonen T (2011). Alcohol-related harms and risk behaviours among adolescents: Does drinking style matter. Journal of Substance Use16: 243-255. DOI: https://doi.org/10.3109/14659891.2010.499492
- 144 Spear LP (2018). Effects of adolescent alcohol consumption on the brain and behaviour. Nature Reviews Neuroscience 19(4): 197-214. DOI: https://doi.org/10.1038/nrn.2018.10
- 145 Waller R, Murray L, Shaw DS, Forbes EE, Hyde LW (2019). Accelerated alcohol use across adolescence predicts early adult symptoms of alcohol use disorder via reward-related neural function. Psychol Med 49: 675-684. DOI: DOI: https://doi.org/10.1017/S003329171800137X
- 146 Gmel G, Rehm J, Kuntsche EN (2003). Binge drinking in Europe: Definitions, epidemiology, and consequences. Sucht 49(2): 105-116.
- 147 Gore FM, Bloem PJN, Patton GC, Ferguson J, Joseph V, Coffey C, Sawyer SM, Mathers CD (2011). Global burden of disease in young people aged 10-24 years: a systematic analysis. Lancet 377: 2093-2102. DOI: https://doi. org/10.1016/S0140-6736(11)60512-6
- 148 Eurobarometer (2015). Special report 429 (EB82.4): Attitudes of Europeans towards tobacco and electronic cigarettes. Available from: http://ec.europa.eu/public_opinion/
- 149 Kunst A, Giskes K, Mackenbach J. Socioeconomic inequalities in smoking in the European Union. Applying an equity lens to tobacco control policies. Rotterdam: Department of Public Health, Erasmus Medical Center; 2004

(http://old.ensp.org/files/ensp_socioeconomic_inequalities_in_smoking_in_eu.pdf, accessed 24 August 2015).

- 150 Hiscock R, Bauld L, Amos A, Fidler JA, Munafo M. Socioeconomic status and smoking: a review. Ann NY Acad Sci. 2012;1248:107-23.
- 151 Preventing tobacco use among youth and young adults: a report of the Surgeon General. Rockville (MD): US Department of Health and HumanServices; 2012 (http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf, accessed 24 August 2015).
- 152 McConnell, R., Barrington-Trimis, J. L., Wang, K., Urman, R., Hong, H., Unger, J., Samet, J., Leventhal, A., & Berhane, K. (2017). Electronic Cigarette Use and Respiratory Symptoms in Adolescents. American Journal of Respiratory and Critical Care Medicine 195(8): 1043-1049. DOI: https://doi.org/10.1164/rccm.201604-0804OC
- 153 United Nations Office on Drugs and Crime (2017). World Drug Report 2017: Market analysis of plant-based drugs. Opiates, cocaine, cannabis. United Nations publication, Sales No. E.17.XI.6.
- 154 Inchley J, Currie D, Budisavljevic S, Torsheim T, Jåstad A, Cosma A et al. (Eds.) (2020). Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 1. Key findings. Copenhagen: WHO Regional Office for Europe.
- 155 Volkow N, Baler R, Compton W & Weiss S (2014). Adverse health effects of marijuana use. The New England Journal of Medicine 370: 2219-27.
- 156 Casadio P, Fernandes C, Murray R & Di Forti M (2011). Cannabis use in young people: the risk for schizophrenia. Neuroscience and Biobehavioral Review 35(8):1779-87
- 157 van Ours J & Williams J (2009). Why parents worry: initiation into cannabis use by youth and their educational attainment. Journal of Health Economics 28(1):132-42.
- 158 Bachman J, O'Malley P, Schulenberg J, Johnston L, Freedman-Doan P & Messersmith E (2008). The education-drug use connection. How successes and failures in school relate to adolescent smoking, drinking, drug use, and delinquency. New York (NY): Lawrence Erlbaum Associates.
- 159 Giffith-Lendering M, Huijbregts S, Mooijaart A, Vollebergh W & Swaab H (2001). Cannabis use and development of externalizing and internalizing behavior problems in early adolescence: aTRAILS study. Drug and Alcohol Dependence 116(1-3):11-7.

- 160 Ding J, Gadit A & Peer S (2014). School refusal in adolescent young men: could this be an idiopathic amotivational syndrome? BMJ Case Reports 2014:bcr2013203508. DOI: https://doi.org/10.1136/bcr-2013-203508.
- 161 Magnusson C & Trost K (2006). Girls experiencing sexual intercourse early: could it play a part in reproductive health in middle adulthood? Journal of Psychosomatic Obstetrics and Gynaecology. 27:237-244. Available at: https:// doi.org/10.1080/01674820600869006
- Fergus S, Zimmerman MA & Caldwell CH (2007). Growth trajectories of sexual risk behavior in adolescence and young adulthood. American Journal of Public Health. 97:1096-1101. Available at: https://doi.org/10.2105/ AJPH.2005.074609
- 163 Kann L, McManus T, Harris WA, Shanklin SL, Flint KH, Queen B, Lowry R, Chyen D, Whittle L, Thornton J, Lim C, Bradford D, Yamakawa Y, Leon M, Brener N & Ethier KA (2018). Youth Risk Behavior Surveillance - United States, 2017. MMWR Surveill Summ 67:1-114. Available at: https://doi.org/10.15585/mmwr.ss6708a1
- 164 Jackson C, Sweeting H & Haw S (2012). Clustering of substance use and sexual risk behaviour in adolescence: analysis of two cohort studies. BMJ Open 2:e000661. Available at: https://doi.org/10.1136/bmjopen-2011-000661
- 165 Huibregtse BM, Bornovalova MA, Hicks BM, McGue M & Jacono W (2011). Testing the role of adolescent sexual initiation in later-life sexual risk behavior: a longitudinal twin design. Psychological Science. 22:924–933. Available at: https://doi.org/10.1177/0956797611410982
- 166 Smith W, Turan JM, White K, Stringer KL, Helova A, Simpson T & Cockrill K (2016). Social Norms and Stigma Regarding Unintended Pregnancy and Pregnancy Decisions: A Qualitative Study of Young Women in Alabama. Perspectives on Sexual and Reproductive Health. 48:73-81. Available at: https://doi.org/10.1363/48e9016
- 167 World Health Organization (2016). Global health sector strategy on sexually transmitted infections 2016-2021: Toward ending STIs. Geneva: World Health Organization. Available at: https://www.who.int/publications/i/item/WHO-RHR-16.09
- 168 Aicken CR, Nardone A, Mercer CH (2011) Alcohol misuse, sexual risk behaviour and adverse sexual health outcomes: evidence from Britain's national probability sexual behaviour surveys. Journal of Public Health. 33(2), pp. 262-271
- Kaestle CE, Morisky DE, Wiley DJ (2002) Sexual intercourse and the age difference between adolescent females and their romantic partners. Perspectives on Sexual and Reproductive Health. 34(6), pp. 304-309
- 170 Manlove J, Terry Humen E, Ikramullah E (2006) Young teenagers and older sexual partners: correlates and consequences for males and females. Perspectives on Sexual and Reproductive Health. 38(4), pp. 197-207.
- 171 Štulhofer A, Ba ak V, Ajdukovi D, Graham C (2010) Understanding the association between condom use at first and most recent sexual intercourse: An assessment of normative, calculative, and habitual explanations. Social Science & Medicine. 70(12), pp. 2080-2084.
- 172 Manlove J, Ryan S, Franzetta K (2007) Contraceptive use patterns across teens' sexual relationships: The role of relationships, partners, and sexual histories. Demography. 44(3), pp. 603-621.
- 173 Reissing, ED, Andruff, HL, Wentland, JJ (2012) Looking back: The experience of first sexual intercourse and current sexual adjustment in young heterosexual adults. Journal of Sex Research. 49(1), 27-35.
- Burke L, Nic Gabhainn S, Kelly C (2018) Socio-demographic, health and lifestyle factors influencing age of sexual initiation among adolescents. International Journal of Environmental Research and Public Health. 15(9), 1851.
- 175 Craig WM & Pepler DJ (1998) Observations of Bullying and Victimization in the School Yard. Canadian Journal of School Psychology 13(2):41-59.
- 176 Olweus D (1997). Bully/victim problems in school: Facts and intervention. European Journal of Psychology of Education 12(4): 495-510.
- 177 Schoffstall CL & Robert C (2011). Cyber Aggression: The Relation between Online Offenders and Offline Social Competence. Soc Dev 20(3): 587-604.

- 178 Olweus D (2012). Cyberbullying: An overrated phenomenon? European Journal of Developmental Psychology 9(5): 520-538.
- 179 Hinduja S & Patchin JW (2012). Cyberbullying: Neither an epidemic nor a rarity. European Journal of Developmental Psychology 9(5): 539-543.
- 180 Kuntsche EN & Klingemann HK-H (2004). Weapon-carrying at Swiss schools? A gender-specific typology in context of victim and offender related violence. J Adolesc 27(4): 381–93.
- 181 Due P, Holstein BE, Lynch J, Diderichsen F, Gabhain SN, Scheidt P & Currie C (2005). Bullying and symptoms among school-aged children: international comparative cross-sectional study in 28 countries. Eur J Public Health 15(2):128–132.
- Due P, Hansen EH, Merlo J, Andersen A & Holstein BE (2007). Is victimization from bullying associated with medicine use among adolescents? A nationally representative cross-sectional survey in Denmark. Pediatrics 120(1): 110–117.
- 183 Kaltiala-Heino R, Rimpelä M, Rantanen P & Rimpelä A (2000). Bullying at school–an indicator of adolescents at risk for mental disorders. J Adolesc 23(6): 661–674.
- 184 Sinclair KO, Sheri B, Poteat PV, Brian K & Russell ST (2012). Cyber and Bias-based Harassment: Associations With Academic, Substance Use, and Mental Health Problems. J Adolesc Health Care 50(5): 521–3.
- Wolke D, Copeland WE, Angold A, Costello EJ (2013). Impact of bullying in childhood on adult health, wealth, crime, and social outcomes. Psychol Sci 24(10): 1958–70.
- 186 Molcho M, Harel Y & Dina LO (2004). Substance use and youth violence. A study among 6th to 10th grade Israeli school children. Int J Adolesc Med Health 16(3): 239–51.
- 187 Nansel TR, Craig W, Overpeck MD, Saluja G & Ruan WJ (2004). Health Behaviour in School-aged Children Bullying Analyses Working Group. Cross-national consistency in the relationship between bullying behaviors and psychosocial adjustment. Arch Pediatr Adolesc Med 158(8): 730–736.
- 188 UNESCO.). Behind the numbers: ending school violence and bullying. Paris: United Nations Educational, Scientific and Cultural Organization. p 71.
- Walsh SD, Molcho M, Craig W, Harel-Fisch Y, Huynh Q, Kukaswadia A et al. (2013). Physical and Emotional Health Problems Experienced by Youth Engaged in Physical Fighting and Weapon Carrying. PLoS ONE 8(2): e56403.
- 190 Kuntsche EN & Gmel G (2004). Emotional wellbeing and violence among social and solitary risky single occasion drinkers in adolescence. Addiction 99(3): 331–339.
- 191 Molcho M, Harel Y & Dina L (2004). Substance use and youth violence. A study among 6th to 10th grade Israeli school children. International Journal of Adolescent Medicine and Health 16(3): 239–252.
- 192 Vieno A, Gini G & Santinello M (2011). Different forms of bullying and their association to smoking and drinking behavior in Italian adolescents. The Journal of School Health 81(7): 393–399.
- 193 Salas-Wright CP, Nelson EJ, Vaughn MG, Reingle Gonzalez JM & Córdova D (2017). Trends in Fighting and Violence Among Adolescents in the United States, 2002-2014. American Journal of Public Health 107(6): 977–982.
- 194 Njunju E, Mulenga D, Mazaba ML, Kwangu M & Siziya S (2017). Prevalence and correlates for suicidal ideation among adolescents in school in Bolivia. International Public Health Journal 9(4): 479–484.
- 195 Soares S, Araújo J, Ramos E & Fraga S (2019). Sleep duration and physical fighting involvement in late adolescence. Journal of Public Health 27(3): 341–348.
- 196 Hillis S, Mercy J, Amobi A, Kress H (2016) Global prevalence of past-year violence against children: a systematic review and minimum estimates. Pediatrics. 137(3), e20154079.
 - 197 Kessler RC, Bedirhan Ustun T. The WHO World Mental Health Surveys: Global Perspectives on the Epidemiol-

- ogy of Mental Disorders. Cambridge University Press; 2011. 600 p.
- 198 Leeb RT, Lewis T, Zolotor AJ. A Review of Physical and Mental Health Consequences of Child Abuse and Neglect and Implications for Practice. Am J Lifestyle Med. 2011;5(5):454-68.
- 199 Kim J, Cicchetti D. Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. J Child Psychol Psychiatry. 2010 Jun 1;51(6):706-16.
- 200 Teicher MH, Samson JA, Anderson CM, Ohashi K. The effects of childhood maltreatment on brain structure, function and connectivity. Nat Rev Neurosci. 2016;17(10):652-66.
- 201 Jewkes RK, Dunkle K, Nduna M, Jama PN, Puren A. Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. Child Abuse Negl. 2010 Nov;34(11):833-41.
- 202 Miller GE, Chen E, Parker KJ. Psychological stress in childhood and susceptibility to the chronic diseases of aging: moving toward a model of behavioral and biological mechanisms. Psychol Bull. 2011 Nov;137(6):959-97.
- 203 Capaldi DM, Knoble NB, Shortt JW, Kim HK. A Systematic Review of Risk Factors for Intimate Partner Violence. Partner Abuse. 2012 Apr;3(2):231-80.
- 204 Widom CS, Czaja SJ, DuMont KA. Intergenerational transmission of child abuse and neglect: real or detection bias? Science. 2015 Mar 27;347(6229):1480-5.
- 205 Widom CS, Czaja SJ, DuMont KA (2015) Intergenerational transmission of child abuse and neglect: real or detection bias? Science. 347(6229), pp. 1480-1485.
- 206 Rogers, A. A., Ha, T., & Ockey, S. (2020). Adolescents' Perceived Socio-Emotional Impact of COVID-19 and Implications for Mental Health: Results From a US-Based Mixed-Methods Study. Journal of Adolescent Health.68(1), 43-52 DOI: https://doi.org/10.1016/j.jadohealth.2020.09.039
- 207 Ng, K.; Cosma, A.; Svacina, K., Boniel-Nissim, M., Badura, P., (2021) Czech adolescents' remote school and health experiences during the spring 2020 COVID-19 lockdown. Preventive Medicine Reports (in press)
- 208 Racine N, Cooke JE, Eirich R, Korczak DJ, McArthur B, Madigan S. Child and adolescent mental illness during COVID-19: A rapid review. Psychiatry Res. 2020;292:113307. doi:10.1016/j.psychres.2020.113307
- 209 Malik VS, Pan A, Willett WC, Hu FB. Sugar-sweetened beverages and weight gain in children and adults: a systematic review and meta-analysis. Am J Clin Nutr. 2013;98(4):1084-102. doi:10.3945/ajcn.113.058362.
- 210 Trumbo PR, Rivers CR. Systematic review of the evidence for an association between sugar-sweetened beverage consumption and risk of obesity. Nutr Rev. 2014;72(9):566-74. doi:10.1111/nure.12128.
- Sahoo K, Sahoo B, Choudhury AK, Sofi NY, Kumar R, Bhadoria A. Childhood obesity: causes and consequences. J Family Med Prim Care 2015;4(2):187-92. doi:10.4103/2249-4863.154628.
- 212 Basu S, McKee M, Galea G, Stuckler D. Relationship of soft drink consumption to global overweight, obesity, and diabetes: a cross-national analysis of 75 countries. Am J Public Health 2013;103(11):2071-77. doi:10.2105/ AJPH.2012.300974.
- 213 Greenwood DC, Threapleton DE, Evans CEL, Cleghorn CL, Nykjaer C, Woodhead C et al. Association between sugar-sweetened and artificially sweetened soft drinks and type 2 diabetes: systematic review and dose-response meta-analysis of prospective studies. Br J Nutr. 2014;112:725–34. doi:10.1017/S0007114514001329.
- 214 Hasselkvist A, Johansson A, Johansson AK. Association between soft drink consumption, oral health and some lifestyle factors in Swedish adolescents. Acta Odontol Scand. 2014;72(8):1039-46. doi:10.3109/00016357.2014.946964.
- 215 Affenito SG, Franko DL, Striegel-Moore RH, Thompson D (2012) Behavioral determinants of obesity: Research findings and policy implications. Journal of Obesity. 2012, pp. 1-4.

- 216 Hallstrom L et al. Breakfast habits and factors influencing food choices at breakfast in relation to socio-demographic and family factors among European adolescents. The HELENA study. Appetite, 2011, 56(3):649-657.
- 217 Wal V (2012) The relationship between body mass index and unhealthy weight control behaviours among adolescents: the role of family and peer social support. Economics and Human Biology. 10(4), pp. 395-404.
- Neumark-Sztainer D, Wall M, Story M, Standish AR (2012) Dieting and unhealthy weight control behaviours during adolescence: Associations with 10-year changes in body mass index. Journal of Adolescent Health. 50(1), pp. 80-86.
- 219 Herpertz-Dahlmann B (2015) Adolescent eating disorders: Update on definitions, symptomatology, epidemiology, and comorbidity. Child and Adolescent Psychiatric Clinics of North America. 24(1), pp. 177-196.
- 220 Biddle SJ et al. Physical activity and sedentary behaviours in youth: issues and controversies. The Journal of the Royal Society for the Promotion of Health, 2004, 124(1):29-33.
- Brunton G et al. Children and physical activity: a systematic review of barriers and facilitators. London, EP-PI-Centre, Social Science Research Unit, Institute of Education, University of London, 2003
- Brunton G et al. Children and physical activity: a systematic review of barriers and facilitators. London, EP-PI-Centre, Social Science Research Unit, Institute of Education, University of London, 2003
- 223 Oral health in America. A report of the Surgeon General. Rockville, MD, US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
- 224 Koivusilta L et al. Toothbrushing as part of the adolescent lifestyle predicts education level. Journal of Dental Research, 2003, 82(5):361-366.
- 225 Honkala S et al. Toothbrushing and smoking among adolescents aggregation of health damaging behaviours. Journal of Clinical Periodontology, 2011, 38(5):442-448.
 - 226 Selwitz RH, Ismail AI, Pitts NB. Dental caries. Lancet, 2007, 369(9555):51-59.
- 227 McConnell, R., Barrington-Trimis, J. L., Wang, K., Urman, R., Hong, H., Unger, J., Samet, J., Leventhal, A., & Berhane, K. (2017). Electronic Cigarette Use and Respiratory Symptoms in Adolescents. American Journal of Respiratory and Critical Care Medicine 195(8): 1043-1049. DOI: https://doi.org/10.1164/rccm.201604-0804OC
- 228 Geidne S, Backman L, Edvardsson I & Hulldin J (2016). Prevalence and risk factors of electronic cigarette use among adolescents: Data from four Swedish municipalities. Nord. Stud. Alcohol Drugs 33:225-240. DOI: https://doi. org/10.1515/nsad-2016-0017
- 229 Porath-Waller AJ, Beasley E, Beirness DJ. A meta-analytic review of school-based prevention for cannabis use. Health Education & Behavior, 2010, 37(5):709-723.
- 230 Sexual health interventions targeted at children and young people: a short evidence briefing. Edinburgh, NHS Health Scotland, 2010.
- 231 Vreeman RC, Carroll AE. A systematic review of school-based interventions to prevent bullying. Archives of Pediatrics & Adolescent Medicine, 2007, 161(1):78-88.
 - 232 Albanian Demographic Health Survey 2017/18.