



Keynotes:



Generation Z as a research challenge

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GENERATION Z



1995 - 2010

GENERATION Z

Who are they? How many of them are among us?

What are the **formative influences**? Who are their parents and what is their influence? What is going on in a society what might influence them and how? How technology development influence them? What is different in their interactions with peers, adults, world around?

What are their **characteristics**? What is their **potential**? What are **challenges** they are confronted with?

What **research questions** should be formulated? How we could answer them? Do we have **appropriate measurements, methods**?





GENERATION Z

- In 2017, 87 millions people in EU, and 1,4 millions in Switzerland (16-17%) belong to Generation Z (7-22 years old)
- Born in world with new technologies. Online became a natural environment
- Very early (less than 7 years old) have access and are exposed information and influences in a global scale
- *Tumblr, Snapchat, Instg, Twiter, Fcb, YouTube/ Starbuck, Uber, Apple, Google*
- Parents from Generation X (born 1960-1980)
- Global crisis: recesion, ecological and humanitarian crisis, radicalization of society and terrorism, migration
- Accessibility, the range and ways how new technologies are used



HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN
WORLD HEALTH ORGANIZATION COLLABORATIVE CROSS-NATIONAL SURVEY



- WHO collaborative study
- more than 30 years, each 4 years about half million of children aged 11, 13 and 15 years from more than 45 countries in North Globe
- mandatory, optional and national modules covering various themes as health, nutrition, risk behaviour, leissure time, school, peers, parents, comunity,
- international protocol (hbscstudyprotocol@hbosc.org)
- available data (<http://www.uib.no/en/hbscdata>)
- International reports, European health statistics app, ...
- Generation Z is covered in 2010, 2014, 2018, 2022 data collections (HBSC respondents borned in 1995-2011)

Is „online“ key challenge of Generation Z associated with changes in health, health related behaviour, social interactions, approach to world around?

How characteristics of parents and other significant adults (e.g. teachers) contribute to development of GenZers?

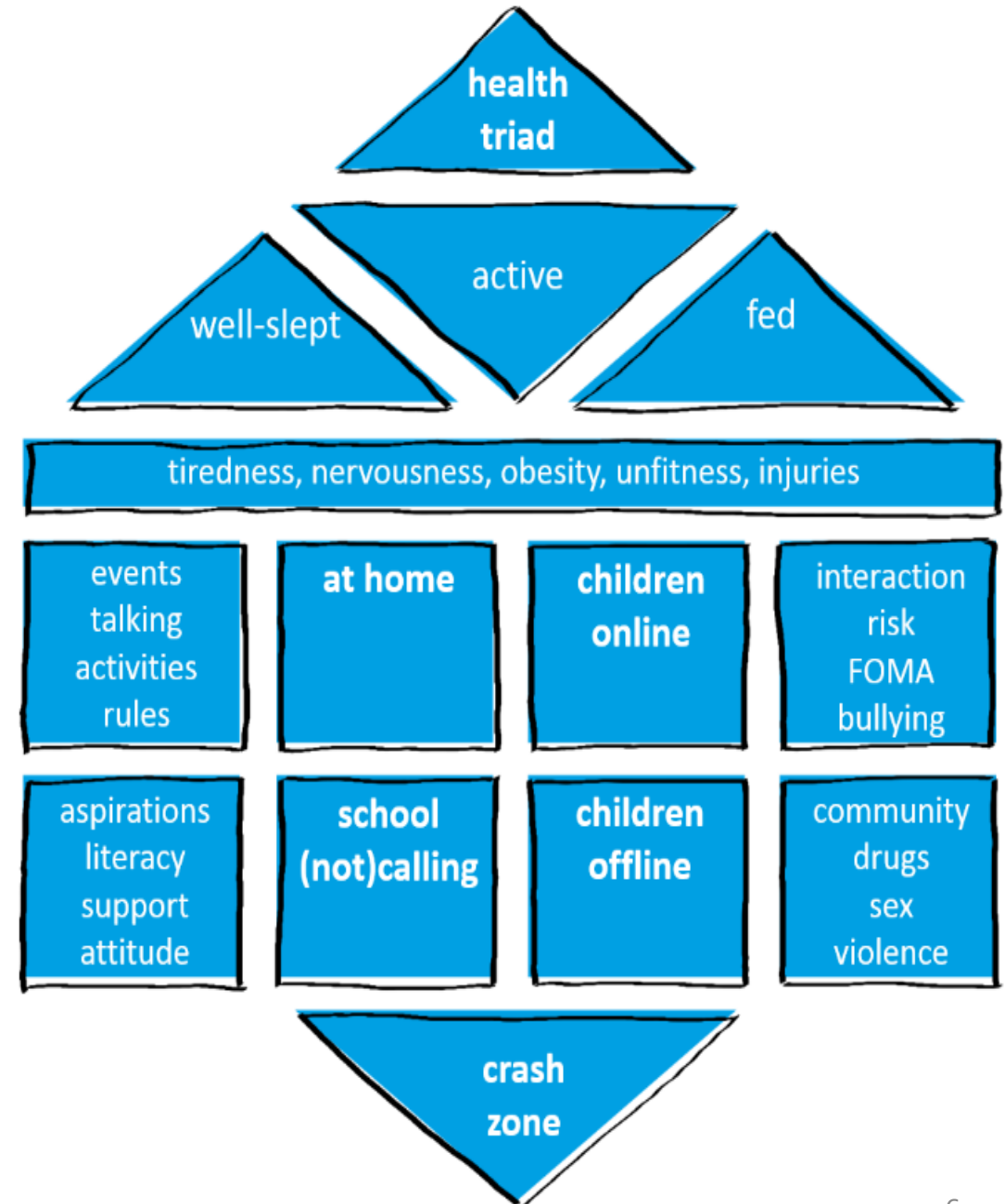
Sleep deprivation

Obesity, unfitness, injuries

Substance use, peer interactions

Family

Online vs. Offline



SLEEP DEPRIVATION

- 2002-2006-2010-2014
- increase in the prevalence of **sleep-onset difficulties (SOD)** and in **excessive screen time exposure**
- adolescents exceeding **2-h daily screen time** had 20% higher odds of reporting SOD
- the strength of the association between screen time and SOD increased over time, which may reflect a **change in type of screen time use** (e.g., the increased use of easy accessible screens such as smartphones and tablets)

Ghekiere A. et al. Int J Pub Health 2019,64(1):487-498

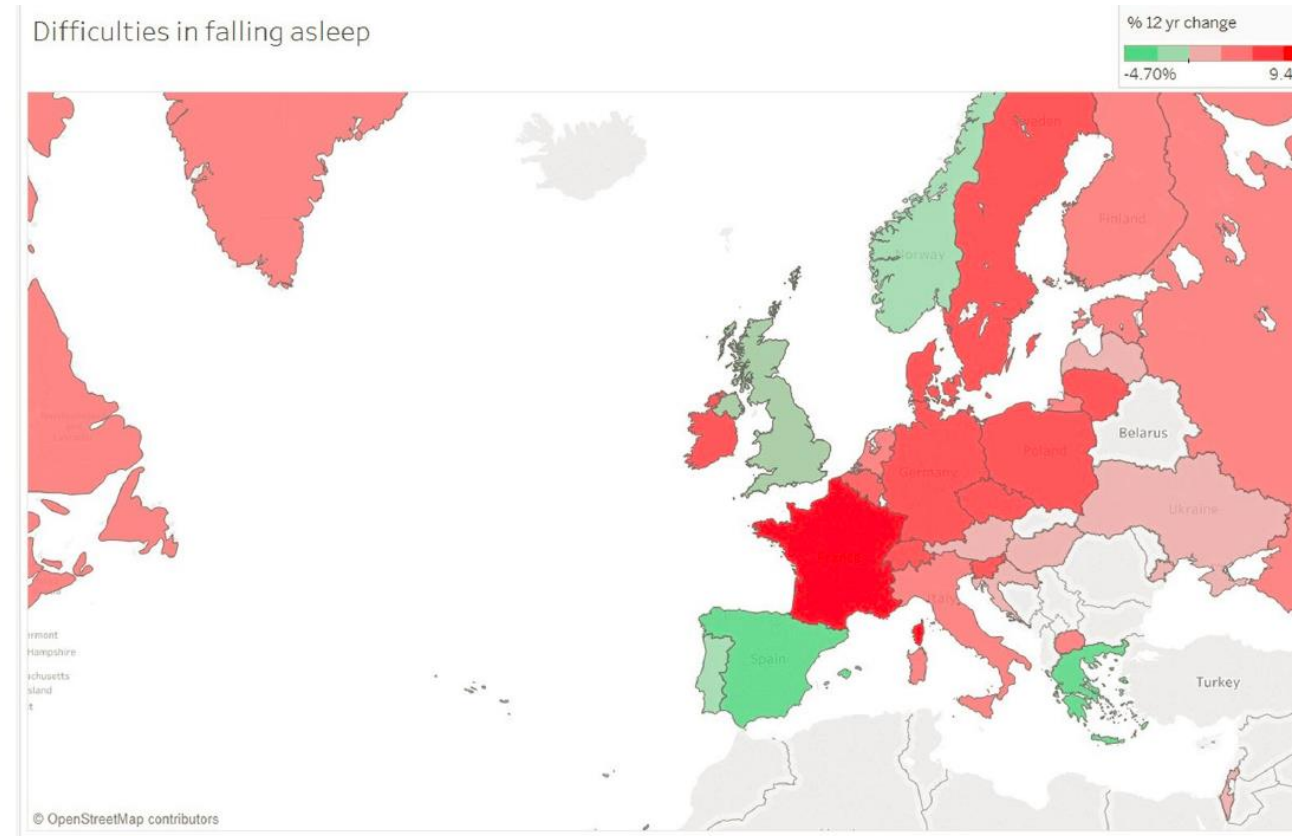
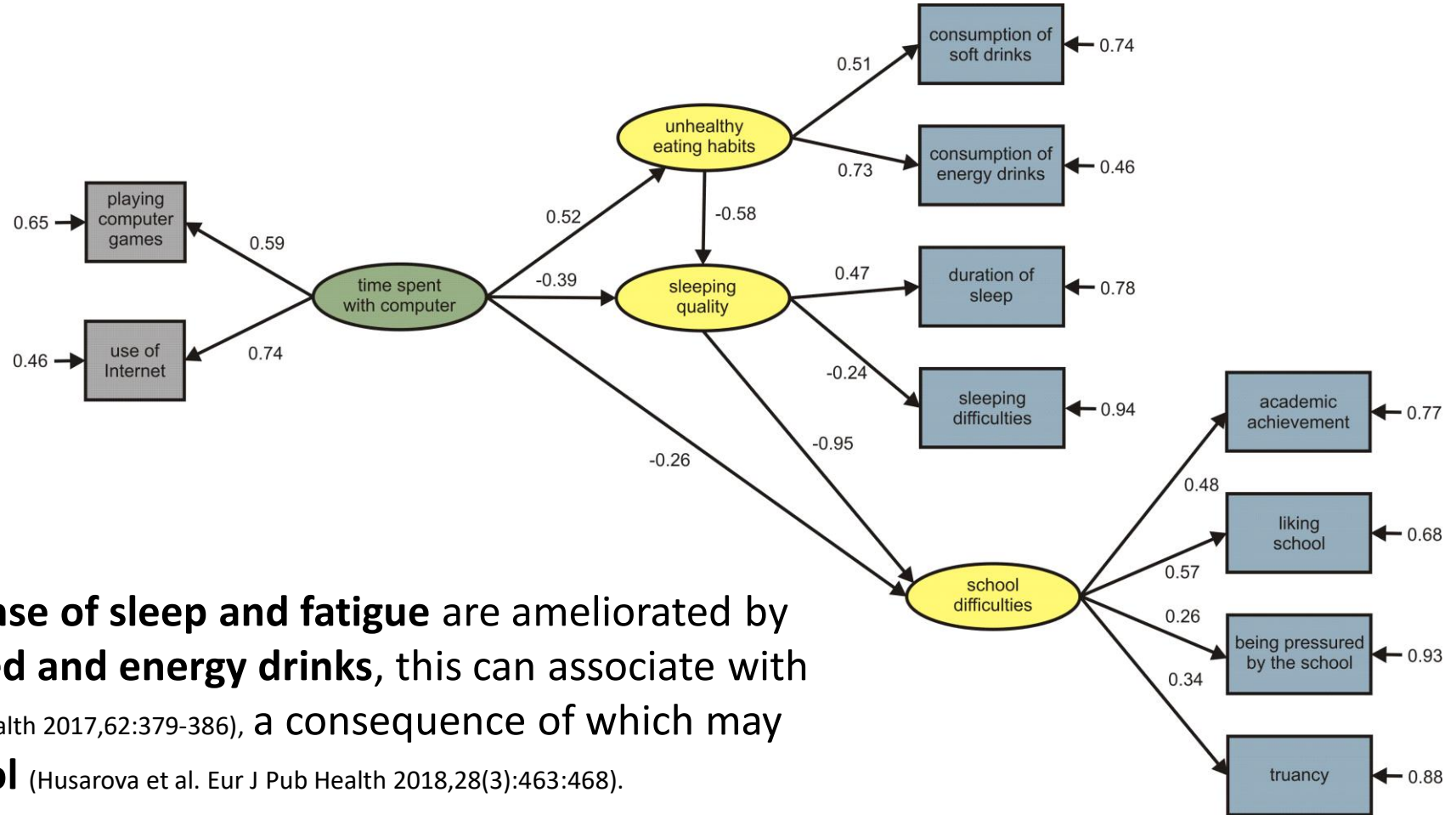


Fig. 1 Twelve-year changes in the prevalence of sleep-onset difficulties, the Health Behavior in School-Aged Children (HBSC) survey, 2002–2014. Red color indicates detrimental evolutions. Green color

indicates positive evolutions. The darker the color, the large 12-year change (color figure online)

SLEEP DEPRIVATION

- Only half of 15-years old children **slept at least 8 hours** in school-days, and 7% of them **slept less than 6 hours** in 2018 (Slovak national HBSC report 2019)



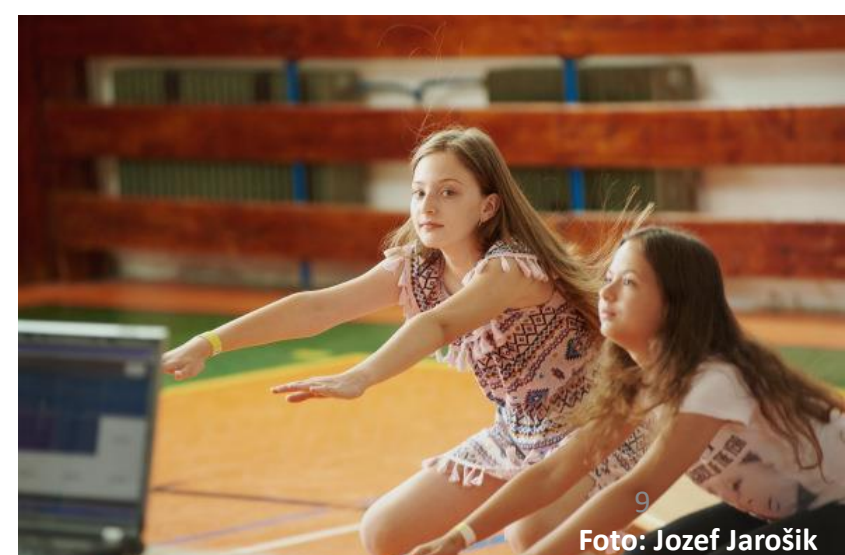
- If time “online” at the expense of sleep and fatigue are ameliorated by the consumption of sweetened and energy drinks, this can associate with **crabbiness** (Holubčíková et al. Int J Pub Health 2017,62:379-386), a consequence of which may be **worse functioning at school** (Husarova et al. Eur J Pub Health 2018,28(3):463:468).

- Little evidence for substantial **negative association between digital-screen engagement and adolescent well-being** (Orben et al. Psychological Science, 2019:1-15)

HOW FIT IS GENERATION Z?



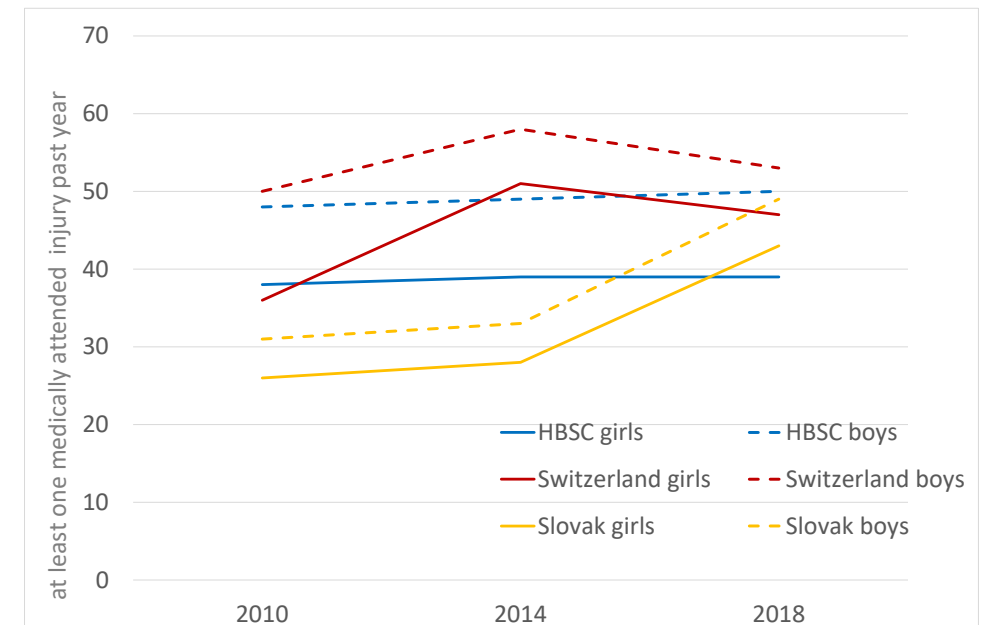
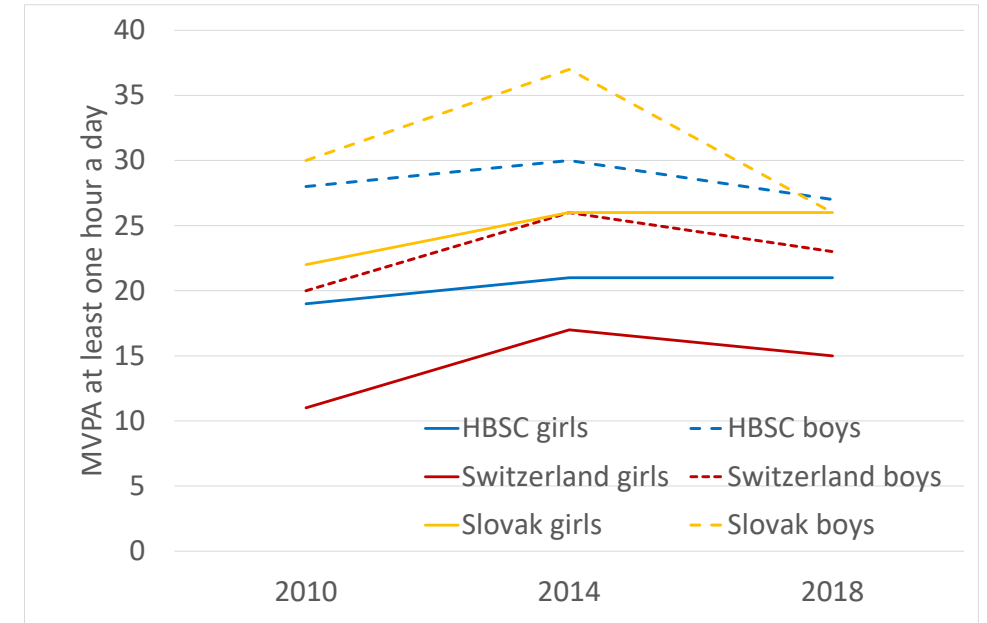
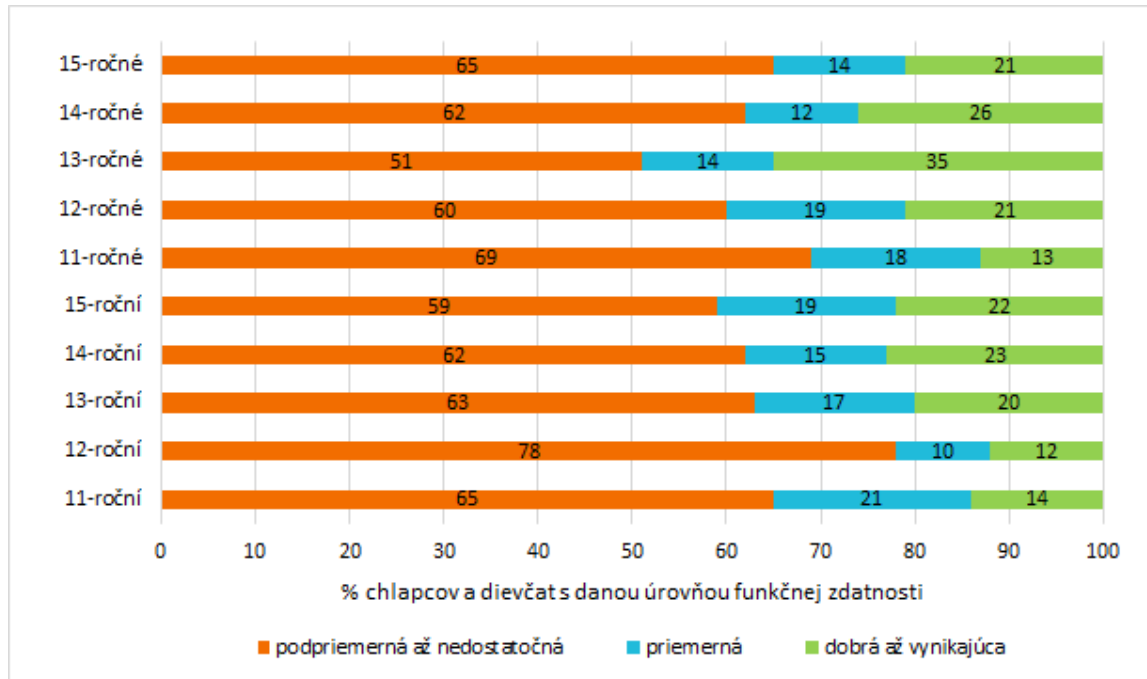
Slovak HBSC study, 2018, n=888 ,11-15 years old, HBSC questionnaire, self-reported vs. objectively measured height and weight/ calculated BMI, Inbody –proportion of body fat, cardiovascular fitness via Ruffier test



(UN) FITNESS

Despite prevalence of physical activity is increasing, functional fitness (Ruffier test) of nearly two thirds of children (51-69%) was insufficient and half of children (43-52%) reported medically attended injury during last year and prevalence of injuries was increasing since 2010.

(Ghekiere A. et al. Int J Pub Health 2019,64(1):487-498/ Slovak HBSC national report 2018)

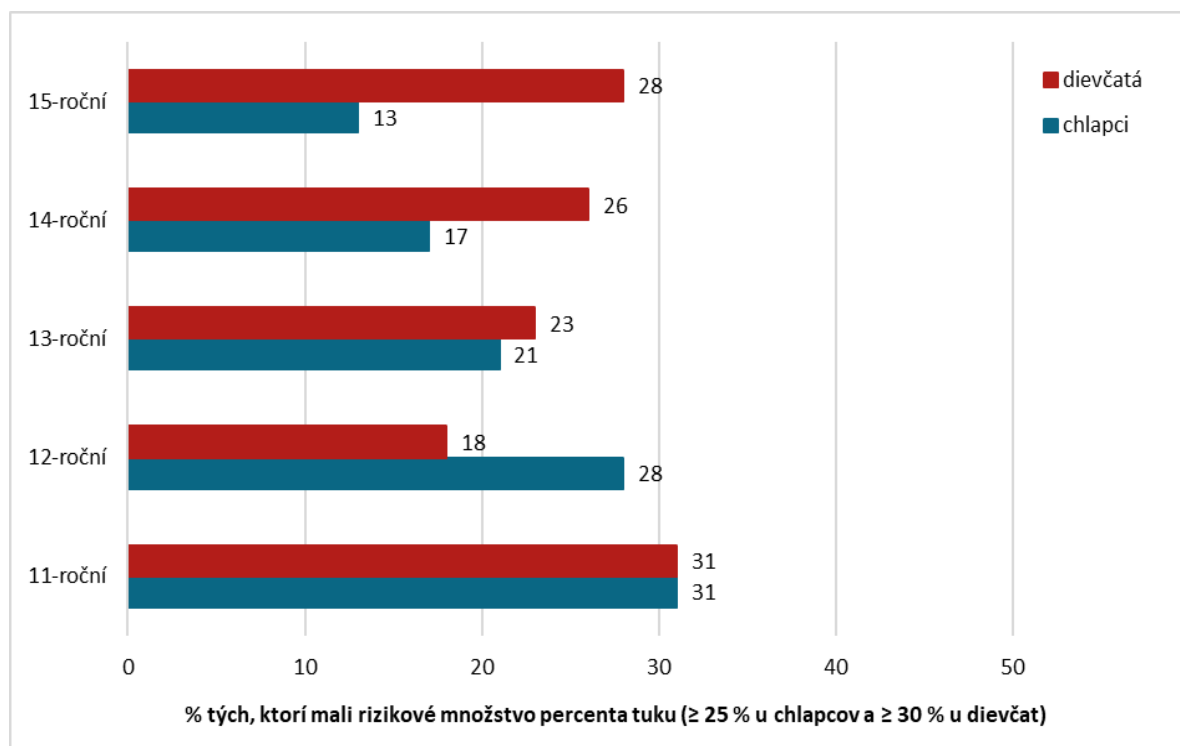


OBESEITY

Prevalence of overweight and obesity based on BMI calculated from self-reported height and weight range from 3% in 11-years old girls up to 17% in 15-years old boys.

Measuring proportion of body fat by InBody 230 (proportion of body fat over 25% in boys and 30% in girls) indicate that one third of 11 years old are obese.

(Slovak national HBSC report 2019)



DECLINE OF SUBSTANCE USE



Zuzana Madarasová

- 2002-2006-2010-2014

national **declines in substance use** (alcohol, tobacco, cannabis) were associated with **declines in face-to-face peer contact**, but not with increases in electronic media communication (EMC)

- adolescents who reported daily EMC spent more time with friends in the evenings and were more likely to use substances, than adolescents who did not report daily EMC.

- support for the stimulation rather than the displacement hypothesis: EMC overall functions as a social connector for adolescents, to **intensify already existing friendships**, rather than replace face-to-face per interactions.

De Looze M. et al. Int J Pub Health 2019,64:229-240

- Adolescent EMC has grown over the years and **predict ease of communication with friends.**

Bonié-Nissim M. et al. Eur J Pub Health 2015,25(supp2):41-45

FAMILY

Family structure as well as **parenting** itself has changed, and we don't know exactly in what way and with what consequences (e.g. alternating parental care, helicopter parenting).

Lack of competencies and experiences with **parenting in „online world“**

Cumulating of **adverse childhood experiences (ACE)**: 39% reported 3 and more ACE

(Slovak national HBSC report 2019; Lackova Rebicova et al. J Env Res Pub Helth 2019,16:2446; Paclikova et al Int J Pub Health 2019,64,2:209-217)





Online vs. offline

By Ivo Brachtl

TRAILER

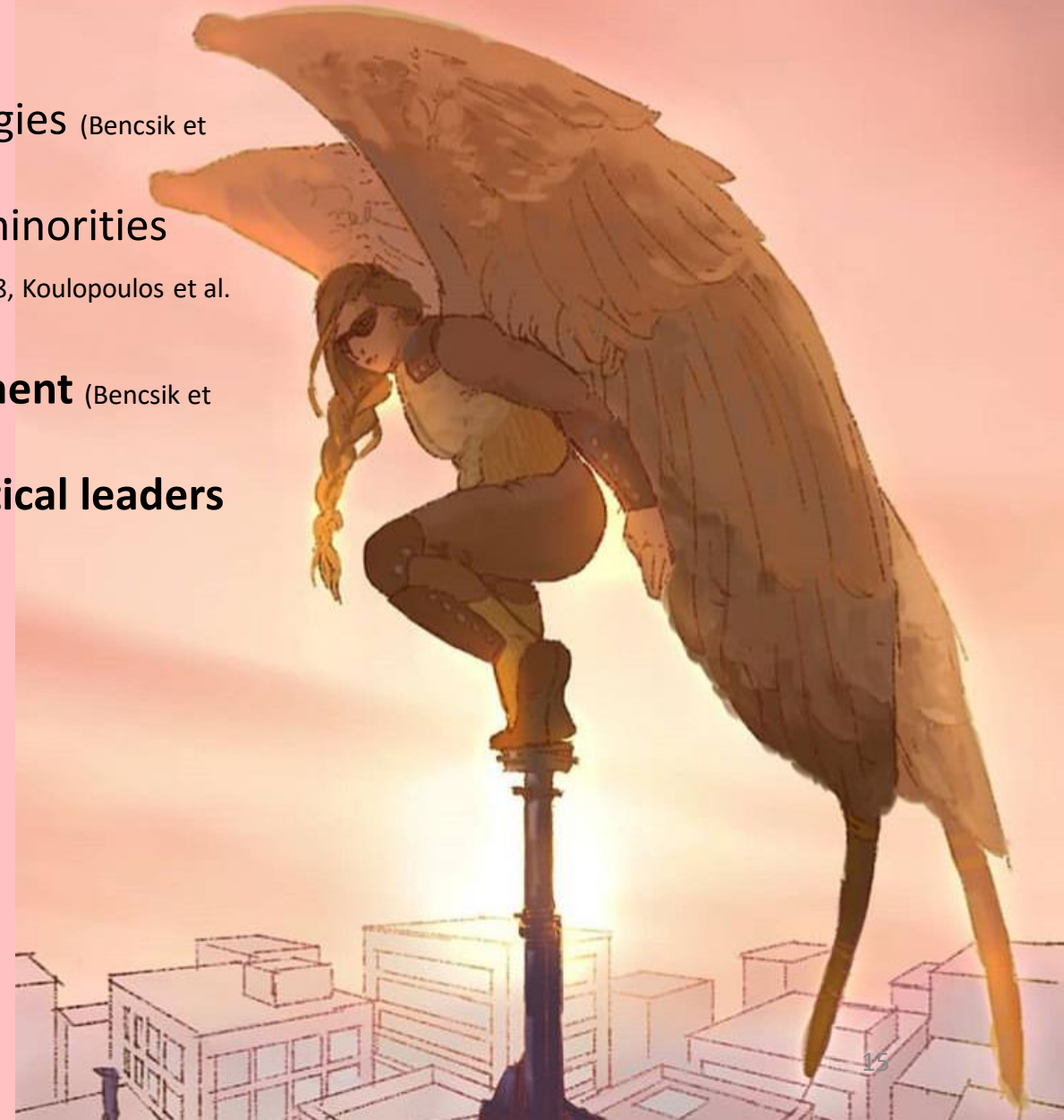
<https://youtu.be/nG3YYe1vMHs>

FULL DOCUMENT:

<https://youtu.be/kiaQU0wp-E0>

THE POTENTIAL OF GENERATION Z

- **first truly global generation** thanks to new technologies (Bencsik et al. 2016, Tulgan 2013).
- **greater openness and tolerance** towards different minorities and greater openness to global questions (Shahidullah 2018, Koulopoulos et al. 2016, Tulgan 2013).
- maturing in a **very complex and uncertain environment** (Bencsik et al. 2016).
- **changes in the functioning of civil society with political leaders** (Mathews 2008)
- **will have to resolve some serious global challenges**



THE POTENTIAL OF GENERATION Z

They need **not only new technologies** but especially the **development of their full potential, which they are able to apply on behalf of the self, their surroundings and in the resolving of global challenges.**

Malalla Yousafzai (activist and the youngest holder of the Nobel Prize),
Jack Andraka (he developed a test for early detection of pancreatic cancer)
Boyan Slat (Ocean Clean Up)
Greta Thunberg (climate change activist)

