Abstract citation ID: ckac093.007 S02-2 Socioeconomic determinants of physical activity, sleep and screen time among children aged 6-9 years of age in Europe

Sanja Music Milanovic^{1,2}, Marta Buoncristiano³, Helena Križan¹, Giulia Rathmes³, Julianne Williams³, Jolanda Hyska⁴, Vesselka Duleva⁵, Hana Zamrazilova⁶, Tatjana Hejgaard⁷, Maja Bæksgaard Jørgensen⁸, Benoît Salanave^{9,10}, Lela Shengelia¹¹, Cecily C. Kelleher¹², Angela Spinelli¹³, Paola Nardone¹³, Shynar Abdrakhmanova^{14,15}, Zhamilya Usupova¹⁶, Iveta Pudule¹⁷, Snynar Abdrakhmanova "A., Zhamilya Usupova", leta Pudule", Ausra Petrauskiene¹⁸, Victoria Farrugia Sant'Angelo¹⁹, Enisa Kujundžic²⁰, Anna Fijalkowska²¹, Ana Isabel Rito²², Alexandra Cucu²³²⁴, Lacramioara Aurelia Brinduse²⁴²⁵, Valentina Peterkova²⁶, Andrea Gualtieri²⁷, Marta García-Solano²⁸, Enrique Gutiérrez-González²⁸, Khadichamo Boymatova²⁹, Mahmu Enrique Gutiérrez-González²⁸, Khadichamo Boymatova²⁹, Mahmut S. Yardim³⁰, Maya Tanrygulyyeva³¹, Marina Melkumova³², Daniel Weghuber³³, Eha Nurk³⁴, Päivi Mäki³⁵, Ingunn Holden Bergh³⁶, Sergej M. Ostojic³⁷, Kenisha Russell Jonsson³⁸, Igor Spiroski³⁹⁴⁰, Harry Rutter⁴¹, Wolfgang Ahrens⁴²⁴³, Ivo Rakovac³, Stephen Whiting³, João Breda³ João Breda³

¹Croatian Institute of Public Health, Zagreb, Croatia

²School of Medicine, University of Zagreb, Zagreb, Croatia ³Division of Country Health Programmes, WHO Regional Office for Europe,

Copenhagen, Denmark

⁴Nutrition and Food Safety Sector, Institute of Public Health, Tirana, Albania ⁵Department Food and Nutrition, National Centre of Public Health and Analyses, Sofia, Bulgaria

⁶Obesity Management Centre, Institute of Endocrinology, Prague, Czech Republic

⁷Health Promotion and Inequality, Danish Health Authority, Copenhagen, Denmark

⁸National Institute of Public Health, University of Southern Denmark, Odense, Denmark

Department of Non-Communicable Diseases and Traumatisms, Santé Publique France, the French Public Health Agency, Saint-Maurice, France ¹⁰Nutritional Surveillance and Epidemiology Team (ESEN), University Sorbonne Paris Nord, Bobigny, France

11 Maternal, Child and Reproductive Health, National Center for Disease

Control and Public Health, Tbilisi, Georgia

12 College of Health and Agricultural Sciences, University College Dublin,

Dublin, Ireland ¹³National Centre for Disease Prevention and Health Promotion, Italian National Institute of Health (Istituto Superiore di Sanità), Rome, Italy ¹⁴Department of Science and Professional Development, National Center of Public Health of the Ministry of Health of the Republic of Kazakhstan,

Almaty,Kazakhstan

15Kazakhstan School of Public Health, Kazakhstan's Medical University, Almaty, Kazakhstan

16Republican Center for Health Promotion and Mass Communication,

Ministry of Health of the Kyrgyz Republic, Bishkek, Kyrgyzstan ¹⁷Department of Research and Health Statistics, Centre for Disease and Prevention Control, Riga, Latvia

¹⁸Department of Preventive Medicine, Lithuanian University of Health Sciences, Kaunas, Lithuania

Corresponding author: sanja.music@hzjz.hr

Background

Physical activity is key for preventing obesity and development of noncommunicable diseases later in life. Previous research suggests that socioeconomic factors, such as parental education or income, may influence a child's risk of obesity. However, previous research on this has provided heterogeneity in results. Our aim was to investigate the socioeconomic disparities between physical activity, sedentary behaviour and sleep patterns in school-aged children aged 6 to 9 years in 24 European countries, using a large nationally-representative sample of children from 24 countries (Albania, Bulgaria, Croatia, Czechia, Denmark, France, Georgia, Ireland, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Malta, Montenegro, Poland, Portugal, Romania, Russian Federation - only Moscow, San Marino Republic, Spain, Tajikistan, Türkiye and Turkmenistan).

Methods

COSI collected information on physical activity patterns of children, sedentary behaviour and sleep duration through a questionnaire filled by parents. Among these, the paper focused on the following behaviours: Transportation to and from schools, Time spent on practising sports, Time spent on actively/vigorously playing, Time spent watching TV or using electronic devices and Hours of sleep per night. For the paper purpose, countries were grouped in 4 macro-regions according to United Nations "Standard Country or Area Codes for Statistical Use".

Results

Findings indicated that a high prevalence of motorized school transport among children of employed parents in Southern Europe. The highest prevalence of insufficient sports and active play was among families from West-Central Asia who meet the end of the month with troubles, the highest prevalence of excessive screen time is among families from Eastern Europe, where both parents have a low level of education and the highest prevalence of insufficient sleep is among families from West-Central Asia where both parents have a high level of education.

Conclusions

There are important differences in the socioeconomic determinants of PA, sleep and screen related behaviours both between countries and sub-regions across the WHO European Region. This analysis of results from the COSI survey provides important insights that can help guide policy makers to take action to address the childhood obesity epidemic.

Keywords: Screening time, screen-based activities, sleeping behaviour, family record form, parental questionnaire