### COVID-19: AN INTERNATIONAL STUDENT WELL-BEING STUDY IN HUNGARY<sup>1</sup>

Petra Arnold², Zsuzsanna Elekes³, Ibolya Czibere⁴, Anikó Vincze⁵, Adrienne Csizmady⁴, Andrea Lukács¹

#### BACKGROUND AND AIMS

The COVID-19 outbreak has had great psychological and social impacts, not just on the marginalized population but on the general population as well (Wang et al. 2020). Changing life circumstances and daily routines, job losses, an uncertain existence, etc. make people's lives more difficult. The COVID-19 outbreak is likely to have a notable impact on student life as well, as the latter have had to face many challenges (Sahu 2020) such as studying via e-learning methods, online exams, possibly losing their jobs, and financial problems (such as paying tuition fees). International students have moved back to their homeland or live in an isolated way in student hostels, maintaining social distance far away from their families and close friends. So far, only a few studies have been

<sup>1</sup> This article is part of the COVID-19 International Student Well-Being Study (C19 ISWS). C19 ISWS is the result of a study design, study protocol, and questionnaire developed by a team at the University of Antwerp, Belgium (Van de Velde et al. 2020; Buffel et al. forthcoming)

<sup>2</sup> Corresponding author: arnold.petra@uni-corvinus.hu; Social Epidemiology Research Group, Hungarian Academy of Sciences-Corvinus University of Budapest

<sup>3</sup> Social Epidemiology Research Group, Hungarian Academy of Sciences-Corvinus University of Budapest; Department of Sociology and Social Policy, Institute of Communication and Sociology, Corvinus University of Budapest

<sup>4</sup> Department of Sociology and Social Policy, Institute of Political Science and Sociology, University of Debrecen

<sup>5</sup> Department of Sociology, Institute of Social Sciences, University of Szeged

<sup>6</sup> Department of Sociology, Institute of Social Sciences, University of Szeged; Centre for Social Sciences, Institute for Sociology, Hungarian Academy of Sciences Centre of Excellence

<sup>7</sup> Institute of Theoretical Health Sciences, Faculty of Healthcare, University of Miskolc

carried out to analyze how COVID-19 has affected students' lives (Sahu 2020, Wenjun et al. 2020, Wong et al. 2007).

Four Hungarian universities – Corvinus University of Budapest,<sup>8</sup> the University of Debrecen, the University of Miskolc, and the University of Szeged – participated in the COVID-19 International Student Well-Being Study (C19 ISWS) (Van de Velde et al. 2020, Buffel et al. forthcoming), organized and conducted by the University of Amsterdam (UA) to examine the effects of COVID-19 on student life, involving 27 countries. The research objectives (RO) are the following (Van de Velde et al. 2020:1-2.):

- RO 1: Assess how the living conditions (physical and socioeconomic status) and workload of higher education students changed during the COVID-19 outbreak.
- RO 2: Assess how changes in living conditions and workload are related to stress levels among higher education students during the COVID-19 outbreak.
- RO 3: Assess how changes in living conditions, workload, and stress levels relate to well-being, mental health, and health behavior among higher education students during the COVID-19 outbreak.
- RO 4: Assess how the associations described in RO 3 are mediated by stressors (fear of infection, boredom, frustration, inadequate information, etc.), social support, and COVID-19-related knowledge during the pandemic outbreak.
- RO 5: Assess the variation in well-being and mental health among university students across participating universities and countries.
- RO 5: Assess how the cross-university and cross-country variation in well-being and mental health in higher education students may be related to varying (a) university-level, and (2) national policy contexts.

#### **METHOD**

# **Questionnaire**

The questionnaire was developed by the University of Antwerp (UA) based on an article by Brooks and colleagues (Brooks et al. 2020), which was translated into Hungarian by the Sociology Department of the University of Szeged. The questionnaire was adapted to the Hungarian context. The questionnaire was available to students both in English and Hungarian. All participating countries were allowed to add some national questions to the survey.

<sup>8</sup> At Corvinus University, the coordinator of the international study is the MTA-BCE Social Epidemiology Research Group.

### Data and sampling

An online survey was conducted in May 2020. All students registered for the 2020/21 academic year were invited to take part in the survey – both Hungarian and international/exchange students at bachelor, master and PhD level, as well as students of single-cycle programs and different specialized training courses.

## Ethical approval

The research project was approved by the Ethics Committee for the Social Sciences and Humanities in Antwerp, and was approved by the institutional ethics committee/the vice-rector for research/the vice-rector for education at all participating universities in Hungary. The four universities received no financial support for conducting the survey.

# Data collection and sample

The data collection procedure and sampling at each university were the following:

## **Corvinus University of Budapest**

At Corvinus University, respondents were asked to participate in the survey via the following ways: a direct email was sent to the entire student population; an invitation to the questionnaire was included in the Corvinus newsletter; posted on Facebook; and posted on the Research Group's website<sup>9</sup>; and teaching staff were asked to inform students about the survey via Teams. The first invitation was sent out on 14 May, and data collection closed on 28 May. The questionnaire was not public, but was made available via an email sent to students in order to keep track of those students who had participated in the survey.

In 2019/2020, 11,574 students were enrolled at Corvinus University of Budapest, and 365 students participated in the survey. The low response rate  $(3.2\%^{10})$  may be due to the fact that during the period of quarantine Corvinus

<sup>9</sup> www.devianciakutatas.hu

<sup>10</sup> There is no data about the response rate among international students.

students received lots of emails and invitations asking them to participate in COVID-related (or other) surveys.

The majority of the respondents were female (76.4%, male 23.3%) and enrolled in a BA program (60.3%), followed by an MA program (29.6%), single-cycle program (0.8%), and doctoral program (7.4%). The majority (86.6%) of students who completed the questionnaire were Hungarian; the rest (13.4%) were international. Most participants (81.6%) were studying social sciences, business and law, while 8.8% were studying science. An insignificant number of students from other fields completed the questionnaire.

#### **University of Debrecen**

The University of Debrecen conducted a survey in Hungarian and in English and reached both domestic and international students through the "Neptun" learning system. Students received the link within a closed system; it was not sent out in an e-mail, or publicly announced on any online platform. The letter we attached to the survey informed students about the research goals, the organization initiating the research, as well as a list of Hungarian universities participating in the research. We also included a data privacy statement in English and Hungarian.

Four hundred and sixty-three individuals completed the survey at the University of Debrecen. The response rate was 1.7%. Seventy-four per cent of respondents were Hungarian citizens, and 26% international students. Women were more likely to respond (65%) – male respondents comprised about one-third of the sample. Half of the participants were enrolled in a BA program; individuals in MA and Doctoral programs participated in almost equal proportions (16.8 and 15.3%, respectively). The rest (one-tenth of the sample) were studying on professional programs such as medicine and law and various other majors.

Nearly all of the 14 Schools at the University of Debrecen were represented in the survey, but the field of medicine was best represented (28.5%). Response rates were also relatively high in the area of sciences (16.6%), social and behavioral sciences (15.3%), and pedagogy (15.1%). Students from pedagogy, information and communication technology, as well as engineering, also had a response rate of over 10%.

#### University of Miskolc

All the registered students of the University of Miskolc were invited to take part in the survey via the "Neptun" Student Administration System through the students' personal e-mails. After a week of data collection, an additional invitation was sent out, and the link to survey was made available on the university Facebook page for some days. Participation was voluntary and no financial incentives were given for participation. The survey was open from 15 to 28 May. At this time, students had already been in confinement for 4-6 weeks.

A total of 695 students provided data, of whom 87.9% were Hungarian citizens, 1.6% were permanent residents, 1.6% temporary residents for one year or less, and 9.4% temporary residents who had been enrolled at the University of Miskolc for more than one year. (0.3% or respondents provided no data.) The response rate was 8.61% (65.0% female: 34.4% male: 0.6% other). The majority of students were studying on BSc programs (59.6%), 15.4% on MSc programs, 10.8% in single-cycle programs, 8.1% on PhD programs, and 6.2% attended other specified programs. The majority of students were majoring in business and administration, engineering and engineering trades, or health sciences. Almost one-quarter (24%) of investigated students were in their first year.

### **University of Szeged**

The students of the University of Szeged were contacted to take part in the COVID-19 International Student Well-Being Survey through the "Neptun" educational platform. Therefore, the entire student population of the university received an invitation via direct e-mail at the e-mail addresses registered on this platform. The first invitation was sent out on 18 May, followed by a reminder one week later on the 25 May. Most answers were registered on the days of receiving both the first and the second invitation.

From the University of Szeged, a total of 1,808 students completed the survey, which represents almost one-tenth (9.71%) of the entire student population (18,613 individuals) at the university enrolled in the second semester of the term 2019-2020. Therefore, the response rate at the University of Szeged can be considered quite high – the highest among the four participating Hungarian universities.

More than two-thirds of the respondents (70.7%) were female, and less than one-third (29.3%) male. The sample consisted mostly of students of Hungarian citizenship (83.9%). Students temporarily resident in Hungary for more than

a year accounted for 12.1%, while only 2.6% had temporary residence for less than a year and just a few students (1.4%) in the sample were permanent residents. With regard to the study program, students of bachelor programs were represented in the highest proportions (53.6%), followed by students enrolled in single-cycle programs (22.5%). Another 12.1% were studying on masters programs and 8.2% were PhD students. Only 3.6% opted for study programs other than those listed here. The three main fields of study of the respondents were health and welfare (29%), social sciences, business and law (21.5%), and science (19.3%). The proportion of students studying humanities and arts was somewhat larger than one-tenth (12.4%). The latter were followed by students engaged in engineering, manufacturing and construction (7.2%), as well as students enrolled in educational studies (6.2%). Only a few students answered the survey from the study fields of agriculture, services, or other fields (1.5% each).

#### DATABASE AND ANALYSIS

The data will be made accessible through an online data repository<sup>11</sup> for other researchers who will be free to use the data for their own purposes without co-authorship requirements (Van de Velde et al.2020). The cross-country database will be available circa 2021 May.

#### PUBLICATION PLAN

The MTA-BCE Research Team at Corvinus University of Budapest will analyze how COVID-19 affects students' risk behaviors. We also want to find out which psycho-social factors can play a role in this change.

Publications by our colleagues of the Sociology Department of the University of Szeged are planned that will involve conducting an investigation of the factors influencing coronavirus-related worries, changes in housing situation, effects on subjective well-being during the coronavirus outbreak,

<sup>11</sup> There is no information yet about which one. More information about the international survey can be found at the following link: https://www.uantwerpen.be/en/research-groups/centre-population-family-health/research2/covid-19-internation/ On this site, you will find up-to-date information about data accessibility as well. The questionnaire and (preliminary) research results are accessible through the Zenodo portal: https://zenodo.org/communities/c19-isws/?page=1&size=20

changes in satisfaction with different areas of life, the role of social capital on subjective well-being and health behavior, and students' attitudes towards the shift to digital education – old and new forms of vulnerability.

A research team at the University of Miskolc will analyze changes in smoking, alcohol, and drug consumption, as well as in moderate and vigorous physical activity before the outbreak of COVID-19 and during the period of social isolation; the predictors of students' well-being 4-6 weeks following the pandemic outbreak; and the socio-psychological satisfaction of students before and after the COVID-19 outbreak.

During future data analysis the research team in Debrecen will explore differences in social standing, social capital, regional variations, and study majors, along with changes in educational and labor force opportunities, and how the everyday lives, social bonds, and satisfaction levels of students have shifted in various areas of life since the start of the pandemic.

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