

THE ROLE OF PSYCHOLOGICAL MENTAL HEALTH OF STUDENTS INFLUENCES SUSTAINABLE ENVIRONMENT (CASE: HUNGARIAN ECONOMIC UNIVERSITIES)

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Young students start new phase of their lives at university after finishing secondary school. Like any transition in life, the period after leaving high school can be a shock and a crisis. The many changes, the many places to fit in and the start of independent life all coincide, and this can cause considerable anxiety for young people, as most of them are starting their independent lives at this time. These students will be workers in the future carrying these effects with them. The aim of this study is to understand the mental health status and problems of first-year students currently enrolled for three undergraduate business courses in Budapest, in Hungary. This research used the EPOCH model and the validated EPOCH-H questionnaire. According to the results, the mental health of students needs to be strengthened in typical teaching processes, and the preservation and improvement of students' mental health should be in the major focus of attention for all higher education institutions in the future. The results of the study show that mental health has a significant impact on student well-being and consequently influences sustainability. The results of the study will be continuously updated as the survey is conducted every semester.

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1 Introduction

For first-year students, university opens door to a new world, successfully applying and starting university is one of the most decisive moments of their lives. Young students, after having left secondary school, start a new phase in their lives. It is also an important step in the journey to adulthood, which is not experienced in the same way by all the young people. As with all life transitions, the period after leaving secondary school can be a crisis. It means quarterlife crisis (Agarwal et al., 2020; Robinson et al., 2021). In general, the process of becoming independent from the family is being accelerated and an independent self-image is formed. Friends from the secondary school no longer provide security: new relationships are formed in the new, unfamiliar environment, and a new life way becomes dominant (Nagyné Kricsfalussy, 2017; Leist Balogh & Jámboři, 2016). Some students become anxious in unfamiliar surroundings and cannot cope with the seemingly limitless freedom. They feel lost in the big university organisation. The transparent and manageable classroom community is replaced by hundreds of students at the lectures. University lecturers no longer know students personally, as in a semester a lecturer meets hundreds, sometimes thousands of students, minimising the time spent on one student. In addition to the above problems, a significant proportion of students also need to generate the financial resources to support themselves while studying. Consequently, they are new students at universities and new entrants to the labour market at the same time, and they have to respond to both factors simultaneously. This can again create a serious crisis situation for young people. Therefore, the quarterlife crisis can start at this stage of life and cause a serious crisis for the students. All the changes, the need to fit in many places and the start of independent life coincide, and it can cause considerable anxiety for young people, as most of them are starting their independent lives at this time.

A further mental strain is that for some young people, university life is associated with a sense of boundless freedom, for example, there are no strict obligations during the academic year, no constant and ad-hoc exams, no compulsory attendance at lectures, which can be amazing for the students concerned in the first period. It is the period of parental relaxation control and huge parties. In this case, a new problem may appear in their lives, the question of harmful addictions and dependencies may arise: alcohol and drugs to relax, then pills to get through the day or prepare for exams.

Sustainable development encompasses three key areas: economic, environmental and social. Social sustainability involves a focus on the well-being of people and communities. This paper explores the mental health of first-year students in Budapest. The research question is the following: What is the psychological well-being of first-year students at economic universities in Hungary?

The rest of the study is structured as follows. Section 2 provides shortly the major national and international literatures. Section 3 covers the data sources as well as the method of analysis. Section 4 presents the statistical analysis and results, while Section 5 discusses the opportunities in international context. Finally, Section 6 concludes.

2 Theoretical Background

The transition from secondary school to university is in itself a major life change and source of stress, which can be associated with adjustment problems (Fisher & Hood, 1987). One of the fundamental reasons for this is that there are important differences between the educational approaches of secondary schools and universities. While secondary education tends to take a top-down approach, which means that students have little control and limited influence over decisions about curriculum, courses or the timing of their school work. In contrast, university programs give students greater freedom to make personal decisions about subjects, exam timetables or joining student groups (Jagodics & Szabó, 2023).

To look at the secondary sources, it can be seen that there is a growing body of academic literature on mental health problems and psychiatric morbidity among university students.

The results of many authors (Andrade et al., 2023; Bhama, 2022; Bogdan & Lomakovych, 2021; Hukom & Lubis, 2023; Joshipura & Lamba, 2023; Kim et al., 2023; Kitukutha et al., 2021; Storonianska et al., 2021; Volosovych et al., 2021) show the negative impact of COVID-19 on society and the economy. Similar findings are obtained by Ginevičius et al. (2022), Mishchuk et al. (2023), Streimikiene, (2022) and Aguayo-Estremera et al. (2023).

Initially, symptoms of burnout were observed in health and social workers, members of self-help groups and crisis intervention centre staff. Later researches have also identified burnout in other professions that actively interact with people, such as teachers, lawyers and police officers. Most studies on burnout are related to these fields (Heinemann & Heinemann, 2017; Fontes, 2020). According to Jagodics and Szabó (2023) burnout research extended beyond different professions to educational contexts as well. The study of factors contributing to undesirable student outcomes in higher education is becoming increasingly important. According to research by Schaufeli et al. (2002), student burnout can be described along three main symptoms: exhaustion caused by academic demands, cynical attitudes towards learning and academic goals, and feelings of incompetence and reduced performance.

Based on their descriptive analysis and bivariate linear regression calculations, Khan et al. (2020) found that among college and university students in Bangladesh, 28.5% of respondents had stress, 33.3% had anxiety, and 46.9% had depression ranging from mild to extremely severe. Husky et al. (2020) researched the mental health of French university students during the pandemic. Their research involved students from social sciences, health sciences, engineering, law and economics. They found increased anxiety and moderate to severe stress.

In their study, Muaddi et al. (2023) assessed the burnout among medical students during the COVID-19 pandemic. They found that the prevalence of burnout was high among medical students at Jazan University. Szigeti et al. (2023) surveyed 410 university human resources students and their research results can be used in educational development.

3 Methodology

This study presents the partial results of a complex, multiannual research series. This publication is a continuation of a study conducted in February 2020, whose results have already been published by Vágány (2021a). Our quantitative questionnaire research method has focused on the data collection of students enrolled in the undergraduate business education in Budapest. The questionnaire was filled in by first-year full-time students (1,170 students), bachelor of economics studies, at three universities.

The authors used a questionnaire that has been validated both abroad and in Hungary (they used different methods to check that the questionnaire really measures what it was designed to measure). The overall questionnaire consisted of mostly closed and two open questions. Responses were voluntary and anonymous. Data collection was self-completed via an online interface use by Google Form, which included instructions for completion. The questionnaire consisted of 80 questions in four main sections.

1. EPOCH questionnaire (Hungarian validated version: EPOCH-H): Psychological well-being is one of the most important research areas in positive psychology, but adolescents are not expected to have fully developed the components of psychological well-being at an early age. This challenge is addressed by the EPOCH questionnaire (Láng, 2019). The dimensions represented in the EPOCH model describe the adolescent who will be able to soar as an adult, taking into account the age-specific characteristics of adolescence.
2. Attachment Style Questionnaire (ASQ) (Feeney et al., 1994), Hungarian validated version: ASQ-H (Hámori et al., 2016).
3. Assessment of students' competences.
4. Examination of positive and negative factors of the coronavirus pandemic.

This article focuses on the 1st and 4th topic. Data collection took place between 1 September 2022 and 30 November 2022. Based on the evaluable feedback of 1,170 students, a total of 8 main groups of factors were affected by the negative impact of the coronavirus pandemic (marked with N), therefore what it took away from students (A-H). Subgroups (1-6) have been identified within each main groups.

These indicate that the pandemic has taken away some things from the students (Table 1).

Table 1: The main groups and subgroups of what the pandemic has taken away from the students

A. Personal characteristics					
1. Freedom, sense of freedom, spontaneity,	2. Sense of safety, stability, comfort,	3. Positive outlook, optimism, enthusiasm,	4. Calmness, patience, tolerance, faith in the	5. Motivation, momentum, energy, perseverance,	6. Mental health, love of life, physical and mental

informality, liberation, unrestraint	confidence, self-assurance, predictability, planning	cheerfulness, happiness, openness	world, view of people	diligence, helpfulness	balance, hope, common sense, plans, vision, possibilities, dreams
B. Programmes that are precious to the student					
1. Opportunities and memories of 'once in a lifetime' (e.g. big wedding, graduation, serenade, freshman camp, childhood, young years, tradition high school graduation)	2. Parties, fun, leisure, experiences, recreation, events, festivals, games, hobbies		3. Travel, holidays, excursions		4. Sports, exercise, training, professional competition, careers in sport
C. Social environment					
1. Personal contact (with family, friends, partner, child, colleagues), social life, physical touching of people, hugging, personal contact with classmates, personal education, oral exams	2. Love, partner (break-up, divorce)		3. Love, partner, family member (loss, death)		4. Possibility of relationship and future love
D. Work environment					
1. Job, workplace, income (lost, reduced), standard of living, existence, financial security, financial well-being, lifestyle, savings			2. New job and employment opportunities, higher income opportunities, business and career opportunities, professional development, internships abroad, exchange programmes, scholarships (e.g. Erasmus)		
E. University environment					
1. University life, experiences, atmosphere, daily school attendance					
F. Normal daily life					
1. Habitual system, regularity, routine, way of life, smooth running of the world, comfort, home, independence, privacy, previous life (e.g. rent, dormitory), normal, comfortable and orderly everyday life, balance, hustle and bustle, activity, rhythm of life, dynamism, spin, rush, stress, tension, anxiety, difficulties, time					
G. Other factors					
1. Health, sense of smell, sense of taste, fresh air, life without a mask, need to conform, dependence on family and others, child self, health care, shape, healthy lifestyle, make-up, everything					
H. Nothing					

In total, seven major groups of factors were defined by the positive effect (P) of the coronavirus pandemic, i.e. what it has given to students. Within each major group (A-G), the paper identified several subgroups (1-5). The pandemic has provided students with the following positive factors (Table 2).

Table 2: The main groups and subgroups of what the pandemic has given to the students

A. Changes in self and environment				
1. Being at home more, having more free time, rest, sleep, more time for themselves (health, weight loss, studying, hiking, hobbies, sports, reading, crafts, computer games)	2. Self-time, reflection, peace of mind, recharging, self-awareness, found self, physical-mental change, harmonious sense of life, personality development, change of attitude, new values, appreciation of what is important in life and small pleasures, redefined perception of life, rethinking life, better appreciation of human relationships, touch, better attention to the environment (home, hygiene, safety), the world and people have changed (caution, sticking together), better air, nature has regenerated	3. Awareness, perseverance, diligence, self-reliance, focus, confidence, determination, stronger, more mature, calmer and less stressful life, patience, slowed down, adapting, calming down, quieting down, experience, discipline, balance, hope	4. Previous goals have changed: new goals, plans, life, tasks, opportunities, having children, normal life, new living place	5. Completed and achieved plans, studies in university
B. Work environment				
1. New job, income, internship, fellowship, better performance at work, more space, success at work, new position	2. Better work (home office, home school), work-family balance, better time management, flexibility	3. Better money management, savings		
C. Social environment				
1. Spend more time with family and friends (even online), more time with his/her pets	2. Improved and closer relationships with family, friends, people, who are real friends, living together with partner	3. New love, meet new people and new friends, new pets, car		
D. Educational environment				
1. Better grades, easier and successful semester, successful high-school graduation	2. Online education, changed exams, less travel and commuting, better use of technology and online space			

E. Other factors				
1. Many things, health care changes, free parking, vaccination certificate, wearing a mask				
F. He/she sees only negative things instead of positive ones				
1. Worse job, disadvantage at work	2. Broken family and relationship, less time together, bad friendships	3. Boredom, loneliness, isolation, being alone	4. Strange situation, confusion, chaos, disappointment, uncertainty, fear, dread, bad mood, hating the mask and people, instability, lost youth, unable to make friends, difficulties, hardship, stress, tension, anxiety	5. Illness, giving up, harmful addiction (smoking, alcohol), obesity, suffering, mental breakdown, depression, insanity, nervous panic attack
G. Nothing				

4 Results

The questionnaire was completed by 792 women (67.7%) and 378 (32.3%) men. 84% of respondents are aged 18-24 and 7% are aged 25-30. The two oldest age groups have the lowest number of respondents. Three respondents are in the 45-50 age group and two respondents are in the 50+ age group. Nearly half of the respondents live in Budapest (47%), while the rest live in a county town (8,5%), rural town (30,8%) or village (13.8%). The questionnaire consisted of 80 questions in four main sections.

The open responses given by students from the above groups of factors were as follows:

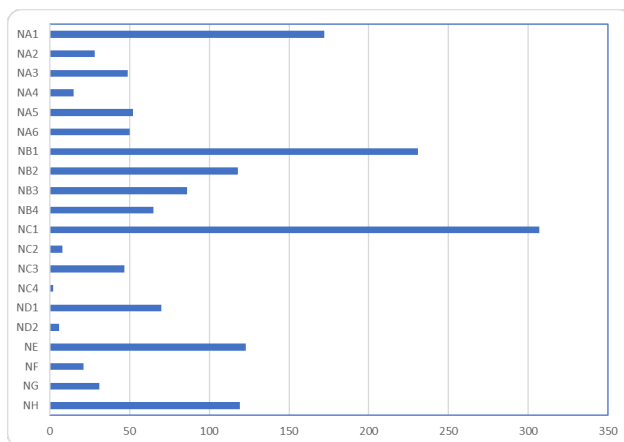


Figure 1: The main groups and subgroups of what the pandemic has taken away from the students

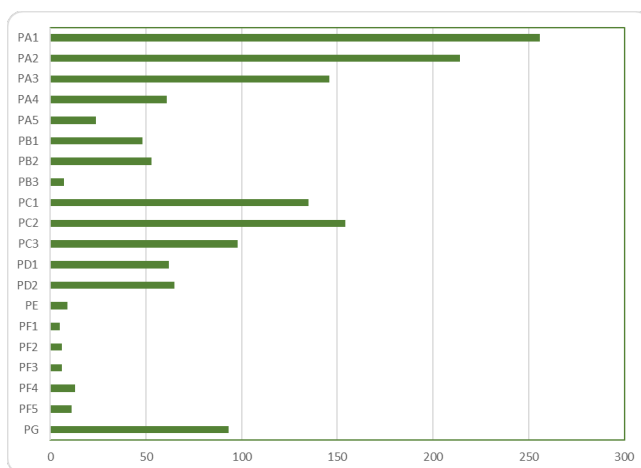


Figure 2: Main groups and subgroups of positive factors

Based on the above, the following top three factors were taken away from first-year students by coronavirus (1. most mentioned):

- NC1: Personal contact (with family, friends, partner, child, colleagues), social life, physical touching of people, hugging, personal contact with classmates, personal education, oral exams.

- NB1: “Once in a lifetime” opportunities, memories (e.g. big wedding, graduation, serenade, freshman camp, childhood, young years, high school/university graduation), traditional oral graduation.
- NA1: Freedom, a sense of freedom, spontaneity, informality, liberation, autonomy, unrestraint.

The following top three factors were given by the pandemic to first year students:

- PA1: Being at home more, having more free time, rest, sleep, more time for themselves (health, weight loss, studying, hiking, hobbies, sports, reading, crafts, computer games).
- PA2: Self-time, reflection, peace of mind, recharging, self-awareness, changed, found self, physical-mental change, harmonious sense of life, personality development, change of attitude, appreciation of what is important in life and small pleasures, redefined perception of life, new values, rethinking life, better appreciation of human relationships, touch, better attention to the environment, the world and people have changed, better air, nature has regenerated.
- PC2: Improved and closer relationships with family, friends, people, who are real friends, moving in with boyfriend/girlfriend.

However, from a psychological point of view, it is of great importance and, as described in the introduction, it is important to deal with the PF1-PF5 factors separately, with the 'critical' responses, because in this case, the students, when asked what they attributed to the coronavirus pandemic, gave negative factor(s) instead of some positive factor(s) (i.e. stress, tension, anxiety, etc.). This is a total of 41 students, which is 3.5% of the total database, or 35 students out of 1000!

Of 41 students, 5 students' owe it to the pandemic that they have a worse job and have been disadvantaged at work (PF1), 6 students have a broken family, a broken relationship, less time with their family and unfortunately a worse relationship with friends (PF2). Six students experienced boredom, loneliness, isolation, loneliness (PF3) during the quarantine. Thirteen respondents received strange situations, confusion, chaos, disappointment, uncertainty, fear, dread, bad mood, hatred of masks and people, instability, lost their youth, no friends, difficulties, hardships,

stress, tension, anxiety as positive aspects of the pandemic (PF4). Eleven students received illness, harmful addiction (smoking, alcohol), obesity, suffering, mental breakdown, depression, mental illness, nervous breakdown, panic attack or giving up from the pandemic situation (PF5).

If we analyse only the PF4 and PF5 factors, we see that 19 women and 5 men are affected. The vast majority of respondents (83.3%) belonged to the youngest age group (18-24 years). Ten of the respondents (41.6%) live in the capital city and nine (37.5%) in a rural town.

5 Discussion

As it can be seen previous studies have shown that university students in particular face various environmental and mental health struggles due to COVID-19. The issue of mental health is particularly exciting at universities in business studies, where competitive spirit is very strong. Vágány (2021b) explored the life coaching, mental health or psychological counselling activities of 17 business higher education institutions by examining their websites. The results of her research show that universities have very different mental health and life skills counselling networks and different levels of importance for the mental health of students and staff.

From a psychological point of view, it is of great importance to deal separately with the 'critical' (PF1-PF5 factors) responses. In this case, the students interviewed indicated negative factor(s) (e.g. stress, tension, anxiety, etc.) instead of positive factor(s).

They perceive their situation as so bad that they could not mention any positive factor, nor even the 'nothing' factor. These students are in such a state of mind when they are at university, at the courses. On the statistical side, it could be said that 'only' 3,5% of the total sample is affected by this poor mental health, it does not give us the possibility to draw any definitive statistical conclusions, but from an educational and psychological point of view, this number is a lot. These students see their situation as so desperate, negative, bad, and dark, under so much pressure from the pandemic that their mental health and psychological well-being need to be addressed.

6 Conclusions

This study researched the mental health of university students in economic studies in Hungary during the pandemic, for which no research has been done in previous years.

In our view, improving the psychological well-being of students should be a priority for any higher education institution that wants to attract high achieving students and maintain a high position in national and international rankings of higher education.

Universities have a role to play in maintaining the mental health and well-being of students. Increasing competition in higher education and the changing environment make it clear to more and more higher education institutions that protecting the mental health and psychological well-being of their students, staff and faculty will be essential to ensure long-term student and faculty satisfaction. As our research results demonstrate high performance and significant results can be achieved by people of high psychological well-being and mental strength, whether they are students at a university, high performers at a workplace or the best in a sport.

The questionnaire was repeated in the period following the completion of the research presented in this study. The results are still being evaluated.

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