

ONLINE EDUCATION IN THE PERCEPTION OF HUNGARIAN STUDENTS – RESULTS OF ONLINE FOCUS GROUPS

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ABSTRACT

This paper we attempted to find an answer to the perceptions and experiences related to online education, with the help of the stories told, which can adequately indicate the epidemic's effects on the 15-29-year-old age group. We can reasonably assume that the global pandemic events of 2020, 2021 and partly 2022, which are associated with digital education, may have profound and long-lasting effects on young people as a social group. However, we so far have only a few scientific findings contributing to the assessment of the COVID-19 pandemic's long-term effects on young people.

KEYWORDS

Online education, COVID-19, youth research, age group 15-29, focus groups

1. INTRODUCTION

Even though, according to most OECD reports, Hungary had one of the longest and toughest lockdowns, which caused severe disruptions to the Hungarian education system, which is already performing exceptionally poorly (OECD Report 2022, see Monostori 2021). From Friday evening on 13 March to Monday, 16 March 2020, the Hungarian Government ordered all public education institutions and vocational schools to conduct their educational activities outside the classroom in a digital form. Together with the Government's directive on higher education, this measure marked the beginning of a 1.5-year-long period, often called online education, in Hungary's education system.

We can reasonably assume that the global events of 2020, 2021 and partly 2022, which are associated with digital education, may have strong and long-lasting effects on young people as a social group. However, we so far have few scientific findings contributing to the assessment of the COVID-19 pandemic's long-term impact on young people. We are unable to provide a sufficiently nuanced determination whether such experiences as the direct restriction of social life; digital learning; social distancing; the problems arising from the lack of communities, or long-term solitude are just “momentary weaknesses” that hardly affect our youth at all and never

get internalized as a formative memory or they make up a life-altering cornerstone, i.e., a so-called generation-forming life event that fundamentally transforms their way of life, prospects, problem perception and behavioural patterns, thus shaping their generational characteristics as well. The restriction of offline social interactions and increased social life and recreational activities transfer into the online sphere is part of everyday memory. It is simply impossible to analyse this phenomenon and model its long-term post-COVID impacts with the conventional methods of social science because memories do not only fade; they are also transformed and updated and adjusted to the present. In the framework of the HAS' high-risk post-COVID research project, our group investigates how Hungarian youth experienced this period, whether the COVID disease, more specifically, the resulting pandemic and social separation, as well as the transformed socialization processes, may have entailed such consequences that would give us grounds to rethink the traditional generational theories and start talking about a COVID generation instead of the earlier alphabet generations (Szabó 2020; Fekete–Nagy 2020; Nagy–Fekete 2020; Zwanka–Buff 2020, Fekete–Nagy 2021; Déri–Szabó 2021; Székely 2021, Kutwa 2021, Szabó–Déri 2022).

There seems to be a scientific consensus inasmuch that COVID occurred in young people's lives as an *asteroid effect* (Déri–Szabó 2021; Déri–Szabó 2022), but are the impact, its consequent effect, and the degree of adaptation novel and different enough to have caused or to cause the creation of a historical COVID generation? Due to its significance – which, looking back after a few years, does not make it a potential caesura in terms of social structure and political thinking per se – it may be considered a landmark period like 1956, 1968, 1989 or 2001.

The primary approach to analysing whether these events caused a paradigm shift must obviously be a retrospective one, but this initial thought was supported by at least as many arguments as the other concept, i.e., that the COVID period did not result in any such break in terms of thinking, attitudes and world perception at all.

When discussing this problem, the prominent question is what sociological research method can be applied to analysing the period from early 2020 to late 2021, as it has largely been reduced to memory. Several special journal issues or individual studies have been published on the correlations between COVID and digital education in both the Hungarian and the international literature (see, e.g., *Distancing, Disease and Distress. Young* 2021/4. Furthermore, such publications as the *Journal of Youth Studies* and the *Children and Youth Services Review* have also been discussing COVID as a prominent issue). So, the topic, primarily based on small-sample online or phone surveys and a limited number of interviews, cannot be considered under-researched. On the other hand, the limitations of survey-dominated youth studies are increasingly perceptible (Nagy, 2022). We believe that the digital shift in social science (Salganik 2019) enables researchers to obtain real-time knowledge about young people's thinking as well as the related triggers of reflection with a high number of items and interactions.

This study analyses the perceptions related to online education. We believe online education is a kind of litmus test that may sufficiently indicate the pandemic's effects on the 15-29 age group, because digital teaching did affect most of the young people in one way or another, even if their own first-hand experience was not the only factor and they associate third-party accounts with it as well.

According to the results of the research projects conducted in this topic, the effect of the pandemic on online education can be divided into three, clearly distinct phases. Phase 1: Spring semester 2020 – the period of panic and shock; Phase 2: The 2020/2021 academic year – rational and more prepared management of digital education; Phase 3: Fall 2021 – complete withdrawal of online education. What all the three phases have in common is that they had nearly the same

effect on primary, secondary and higher education systems as well. The research findings show us such factors as the teachers' attitudes and experience related to online education as well as the effect of the families' socio-economic status on learning efficiency, but they do not reveal the opinions and personal narratives of students, i.e., the other side involved in the learning process. This study aims to remedy this situation.

2. SHORT LITERATURE REVIEW – EMPIRICAL EXPERIENCES OF ONLINE EDUCATION

Analysing Italian and Jordanian samples respectively, Panarese–Azzarita (2021) and Almahasees–Mohsen–Amin (2021) concluded that keeping to a daily routine was greatly instrumental for students in getting through the initial difficulties. Investigating a sample of Austrian primary school students, Heidrich et al. (2022) experienced that the students wished for more support and security during the months of online education, suggesting that the most important negative consequence may have been a general feeling of uncertainty. Perhaps most of the problems have arisen from the students having fewer opportunities to ask for and receive help from their teachers or peers (Agostinelli et al., 2022).

In Hungary, around 7% of secondary school-age students automatically opted out of online learning due to a lack of internet connection at home or a computer or could only join in with extraordinary effort. And the lack of technical conditions for digital education was strongly associated with student's family background and place of residence (Hermann 2020). Having analysed the consequences of digital education, Engler–Markos–Dusa (2021) concluded that the parents' education level had little effect on their frequency of studying together with their children. Furthermore, other social group characteristics (type of settlement, financial status) showed no significant correlation with studying together, which led them to the conclusion that every parent, regardless of their social status, tried to give maximum support to their children in this extraordinary situation (For matriculation results, see Vit 2022).

The only statistically significant variances were found to be caused by the parents' type of work activity and the number of children in the family. Parents who worked from home during the pandemic typically could allocate less time to checking and supporting their children's school assignments. In contrast, the higher the number of children was in the family, the more motivated the parents were to study together. Szilveszter–Kassai–Takács–Futó (2021) also found that the parents' social status or cultural capital were less determinative in terms of successful home learning during the pandemic than the indirect effect of these factors. Such effective factors included the family's adaptability, their opportunity to create a relaxed, neat physical environment as well as a predictable daily routine. One of their key conclusions was that the effects of social status should be interpreted in a wider context, and it is necessary to consider the family atmosphere when assessing a child's school performance (Szilveszter–Kassai–Takács–Futó 2021).

Fekete (2020) explores the Hungarian teacher experience of online education. The analysis of individual in-depth interviews demonstrates that teachers were shocked by the transition to digital education; they used such expressions as “deep water”, “roller coaster”, “chaos”, “burden”, “uncertainty” and “excitement” to describe the situation (Fekete, 2020: 311). The opportunities of digital transition were determined by the teachers' personal training level, ICT skills, the institution's measures taken, and rules adopted to prepare for and manage the transition. Based on the interviews, Fekete concludes that the worst situation occurred in the institutions where there was no uniform concept to regulate the work of the teachers (For international experiences, see Orlov et al. 2021.).

In the second part of our study, we analyse the student's experiences with online/digital education. We hypothesise that Hungarian students could adapt more easily and quickly than their teachers, but at the same time, they were exposed to solid impressions and influences that will stay with them for a long time.

3. THE ONLINE FOCUS GROUP INTERVIEW – METHOD AND RESULTS

We used the transcripts of three online focus group interviews for identifying preliminary patterns and laying down the foundations for the study of the research theme. Online video interviews have the same framework as personal interviews, but the participants join in the conversation via an online platform which allows them to see and hear each other live by sharing the camera and the voice. The benefit of this method is that the participants do not need to stay in the same physical space. Thanks to the use of the camera, they can immediately react to the moderator's questions or the other interviewee's input as well as see each other's metacommunication, facial expressions, thus allowing for further analysis (Vicsek, 2017). The method is outstandingly relevant for the studies with 15–29-year-olds, as the members of this age group already spent a significant amount of time on online communication even before the COVID restrictions, it has been their preferred method for social interaction in their education, work and private life alike (Nagy–Fazekas 2016, Fekete–Tibori 2018, Székely–Aczél 2018). As a method, focus group interviews allow us to detect changes occurring at the micro level, in other words, they give us an insight into the youth's personal life situation, thinking and cultural forms, all of which may be significant factors in the post-Covid period as well.

We used the intelligent content analysis software Zurvey.io to scan and analyse the opinions or sentiments expressed in the focus group interviews, which allows for the investigation of shorter text bodies by Analysing its words and categorizing them according to predetermined parameters. The software's sentiment analysis tool recognizes and highlights negative and positive expressions, while evaluating the quality of the opinions on a scale of 1 to 7. According to their emotional charge, the software arranges the text's expressions into three groups: positive, negative, and neutral. The three emotional charges are colour-coded as follows: green-positive, red-negative, grey-neutral. In the graphical representation, usage frequency is indicated by font size. The software also creates an opinion index, i.e., a universal indicator that quantifies the sentiment value of the given category.

The participants of the focus group interviews were youth between 15 and 30, arranged into three groups of 6–7 based on age and education. Group 1 had youth of 15–17 years of age, while Group 2 contained young people of 18–30 years of age with secondary school education. Group 3 consisted of young people of 18–30 years of age who had either obtained higher education degrees or were studying in higher education. The respondents used the Miro application for the free association exercises. This application is an online whiteboard for group work and collaboration <https://miro.com/>. Before starting the discussion of each topic, the focus group interview participants could anonymously write their topic-related thoughts or discussion topic suggestions on Miro stickers.

The onset of COVID-19 and the subsequent restrictive measures affected high school and college students the most: their daily lives changed radically and uniquely to this group. The shift to online education had a dual impact: firstly, it resulted in easier requirements and secondly, class and group cohesion was diluted due to the students' weakened social skills. The experience of the latter led to unanimously negative emotions in the respondents.

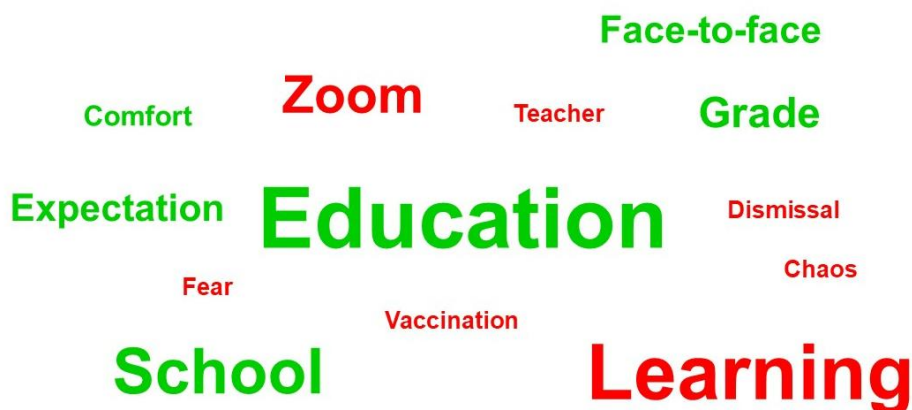


Figure 1: Topic cloud based on Group 1 (15-17 years of age) interviews

According to the opinion index, the strongest positive emotion is attached to the expression “grade” (value: 4.5), followed by “face-to-face” (value: 3), then “comfort” and “expectation” (2 each) (Figure 1). The strongest emotions (either positive or negative) are associated with the learning process in the youth’s narrative. The unprecedented experience of remote education increased the value of the traditional in-school, face-to-face education forms in the eyes of students.

The positive experiences of digital education were typically associated with testing, measurement/evaluation of student performance as well as the decreased amount of time spent on societally restricted activities. The latter category includes activities that do not really offer a free choice for the individual: working, studying, commuting (Falussy, 2002), which have changed significantly due to the onset of COVID-19 and the adoption of restrictive measures.

“When it came to a history class starting at 7.30, it was enough for me to get up at 7.29, log in from my bed, and then go back to sleep.” (Group 1, Z. woman, 16)
“Studying was hard, getting good grades was easy” (Miro comment, Group 1)
“The teachers are desperate, the education system is a total chaos” (Miro comment, Group 1)

The negative values were attached to the efficiency of online teaching and learning: the expression “studying” (opinion index value: -0.5) summarizes the young people’s opinion on teaching-learning productivity (the difficulties of studying on their own, online classes slept through or completed with the camera and/or microphone switched off, low motivation level, lack of engagement).

As described in the study earlier, the unique characteristics of the first online education period (global and local panic) are validated by the term “chaos” (value: -1.5), which reflects on the Hungarian education system’s severe deficiency faced by teachers and students alike in March 2020: the absence of such measures as the digital reform in public education, or the lack of development and adoption of methods, course materials, smart books and programmes applicable in digital education. High school student subjects showed empathy for their teachers, understood

their difficulties (the -2 value of the term “teacher” confirms it), but they still leveraged the digital competence gap between them and their teachers, nonetheless.

“I still have some knowledge from that period, because I kept it on mute, too... We really didn’t study for it at all, because it was easy to bypass any system, which the teachers tried to prevent, but they couldn’t. I did not study in this period at all.” (Group 1, L. woman, 15)

Online classes increased the total screen time significantly. The subjects also reflected on the consequent health risks.

“Zoom classes with a terrible headache, after which the real face-to-face teaching is much better; it was more difficult to study during the online education period” (Miro comment, Group 1)

“Even if you did want to pay attention, I think your head simply can’t bear it when you have to listen to the third 90-minute class back-to-back, you get a headache and you can’t concentrate on what they say. It’s much easier face to face” (Group 1, M. man, 17)

The software associated a negative emotion with COVID vaccination because the high school subjects expressly resented the sanctioning and dismissal of teachers who rejected the vaccination.

“The school dismissed some teachers, because they were not vaccinated” (Group 1, Z. woman, 16)

Out-of-school education weakened social connections, made it difficult or even impossible for students to form new class communities and increase group cohesion, which resulted in heightened anxiety in an environment of increased insecurity, unpredictability and loss of control (as expressed by the word “fear” in the topic cloud as well). According to the students’ experience, the online communication options were unable to help them in developing social relations in the new environment. Both high school and university students associated an intense sentiment with these difficulties in terms of their COVID experience.

“The good thing for me was that my grades became better, because it was very easy to write tests. The bad thing for me was that I was in 9th grade at the time, you know, and we didn’t really know each other with my classmates, we didn’t really talk.” (Group 1, B. woman, 15)

“It was more difficult to have a conversation and get to know the new classmates because saying something face-to-face is not the same as posting it online” (Group 1, O. man, 17)

“It wasn’t such a good experience because I couldn’t meet my new college mates at the beginning, so the community could not be formed completely, we couldn’t get to know our college mates and form new relationships, which is very important in a university in my opinion” (Group 3, P. man, 21)

The narratives of Group 3’s university student respondents also reflect on the dual opinion regarding online education: similarly to high school students, these subjects also experienced positive aspects in the area of performance testing/measurement in the form of easier exams, and they mentioned the reduced material costs as a positive aspect as well. Conversely, the negative side was represented by the limitations or, at times, the impossibility of online knowledge

acquisition as well as the anomalies occurring in education implementation due to the absence of good practices and earlier experience, particularly in Phase 1 of the online education period.

“I experienced the good and the bad side of online education, too. The good side was that exams were obviously easier, I didn’t need to pay for lodgings, while the bad side was that I couldn’t really grasp the professional things they were teaching. I study to become a physiotherapist, you know, and you can’t really learn things like what and how you do with the patient online. That was bad” (Group 3, F. woman, 22).

“They kept changing the exam dates (final exam) for me, so I didn’t know when I was going to take my exams, but it didn’t have an impact on learning, and I could keep working as usual” (Group 3, Sz. Man, 27).

The change in the form of education entailed the transformation of the traditional educational framework (lecture, seminar, fixed framework, and methods of practical), which also required student routines to be changed – which led to the onset of new difficulties in relation to that (taking notes, maintaining their concentration in their home environment).

4. CONCLUSION

After the appearance of COVID-19, broad society groups experienced volatility and radical uncertainty in their lives as they lost control regarding their priorities, scheduling, and access to information (Kay-King 2020). Hungary occupies a special place in this sociological space because its education system has struggled with severe problems for decades (OECD 2022). Online education has only added to these severe problems at the societal level.

We believe the global health crisis in the spring of 2020 weakened young people’s reflexive life-forming abilities and individual capacities. The pandemic and the risk-minimizing measures forced them to restructure the fixed framework of their daily life and quickly adapt to the new normality, i.e., the online education process, social interactions, and leisure time activities. The crisis has intensified social tensions and differences, while social inequalities have become more visible. The period of online education has demonstrated the existing disparities in connectivity and usage autonomy. The applied research methods explored the experiences and opinions of 15–29-year-old youth regarding online education and the detected competency gaps in infrastructure, education organization and equipment use. Young people have a mixed idea of digital education: positive attitudes are primarily associated with the measurement/evaluation of student performance, whereas the negative aspects are attached to learning efficiency, which consequently increases the appreciation of in-school education.

ACKNOWLEDGEMENTS

This study and the supporting research were conducted in the framework of Project No. 19/2021, Identifying generations with Big Data logic in the post-pandemic period, as part of the tender “Support the research of post-COVID phenomena” issued by the Hungarian Academy of Sciences.

REFERENCES

- [1] Agostinelli, Francesco. – Doepke, Matthias – Sorrenti, Giuseppe – Zilibotti, Fabrizio (2022) When the great equalizer shuts down: Schools, peers, and parents in pandemic times. *Journal of Public Economics*, 206, 104574. <https://doi.org/10.1016/j.jpubeco.2021.104574>.

- [2] Almahasees, Zakaryia – Mohsen, Khaled – Amin, Mohammad Omar (2021) Faculty's and Students' Perceptions of Online Learning During COVID-19. *Frontiers in Education*, 2021. május 12. <https://www.frontiersin.org/articles/10.3389/educ.2021.638470/full>
- [3] Asztalos, Réka – Bánhegyi, Mátyás – Fajt, Balázs – Pál, Ágnes – Szcénich, Alexandra (2021): Hallgatói visszajelzések a kényszertávoktatásra való átállásról és a digitális módszertani megújulásról az egyetemi szaknyelvoktatásban: egy kérdőíves felmérés tanulságai. ("Student feedback on the forced transition to remote learning and the digital methodological renewal in university professional language education: lessons of a questionnaire-based survey") In: *Iskolakultúra* ("School Culture"), 31(6), pp. 84–100.
- [4] Déri, András – Szabó, Andrea (2021). Generációs kihívás a poszt-Covid időszakban, *Szociológiai Szemle* 31(4): 4–27. DOI: 10.51624/SzocSzemle.2021.4.
- [5] Dessewffy, Tibor – Mezei, Mikes (2020). Fans and politics in an illiberal state. *Transformative Works and Cultures*, Vol. 32
- [6] DiMaggio, Paul – Hargittai Eszter (2001): From the „Digital Divide” to „Digital Inequality”: Studying Internet Use as Penetration Increases. Working paper – Centre for Arts, Cultural and Political Studies, Princeton, Princeton University. <http://www.princeton.edu/~artspol/workpap/WP15%20-%20DiMaggio%20BHargittai.pdf>
- [7] Education at a Glance 2022 OECD Indicators (2022). <https://doi.org/10.1787/3197152b-en>
- [8] Engler, Ágnes – Markos, Valéria – Dusa, Ágnes. R. (2021). Szülői segítségnyújtás a jelenléti és távolléti oktatás idején. *Educatio*, 30(1), 72–87. <https://doi.org/10.1556/2063.30.2021.1.6>
- [9] Falussy, Béla (2002): Tevékenységosztályozási rendszerek az időmérleg-vizsgálatokban. ("Activity classification methods in time use analysis") In: *Statisztikai Szemle* ("Statistical Review"), Vol. 85. (8). pp.690–714.
- [10] Fekete, Imre: a magyar közoktatásban tanító pedagógusok tapasztalatai a digitális munkarendű oktatásról IKT tudásszintjük tükrében: egy kevert módszertanú kutatás eredményei a COVID-19 idején. ("Public school teachers' experience of digital education in the mirror of their ICT skill level: findings of a mixed-methodology research during COVID-19") In: *Magyar Pedagógia* ("Hungarian Pedagogy"), Vol. 120. Issue 4, pp. 299–325. (2020) DOI: 10.17670/MPed.2020.4.299
- [11] Fekete, Mariann – Nagy, Ádám (2020a). Q vagy Q? – Generációs választak. *Kultúra es Közösség*, 11:3. 63-68.
- [12] Fekete, Mariann – Nagy, Ádám (2020b). Megszólal-e az új csendes generáció? Avagy mit várhatunk az Ifjúság 2020 adatfelvétel eredményeképp? *Szociológiai Szemle* 30(1), 98–106.
- [13] Fekete, Mariann – Tibori, Tímea (2018): Az ifjúság szabadidő-felhasználása a fogyasztói társadalomban. ("Leisure time usage of youth in the consumer society") In: Nagy, Ádám (ed.) *Margón kívül*. ("Outside the margin."); in: *Magyar ifjúságkutatás* ("Hungarian Youth Research") 2016. Budapest, Excenter Publishing. pp.258-283.
- [14] Heidrich, Franziska – Pozas, Marcela – Letzel, Verena – Lindner, Katharina-Theresa - Schneider, Christoph - Schwab, Susanne: Austrian Students' Perceptions of Social Distancing and Their Emotional Experiences During Distance Learning Due to the COVID-19 Pandemic, *Frontiers in Education*, 2022. március 31. <https://www.frontiersin.org/articles/10.3389/educ.2022.862306/full>
- [15] Hermann, Zoltán (2020) Hány diákhöz nem jut el az online távoktatás? https://kti.krtk.hu/koronavirus/hany-diakhoz-nem-jut-el-az-online-tavoktatasi/12769/#_edn3
- [16] Mihalik J. (2020) A bizonytalanság radikalizmusa: egy gondolati térkép a fogalom értelmezéséhez. ("The radicalism of uncertainty: an idea map to interpret the notion.") In: *Szabad Piac* ("Free Market") 2020 (2). Budapest: Milton Friedman University, pp. 47–58.
- [17] Millar, Sarah-Kate – Spencer, Kirsten – Stewart, Tom – Dong, Meg (2021) Learning Curves in COVID-19: Student Strategies in the 'new normal'? In: *Frontiers in Education*, March 19, 2021 <https://www.frontiersin.org/articles/10.3389/educ.2021.641262/full>
- [18] Monostori, Judit (2021) The school year 2020-2021 in Hungary during the pandemic. Country report. Joint Research Centre (JRC) Report. doi:10.2760/062696 <https://ec.europa.eu/jrc>
- [19] Muroga, Atsuko – Zaw, Htet Thiha – Mizunoya Suguru – Lin, Hsiao-Chen – Brossard, Matt – Reuge, Nicolas (2020) COVID-19: A Reason to Double Down on Investments in Pre-primary Education. Office of Research – Innocenti Working Paper. WP-2020-11 | September 2020
- [20] Nagy, Ádám – Fazekas, Anna (2016): Offline helyett online szabadidő? ("Online leisure time instead of offline?") A fiatalok szabadidős tereinek és médiahasználatának átalakulása. ("The transformation

- of youth leisure time spaces and media use”) In: Médiakutató (“Media Researcher”) Vol. XVI Issue 2, pp. 41–57.
- [21] Nagy, Ádám – Fekete, Mariann (2020) OK, Zoomer – a digitális tanulás problémái. (“OK, Zoomer – the problems of digital learning”) In: *Opus et Educatio*, Vol. 7. No. 3. pp. 203–207.
- [22] Nagy, Ádám (2022): A Survey-n is túl (“Beyond the Survey”), in Nagy, Ádám (ed.): (“Beyond the Footnote”), Excenter-SDI, Budapest.
- [23] Nahalka, István (2021): Koronavírus és oktatáspolitikai (“Coronavirus and educational policy”); In Hungarian, in: *Educatio* 30 (1), pp. 22–35 DOI: 10.1556/2063.30.2021.1.2
- [24] Orlov, George – McKee, Douglas – Berry, James – Boyle, Austin – DiCiccio, Thomas – Ransom, Tyler – Rees-Jones, Alex – Stoye, Jörg (2021) Learning during the COVID-19 pandemic: It is not who you teach, but how you teach. *Economics Letters*, 202, 109812. <https://doi.org/10.1016/j.econlet.2021.109812>
- [25] Panarese, Paola – Azzarita, Vittoria: The Impact of the COVID-19 Pandemic on Lifestyle: How Young people have Adapted Their Leisure and Routine during Lockdown in Italy. In: Young, July 29, 2021 <https://journals.sagepub.com/doi/full/10.1177/11033088211031389>
- [26] Policy Brief: Education during COVID-19 and beyond. United Nations Report, (August 2020). <https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond>
- [27] Polónyi, István: Pandémiás oktatás (“Pandemic education”) *Educatio* 30 (1), pp. 3–21 (2021) DOI: 10.1556/2063.30.2021.1.1 DOI: <https://doi.org/10.1556/2063.30.2021.1.1>
- [28] Salganik, Matthew J. (2019). *Bit by Bit: Social Research in the Digital Age*. Princeton University Press
- [29] Schwegler, G. (2021) Shifting inequalities in student lifestyles during the COVID-19 pandemic. *Bulletin* 157, Suisse Sociological Association, 31-35.
- [30] Sütő, Anna (2021). Merre tovább, netgeneráció? A magyar fiatalok életstílus-alapú szegmensei. *Metszetek*, (10)3, 124-142.
- [31] Szabó, Andrea – Déri, András (2022). Asteroid-effect in Society: The Formation of a Mannheim-type Historical Generation Post-COVID-19, *Polish Sociological Review* 3(219), 315–330. <https://doi.org/10.26412/psr219.0>
- [32] Szabó, Andrea (2020) „Gyerek vagy ám még...” : Egy történelmi COVID-generáció születésének feltételei. In: Körösnéyi, András; Szabó, Andrea; Böcskei, Balázs (szerk.) *Vírusba oltott politika : Világjárvány és politikatudomány* Budapest, Napvilág Kiadó (2020) 204 p. pp. 169-184. , 26 p.
- [33] Székely, Levente – Aczél, Petra (2018): Magyar világ 2.0 – fiatalok és az újmédia. (“Hungarian world 2.0 - youth and the new media”) In: Székely, Levente (ed.) *Magyar fiatalok a Kárpát-medencében. (“Hungarian Youth in the Carpathian Basin.”) Magyar Ifjúság Kutatás (“Hungarian Youth Research”)* 2016. Budapest, Kutatópont Publishing. pp.353–389.
- [34] Székely, Levente (2021): A járvány nemzedéke – magyar ifjúság a koronavírus-járvány idején. (“Pandemic generation - Hungarian youth during the COVID pandemic.”) In: Székely, Levente (ed.) *Magyar fiatalok a koronavírus-járvány idején (“Hungarian youth during the COVID pandemic”)* Tanulmánykötet a Magyar Ifjúságkutatás 2020 eredményeiről. (“Collection of papers on the findings of Hungarian Youth Research 2020”). Budapest, Enigma 2001 Publishing and Media Services LLC.
- [35] Szilveszter, Áron – Kassai, Réka – Takács, Zsófia – Futó, Judit (2021): Az otthoni tanulás sikerességét bejósoló tényezők a Covid-19 okozta vészhelyzet miatt kialakított digitális munkarendben eltérő szocioökonómiai helyzetű családok esetében. (“Predictors of home learning efficiency in the digital education framework induced by the COVID-19 emergency, in families with different socio-economic status”) In: *Educatio* 30 (1), pp. 88–102 <https://doi.org/10.1556/2063.30.2021.1.7>
- [36] The State of Global Education. 18 Months in t o t he Pandemic (September 2021). Organisation for Economic Co-operation and Development (OECD) Report. <https://doi.org/10.1787/1a23bb23-en>
- [37] Tózsér, Anett – Kudlotyák, Krisztina – Puskás, Attila (2021): Távoktatás a Kárpát-medencei közoktatásban a járványhelyzet időszakában. (“Distance teaching in public education in the Carpathian Basin during the pandemic”) In: *Új Pedagógiai Szemle (“New Pedagogy Review”)*
- [38] Vicsek, Lilla (2017): Online fókuszcsoporthoz alkalmazása - Lehetőségek, korlátok és tanácsok a hatékonyság növelésére. (“Application of online focus groups - Opportunities, limitations and advice to improve efficiency”) In: *Vezetéstudomány (“Management Studies”)*. 48(4): 36-45. <https://doi.org/10.14267/VEZTUD.2017.04.06>
- [39] Vít, Eszter (2022) Érettségi eredmények poszt-Covid tünetei avagy a rendkívüli érettségi időszakok és az oktatási egyenlőtlenségek összefüggései *socio.hu* 12/4. 80–103. <https://doi.org/10.18030/socio.hu.2022.4.80>

- [40] Zwanka, Russel J. – Buff, Cheryl (2020): COVID-19 Generation: A Conceptual Framework of the Consumer Behavioral Shifts to Be Caused by the COVID-19 Pandemic. In: Journal of International Consumer Marketing. <https://doi.org/10.1080/08961530.2020.1771646>