

Mina-Raiu, L., and Oprea, C. V. (2023). Online education: challenges and opportunities during the COVID-19 pandemic. Study on public administration students' and teachers' perception. *Applied Research in Administrative Sciences*, vol. 4, 1/2023, 35-47.
DOI: 10.24818/ARAS/2023/4/1.04

ONLINE EDUCATION: CHALLENGES AND OPPORTUNITIES DURING THE COVID-19 PANDEMIC. STUDY ON PUBLIC ADMINISTRATION STUDENTS' AND TEACHERS' PERCEPTION

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Abstract:

COVID-19 had a tremendous impact on education and the well-being of both students and teachers. The paper analyses the undergraduate students' and academics' perception of the online education services provided by the Faculty of Administration and Public Management (FAPM) of the Bucharest University of Economic Studies (BUES). Individual interviews and an online survey were carried out in order to reflect both the pros and cons of online learning and the determinants that significantly impact the satisfaction of the main stakeholders of the education services. Research findings reveal that despite the great challenges related to online learning, many opportunities have emerged to advance the quality of education. Thus, students and teachers agree on the fact that traditional education and online education provide both advantages and disadvantages, suggesting that, in the future, a hybrid teaching-learning system might help bring together the strengths of both approaches.

Keywords: online education, digital learning, COVID-19 pandemic, quality of education services, students' perception, teachers' perception.

JEL Classification: D90, I21, I23

DOI: 10.24818/ARAS/2023/4/1.04

INTRODUCTION

Since January 2020, Europe has been faced with the wide and rapid spread of the SARS-COV-2 virus, which has proved to be very contagious and harmful. As a consequence, a series of radical restrictions were raised in all activity fields (Raiu & Mina-Raiu, 2022). Several studies (INSPIRE – The National Public Health Institute, 2020; Our World in Data, 2020; SREPI – The Romanian Society of Epidemiology, 2020) focused their attention on the large number of infections and measures to prevent the spread of the virus. In this particular context, characterised by restrictions and desperate solutions to control the pandemic, among the measures taken by the Romanian Government in 2020 was the provision of education services via the online environment. In this respect, universities were very cooperative and eager to help reduce the infection rate. Following the implemented measures, the Management Board of the Bucharest University of Economic Studies (ASE) approved the 2020 Specific Continuity Plan regarding the suspension of all face-to-face teaching activities, as well as other activities conducted within the University (ASE, 2020).

This study aims to analyse the perception of students and teaching staff related to the education services provided in a digital education environment by the Faculty of Administration and Public Management (FAPM). The paper is structured into three parts. First, the literature review is presented, highlighting the peculiarities of online higher education services and the specific modalities for performing remote teaching activities. The second part of the paper introduces the scope, objectives, and research hypotheses and details the research

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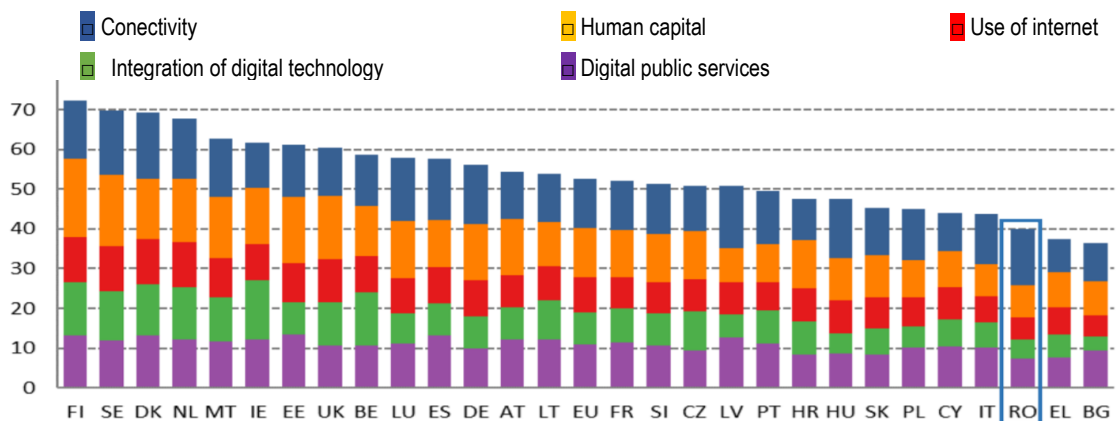
instruments that were employed. The last part of the paper is a case study that reveals the particular situation of the Faculty of Administration and Public Management with online learning, presenting the most relevant results of both the individual interviews with the management team members and of the survey results administered to 3rd year undergraduate students.

1. THEORETICAL FRAMEWORK

Starting with March 2020, the COVID-19 pandemic brought serious challenges to all activity sectors, including education, forcing all providers of education services to rapidly switch to remote learning. In just a couple of weeks, the whole educational landscape changed and teachers, students, and parents were given no choice than to adapt to the new rules. Due to COVID-19, significant weaknesses and drawbacks regarding the use of technology in education became very visible (MEC, 2020). Even before the pandemic, the higher education system was faced with several challenges in order to increase the quality of teaching and learning practices, by paying more attention to teaching and learning processes (Profiroiu, 2013). What COVID-19 did was to accelerate the technological advances in the higher education industry and open up series of further problematic aspects in the transition of traditional education to the online format (Pesha & Kamarova, 2020).

The Digital Economy and Society Index (DESI) monitors the digital performance at the EU level in five areas: connectivity, human capital, use of internet, integration of digital technology, and digital public services. In 2020 Romania was ranked 26 out of 28 EU member states, with a score of 40. All countries included in the DESI 2020 ranking registered improved scores due to the COVID-19 pandemic, which indicates that nowadays digital technologies play a crucial role in assuring the continuity of activities (European Commission, 2021). Figure 1 shows the DESI 2020 ranking, which was undoubtedly greatly influenced by the fact that all sectors of activity were required to go online.

Figure 1. DESI 2020 ranking



(Source: European Commission, 2020)

As Paposas and Paposas (2022) highlight, the most crucial factor for measuring education services success is the perception of the beneficiaries about the service quality, as it derives satisfaction and loyalty. Therefore, identifying the factors that contribute to learners' satisfaction is a key aspect to assess the online education services during the COVID-19 pandemic in order to leverage all stakeholders' satisfaction.

In the academic literature, several authors were concerned with the quality of online higher education services and its peculiarities. Thus, Srivastava and Hussaini (2023), Phipps and Merisotis (2000), Bickle and Carroll (2003), Deubel (2003), Wiesenbergs and Stacey (2005), Sonwalkar (2007), Ternus, Palmer and Faulk (2007), Means, Toyama, Murphy, Bakia and Jones (2010) quoted by Simpson (2012) admit that quality online education is a result of structure, content, processes, outcomes, on time feedback, perseverance, technical assistance, appropriate financing, apprehensive teachers, assiduity, willingness and openness to try new pathways. Furthermore, online learning needs to respect certain principles, such as: compliance with

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curriculum, achievement of learning objectives, involving learners, inclusive, respect for differences, inclusive, prompt feedback, innovative, etc. (Giatman *et al.*, 2020).

The stakeholders of the e-learning process are students, teaching and administrative staff, universities, content suppliers, technology suppliers, accreditation bodies (Wagner *et al.*, 2008). Students, no matter their level of studies (bachelor, master, Ph.D.), are the main beneficiaries of the e-learning process. Their motivation in the e-learning process might range from access to learning materials as an additional component to traditional courses, while for others, e-learning might be associated with online courses, depending on factors such as time, geographical location, or epidemiological context (Wagner *et al.*, 2008). Some authors argue that in order to be successful, the e-learning process needs active engagement from the participants (Romiszowski, 2004 quoted by Wagner *et al.*, 2008). Students tend to become more independent because they do not interact directly anymore with their teachers and colleagues, which requires even more motivation and commitment in the learning process (Huynh *et al.*, 2003 quoted by Wagner *et al.*, 2008). E-learning also implies a certain level of digital literacy, which might become at some point an obstacle that can lead to poor academic results or even drop-off, therefore digital alphabetisation is a prerequisite for the e-learning process (Zhang *et al.*, 2006 quoted by Wagner *et al.*, 2008).

Technology also brings changes both for students and teachers, which require specific knowledge and skills for a successful learning experience. Thus, in the context of online education, teachers are no longer the primary source of information for course participants, but managers of the knowledge resources. For example, in a traditional scenario, teaching staff would directly deliver the information to students and answer their questions, whereas in an online setting the teacher becomes the content coordinator, which students get to become familiar with at their own pace (Wagner *et al.*, 2008).

Apart from technological personal preparedness, in order to deliver online format learning, participants to online education must have appropriate network infrastructure and devices. Because technological infrastructure requires high investments, budgetary limitations can act as a significant restriction for implementing electronic learning-teaching solutions within the campus (Wagner *et al.*, 2008). However, the International Student Survey released by World QS Ranking in 2020, which reports students' interest in studying in the EU, revealed that technology is an important factor that worldwide prospective students take into consideration when making decisions regarding university admission (Paposa & Paposa, 2022).

The transformations in the labor market driven by the high demand for professions that require digital competencies are a major concern shared by higher education institutions (Pesha & Kamarova, 2020). On the other hand, another concern is related to employers' willingness to hire graduates holding online education diplomas, which influences students' choice for this particular form of education. Therefore, universities should lobby among prospective employers to accept and encourage digital education (Wagner *et al.*, 2008).

In order to assess and ensure the quality of the online education, many perception studies were carried out among students during the pandemic period. Findings of such surveys vary greatly, depending on the country and the moment when they were carried out. Thus, studies employed in an early stage of the pandemic revealed that although students were in favour of online learning, they were uncertain whether the quality of online classes matched the quality of on campus classes (Buzatu *et al.*, 2020; Pesha & Kamarova, 2020). The factors that played a positive influence on online education quality and students' satisfaction were associated with an interactive learning environment, competent and digitally skilled teaching staff, rich digital learning content, continuous student guidance, and prompt feedback (Paposa & Paposa, 2022). In contrast, the most common inhibiting factors that affected the successful implementation of remote education refer to administrative problems, social interactions, network infrastructure, academic and technical skills, students' motivation, etc. (Surahman & Sulthoni, 2020; Giatman *et al.*, 2020). Moreover, the quality of digital learning was negatively impacted by the high levels of stress, anxiety and depression experienced by students worldwide faced with social distancing restrictions and uncertainty about the future (Cotoranu *et al.*, 2021, Dagiene *et al.*, 2022).

Several studies, however, stress out both opportunities and challenges attached to remote learning and its tremendous potential for the future of education services provided by higher institutions. Thus, the COVID-19 pandemic forced higher education providers to maximise the digitalisation speed in order to ensure the

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transition from contact to distance learning, which generated innovative thinking and solutions and helped educational actors improve their digital competences (Pesha & Kamorova, 2020; Dagiene *et al.*, 2022).

2. METHODOLOGICAL FRAMEWORK

The aim of this paper is to analyse the perception of academics and 3rd year undergraduate students regarding the education services provided in the online environment by the Faculty of Administration and Public Management, focusing on three research objective: (1) Identifying the factors which significantly determine the satisfaction of FAPM students regarding the quality of the services provided online; (2) Determining the advantages and disadvantages of online education from the students' and academics' perspective; (3) Analysing in a comparative approach on-campus and online learning experiences.

In order to reach the research objectives, three hypotheses were formulated:

Hypothesis 1: The more satisfied students are with the quality of the online education services, the higher their level of engagement in the didactic activities.

Hypothesis 2: The students and academics are rather undecided regarding the advantages versus disadvantages of the online education.

Hypothesis 3: The shift of educational services to the online environment diminishes students' motivation in the learning process.

The concepts used in the hypotheses were operationalised as follows. Student satisfaction was measured using variables such as online teaching methods, equipment employed, as well as the advantages (perceived by students) regarding the academic activities. The student engagement degree was measured by looking at the participation of students in online courses and seminars, while students' motivation was translated into the ability to focus, as well on virtual class participation.

In the early stages of the research, secondary data analysis was employed in order to collect comparative data about the on-campus versus online learning processes, by looking at the provisions of several documents, such as strategies for the digitalisation of education in Romania, legislation, documents about quality management in education, the digital economy and society index - DESI, research results of several studies aimed at measuring the quality and the satisfaction of the education sector users.

Later on, five semi-structured individual interviews were carried out with teaching staff holding a managerial position in the FAPM board. The purpose of the interviews was to capture the perception of the FAPM academics on the remote education services during the pandemic. Qualitative information collected using secondary data analysis and interviews helped to get a better understanding of the particularities of the online education processes and enabled the design of the online survey. The survey contains 24 questions targeting the perception on online education of 3rd year undergraduate students from Public Administration and Human Resources tracks from the Faculty of Administration and Public Management. Out of 307 students, a total of 120 respondents participated voluntary in the survey. The research was conducted in June 2021 through the distribution of an online survey via a google-form link, and the collected data was processed using simple descriptive statistics.

3. MAIN FINDINGS**3.1 Analysis and interpretation of the individual interview results**

Individual semi-structured interviews were carried out in May 2021 with FAPM teachers who were also part of the management team of the faculty, as it was considered that their double status could provide a richer perspective on the shift from traditional face-to-face learning to online education, covering aspects related to both didactical activities, as well as managerial and administrative issues.

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Within the five individual interviews with the academics from the FAPM management team, qualitative data was collected in order to get a deeper understanding of the research topic and later design the second research tool, a questionnaire applied among students.

This section of the paper presents the most relevant findings of the interviews, such as the main changes that took place in the higher education system and the manner in which these were perceived by the academic staff, but also the positive and negative aspects of this teaching process. To maintain the anonymity of the subjects instead of their names the phrases "subject 1, 2, 3, 4 and 5" were used.

Regarding the changes of the higher education system following the shift to the online environment, subjects 1, 3 and 4 indicated that the situation, irrespective of the choice of the people involved, teachers, and students, must be seen as a reform, with positive aspects, but also inherent downsides. Interviewees 2 and 5 amended this shift due to the unexpected way of implementation.

The individual interviews outlined differences of opinion regarding the manner in which the subjects had experienced the online class period. Subjects 2, 3 and 5 stated that it was a difficult moment, with an increased volume of work, and for 1 and 4 these aspects were accompanied by other impediments too, such as the lack of teacher-student interaction and the effervescence of meetings in other spaces of the institution. For them, non-verbal communication was equally important as the verbal one so the absence of a video camera compulsoriness meant the loss of an authentic feedback on students' information assimilation process.

Concerning the most significant positive aspects of the online teaching modalities, respondents had different opinions. Thus, subjects 2 and 3 felt that the flexibility of this form of education was beneficial for the students, since they could carry out parallel activities. For subject 2, an advantage for the students was the possibility to interact more easily with prestigious public institutions by means of the events organised online within the FAPM. Respondents 1 and 4 saw a benefit in the fact that the online environment allowed active engagement during classes from a lot more students compared to the physical format and the applications employed, like Zoom and Google Meet, facilitated teaching activities. Subject 5 was skeptical regarding the intrinsic advantages of the online education; therefore, the only identified advantage was the decrease in the Sars-Cov 2 infecting risk.

Regarding the negative aspects, respondents 1, 3, 4 and 5 felt that the lack of direct interaction and the limitation or impossibility of transmitting additional information to the students were major losses. A contrary opinion was provided by respondent 2, for whom the quality of the teacher-student interaction was maintained, mentioning, however, the physical and psychological overstrain.

From the point of view of the measures that have been taken at the level of the faculty, the subjects unanimously agree that FAPM reacted promptly, so that the biannual meetings with the representatives of the groups now have a frequency of two weeks. Related to the measures adopted at the faculty level, subjects agreed that the FAPM reacted promptly: the sessions with the students' representatives, previously biannual, were scheduled every two weeks. At the same time, teachers have become more receptive to the need of students, by organising consultations outside the course and seminar activities. Other measures included the permanent updating of the faculty website and the posting of useful information to students both on the site and on social networks or through institutional email, or the FAMP initiative to conduct various workshop events with diverse topics.

Regarding the recommendations of the interviewed teachers, they urged the students to manage their time as well as possible, to try in their free time to disconnect through other outdoor activities and take into consideration the fact that if they are open with their teachers to continuous communication, they will keep in a consistent connection with them, ensuring continuity not only educational but also pedagogical. Although respondent 4 acknowledged that it is difficult to find optimal solutions for such a challenging period, respondent 5 simply recommended that students consider this experience as an opportunity to build resilience.

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There were also divided opinions related to changes in the quality of the higher education after shifting to online learning. Subject 1 considered that effects would be visible after a longer period of time, when the graduates will find themselves on the labor market and pointed out he did not notice a quality decrease, but a lower level of interest from all the students. All other 4 FAPM academics perceived the quality of higher education diminished by shifting to the online format, subject 3 pointing out a certain superficiality characterising both teachers and students during online classes.

Regarding the additional dissatisfaction that students have, and which are strictly related to the conduct of the teaching-learning process in the online environment, respondents 2, 3 and 4 state that a first dissatisfaction is the workload, which has increased considerably, to which is added the lack of timely posting of materials during this period. Subject 1, in addition to the aforementioned, also mentions the obligation to use the video camera or the need for active involvement for scoring in courses. Subject 3 considers that the same level of students' dissatisfaction has been preserved as in the years before the pandemic.

Related to the complaints of the academic staff, the individual interviews revealed that they emerged from the students' low engagement in the learning activities and from not complying with the obligation to turn on their video camera during classes. All five respondents shared the same opinion on the main additional stressing factors for students, namely the large volume of tasks and the use of electronic devices for an extended period of time, accepting, however, that there may be other factors, but they differ from student to student. All teachers agreed that the measure taken by BUES at the beginning of the pandemic of increasing the time assigned for teaching activities, from 80 to 100 minutes, classes had an adverse effect, leading to less focused students, who sometimes even failed to attend classes.

All subjects acknowledged that during the pandemic they were forced perform adjustments in their didactic activity. Thus, they improved teaching materials, by making them more concise and visually attractive, in order to maintain students' attention. Subjects 1, 3, 4 opted for oral examination, considering it the most appropriate method for clearly assessing the level of knowledge in an online learning environment, while subjects 2 and 5 chose the multiple-choice examination via the online platform www.online.ase.ro.

When discussing about the key to a successful teacher-student relationship, subject 5 had again a singular perspective, stating that there are not really successful relationships, but simple interactions during the pandemic, when the activity is carried out online. For the other interviewees, communication remains defining in an optimal relationship between student and teacher.

Taking into account the analysis of the data that resulted from the interview, it appears that respondents identify both positive and negative aspects of the online education process, which seems to show that subjects are not very determined about the advantages and disadvantages of online education, which is a delicate topic because it has not yet made its consequences visible.

3.2 Analysis and interpretation of the opinion survey results

This section of the paper provides analysis and interpretation of the main results of the opinion survey administered among FAPM students. The questionnaire starts with questions meant to identify the profile of the respondents in terms of gender, age, and study specialisation.

Figure 3 indicates that students enrolled in the Human Resources track were more willing to fill in the questionnaire, with a 41.94% response rate, by comparison with Public Administration students, who registered a 37.85% response rate.

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Figure 2. Gender

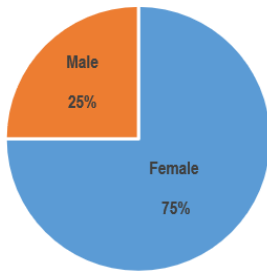


Figure 3. Age

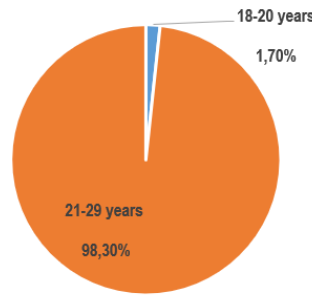
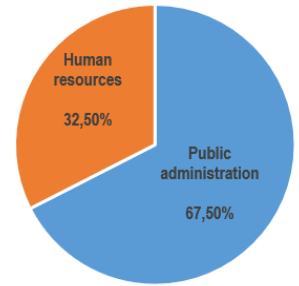


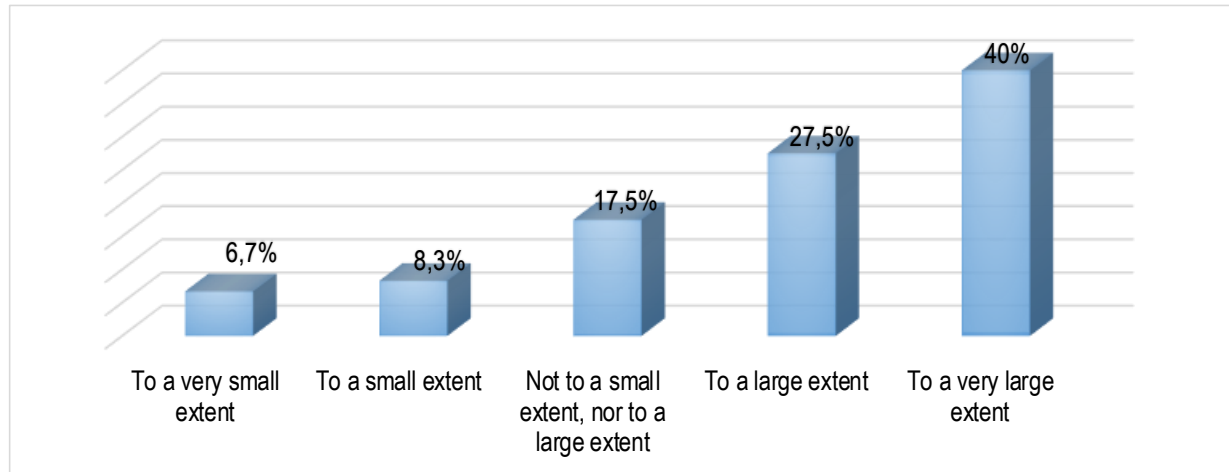
Figure 4. Study specialisation



(Source: Survey data, 2021)

The following set of questions (Figures 5 - 10) aim at revealing students' perception regarding online education, their opinion on the way online classes were conducted, as well as their views on the advantages and disadvantages brought by the shift of the teaching activities to the online environment. Taking into account that 67.5% of the respondents assess that online courses are more demanding to a large and very large extent, compared to just 15% who indicate small and very small levels, it overall results that students experience higher difficulties during the online learning process compared to face-to-face learning (Figure 5). Additional arguments in this respect come from the findings of individual interviews, which reveal that FAPM teachers consider that the most significant stressing factors for students are high volume of work, lack of study materials uploaded in due time on the e-learning platform, difficulties in actively engaging for grading in classes, all resulting in considerable pressure for learners.

Figure 5. Extent to which students consider online classes more demanding by comparison with face-to-face classes

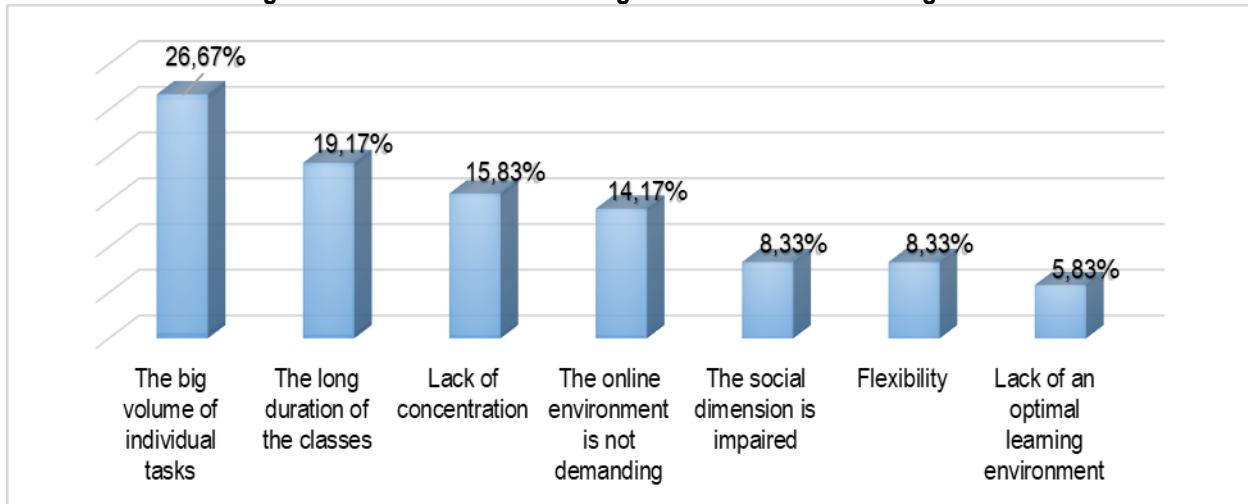


(Source: Survey data, 2021)

Figure 6 indicates students' reasons for considering online classes demanding. It seems that the top three aspects are: the volume of individual tasks, which has considerably increased following the shift to e-learning (26.67%), the duration of classes (19,17%), which during the pandemic increased from 80 to 100 minutes, and the incapacity to maintain focus during online learning (15,83%).

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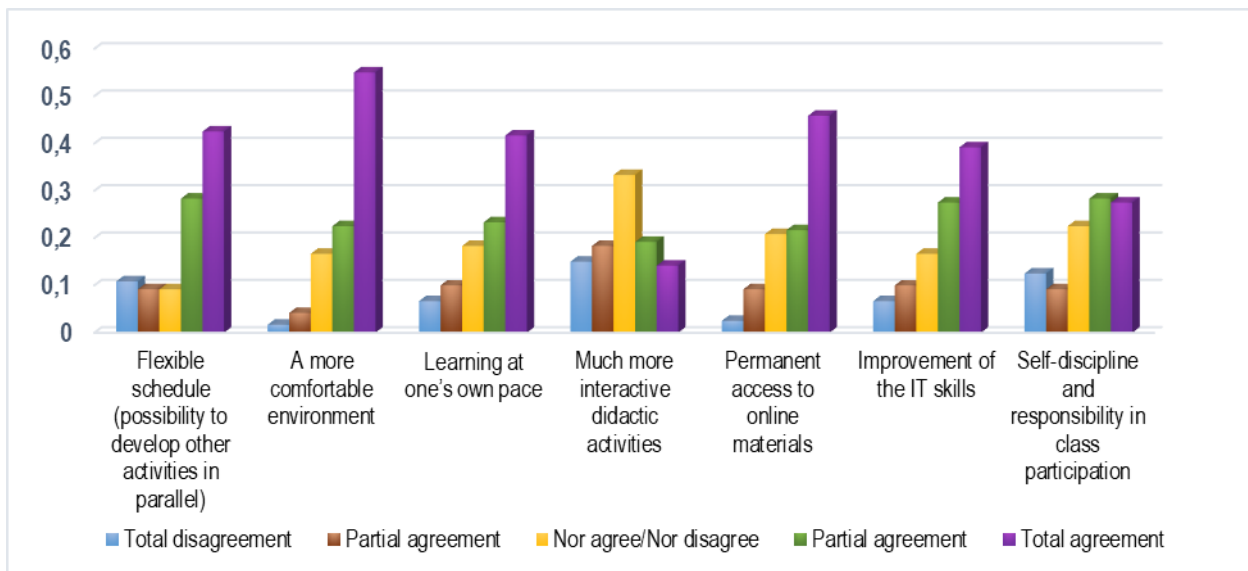
Figure 6. Reasons for considering online classes demanding



(Source: Survey data, 2021)

Students consider that the online environment offers them many advantages (Figure 7), of which, the first one mentioned is a more flexible schedule (70.83%). 65.03% of the respondents agreed partially and totally with the advantage that online classes facilitate „Learning at one’s own pace”. Accordingly, this can be correlated with the fact that 40% of the respondents’ state that their results from the last online session, compared to the last one conducted in the campus, had an improvement, by contrast with only 7,5% who achieved worse results.

Figure 7. Perceived advantages of online classes



(Source: Survey data, 2021)

For the statement „Much more interactive didactic activities”, most respondents (33.33%) opted for „do not agree nor disagree”. This suggests that respondents cannot make up their mind regarding the pros and cons of online classes interactivity. 67.47% agree with the statement „Permanent access to online materials”, which may suggest that teachers have adapted to the online environment and are facilitating the students’ learning process by providing them with course materials. Also, a 66.7% percentage of the respondents believe that shifting educational activities to the online environment has facilitated the development of their ICT skills, bringing added value to their knowledge in this area.

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Regarding self-discipline and responsibility in relation to class participation, 55.83% have checked a partial and total agreement, this advantage being correlated with the fact that 39.2% of the students indicate that they have a higher degree of participation in didactic activities during the 2020-2021 academic year.

To conclude, the most intensely experienced advantages are linked to a more comfortable environment (77.5%), followed by a more flexible environment (70.83%). Other significant advantages are the permanent access to online learning resources (67.47%), improvement of the digital skills (66.7%), as well as self-discipline and responsibility in class participation (55.83%).

It is worth highlighting that all these advantages and disadvantages were also outlined by the FAPM academic staff within the individual interviews.

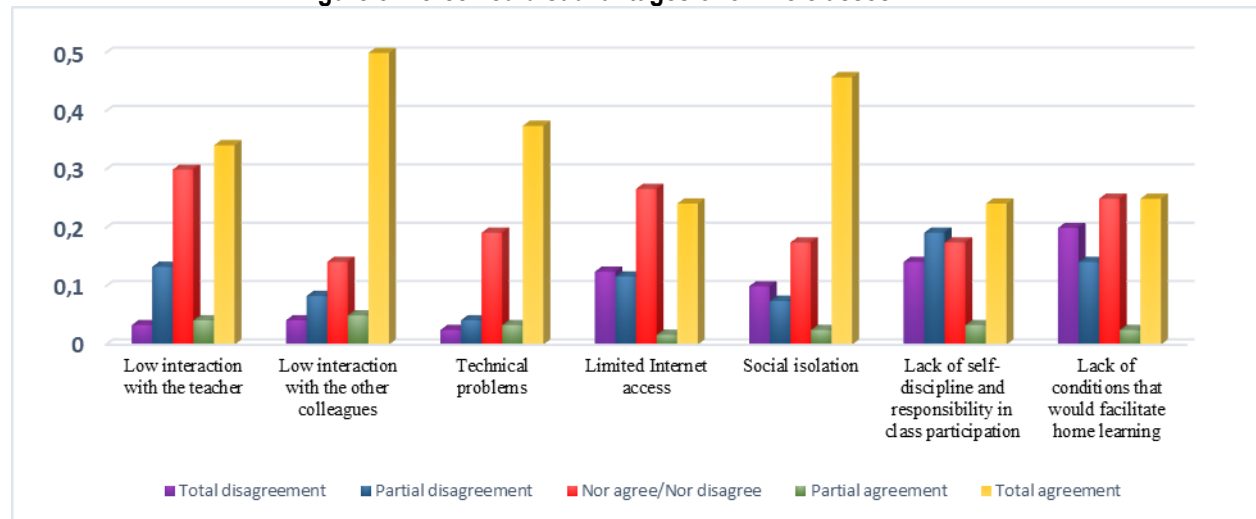
From students' perspective, online learning also implies a series of disadvantages, as can be seen in Figure 8, which reveals divergent opinions, as well as undecided respondents.

Regarding the social dimension, 88.17% of the respondents consider it the main disadvantage, since the interaction with both teachers and colleagues is diminished due to the transfer to online courses. The dimension can also be correlated with social isolation (48.33%). 40.83% of the surveyed students perceive technical problems might represent a disadvantage in the process of optimal delivery of didactic activities. 27% of the respondents consider that Internet access may and may not be a disadvantage for online learning, probably depending on the location of learners (rural or urban areas).

The lack of self-discipline and responsibility in class participation (27.5%) is correlated with the fact that 19.2% of respondents had small and very small degree of participation in courses and seminars conducted online.

The assertion „Lack of optimal conditions that would facilitate home learning” indicates a low level of consensus among respondents, since 25% of them pointed out the fact that they are in total agreement with this statement, while other 25% of the respondents have checked the „not agree, nor disagree” and 20% checked “totally disagree”.

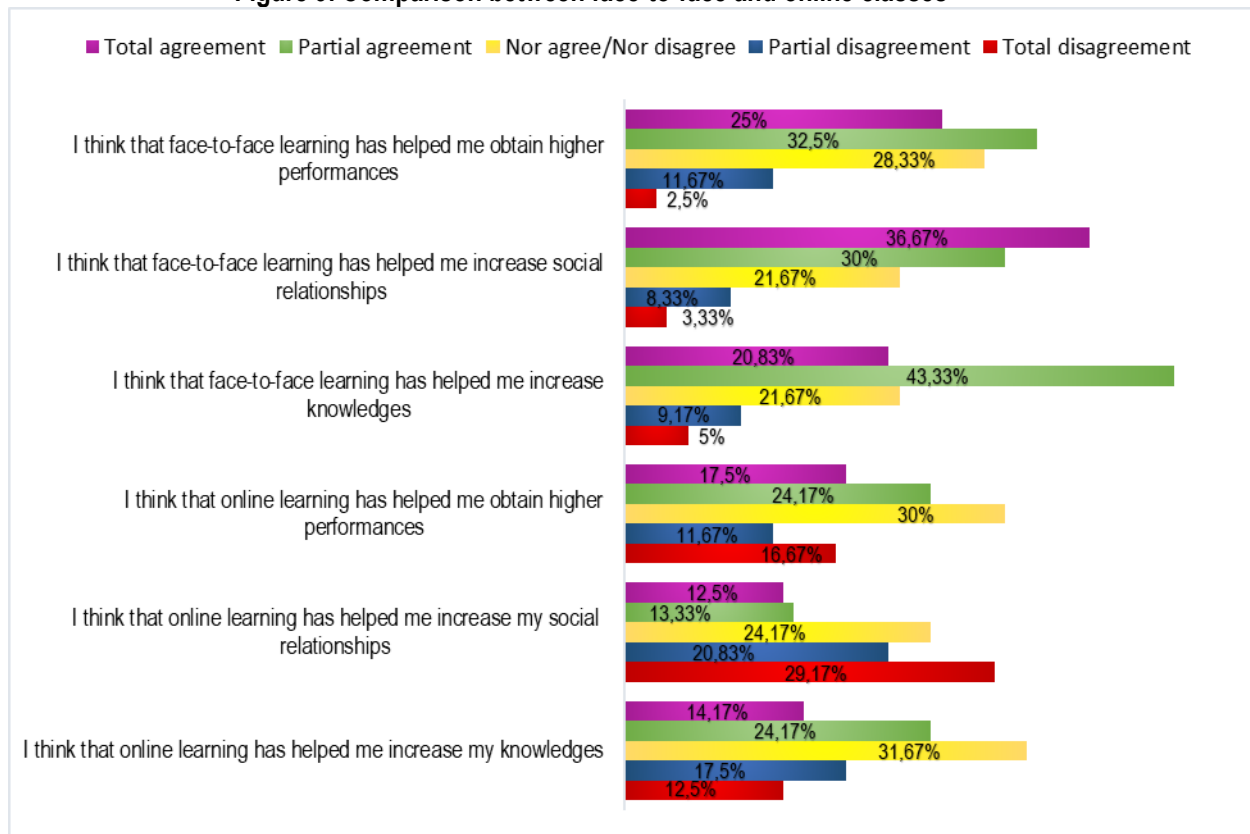
Figure 8. Perceived disadvantages of online classes



(Source: Survey data, 2021)

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Figure 9. Comparison between face-to-face and online classes



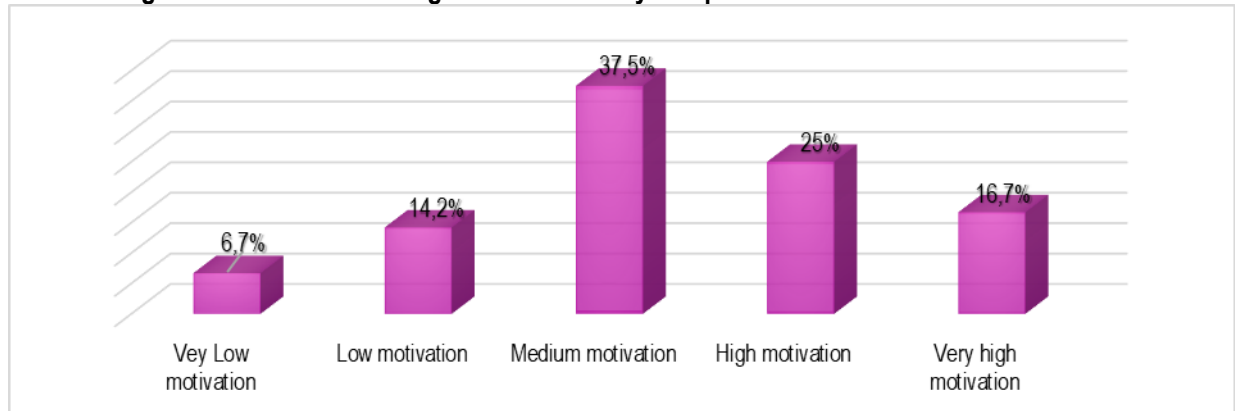
(Source: Survey data, 2021)

Figure 9 indicates that 31.67% of the respondents are undecided whether the shift to online learning has helped them develop their knowledge, while almost 50% do not consider that the online environment has facilitated the increase of the students' social relationships. Accordingly, this can be correlated with the fact that for the previous question (Figure 8), 88.17% believe that upon shifting to the online environment, the social dimension of education was significantly impacted. 41.67% of the subjects believe that online teaching and learning helped them achieve higher performance, which correlates with the fact that 40% qualify their results as better since turning to online education.

Regarding face-to-face didactic activity, respondents seem to have reached the conclusion that on campus education helped them increase their knowledges (64.16%) and boosted their social relationships (66.67%) Moreover, 57.5% of the respondents assess that their results were higher when educational services were provided face-to-face.

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Figure 10. Motivation during online classes by comparison with traditional classes



(Source: Survey data, 2021)

41.7% of the respondents claim that they felt motivated and very motivated while participating in online didactic activities, satisfied with the achieved benefits, and felt improvements in their academic performance. This particular fact might also correlate with the teachers' testimonies during the individual interviews, revealing the fact that students have become much more active during e-classes versus traditional settings. However, the highest individual frequency goes to 37.5%, corresponding to students who could not decide whether they felt motivated or not during online classes.

4. CONCLUSIONS

Based on the data collected in April-May 2021 we can conclude that regarding hypothesis 1, "The more satisfied the students are with the quality of the educational services provided in the online environment, the higher the degree of involvement in the teaching activities", the results obtained indicate that it is validated, because 51.6% of the respondents declared themselves satisfied and very satisfied with this period in the hours that took place in the online environment. The same results from the fact that 39.2% of the respondents have a high degree of involvement in online activities (75 - 100%), because 70.83% of respondents consider that this form of learning gives them flexibility, this aspect being also acknowledged in the interviews with the teaching staff.

The second hypothesis "Students and academics are rather undecided regarding the advantages versus disadvantages of online education" is also validated. Thus, both students and teachers consider that the online environment has brought them advantages, but also disadvantages. Last but not least, the third hypothesis, "Moving the activities to the online environment has diminished the students' motivation regarding the learning process", was validated, because 41.7% of the respondents claim that they are motivated during this period when the teaching activity was carried out in the online environment, feeling satisfied with the advantages obtained, as well as with the performances achieved.

The general conclusion that seems to arise is that students and teachers agree that despite the difficulties encountered while practicing online learning during pandemic, there are many arguments and great prospects acting in favour of digital educational services. Respondents were not very sure whether the online environment has brought them more benefits than drawbacks, therefore a good solution might be a win-win one: blend the traditional and online education systems in order to take advantage of their pluses and avoid the limits, by implementing hybrid systems.

As far as the limitations of this study we can start by pointing out the need for further investigating the academic literature, which boosted during pandemic, but is still interested in the topic of online learning, especially in terms of exploring the potential of integrating technology in higher education systems. The conducted research limited itself to 3rd year undergraduate students from one faculty of BUES, but extending it to all study years and more faculties or even universities could provide richer comparative data. Moreover, this paper employed a self-reporting instrument to collect data on teachers and students perspective, which is might be a source for biased responses.

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Further research could include the perspective of education actors after returning to the traditional educational setting (follow-up study), which might provide a different, maybe more objective, and more well-defined perspective.

AUTHORS' CONTRIBUTIONS

The authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

CONFLICT OF INTEREST STATEMENT

The present research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

REFERENCES

- ASE: Academia de Studii Economice din București (2020). Hotărârea nr. 85/12.03.2020 cu privire la aprobarea Planului specific de continuitate al Academiei de Studii Economice din București (Decision no. 85/12.03.2020 regarding the approval of the Specific Continuity Plan of the Bucharest University of Economic Studies). Retrieved from: https://www.ase.ro/ase_responsive/Decizii/H-109-26.03.2020-prelungire_activitati_didactice_online.PDF
- Cotoranu, D., Creța, S. & Moldovan, O. (2021). Impactul psihologic al pandemiei Covid-19 asupra studenților din cadrul Universității Babeș-Bolyai. *Revista Transilvană de Științe Administrative*, 23(48), 36-52.
- Buzatu, A. R., Cojoc, C. Cotovici, E., Spirache, M. C., Romica, T. & Paun, M. (2020). Students' perception of online education in the COVID-19 pandemic framework. *Romanian Statistical Review*, 3/2020, 3-11.
- Dagiene, V., Jasute, E., Navickiene, V., Butkiene, R. & Gudoniene, D. (2022). Opportunities, Quality Factors, and Required Changes during the Pandemic Based on Higher Education Leaders' Perspective. *Sustainability*, 14(3), 1933. MDPI AG. <http://dx.doi.org/10.3390/su14031933>
- European Commission (2020). Indicele economiei și societății digitale (DESI) 2020: România pe locul 26. Retrieved from: https://ec.europa.eu/romania/news/20200611_raport_rezilienta_digitala_ro
- European Commission, (2021). Indicele economiei și societății digitale (DESI) 2020: România pe locul 26. Retrieved from: https://ec.europa.eu/romania/news/20200611_raport_rezilienta_digitala_ro.
- Giatman, M., Siswati, S. & Basri, I. (2020). Online Learning Quality Control in the Pandemic Covid-19 Era in Indonesia. *Journal of Nonformal Education*, 6(2), 168-175. doi:<https://doi.org/10.15294/jne.v6i2.25594>
- INSPIR: Institutul Național de Sănătate Publică România (The National Institute of Public Health of Romania). (2020). Analiza cazurilor confirmate COVID-19 (Analysis of the COVID-19 confirmed cases), Retrieved from: <https://www.cnscbt.ro/index.php/analiza-cazuri-confirmate-covid19>
- MEC: Ministerul Educației și Cercetării (2020). Strategia privind digitalizarea educației din România. Retrieved from: <https://www.edu.ro/sites/default/files/SMART.Edu%20-%20document%20consultare.pdf>
- Our World in Data (2020). Romania: Coronavirus Pandemic Country Profile. Retrieved from: <https://ourworldindata.org/coronavirus/country/romania?country=~ROU>
- Paposa, K. K. & Paposa, S. S. (2022). From Brick to Click Classrooms: A Paradigm Shift During the Pandemic—Identifying Factors Influencing Service Quality and Learners' Satisfaction in Click Classrooms. *Management and Labour Studies*, 0(0). <https://doi.org/10.1177/0258042X211066234>
- Pesha, A. V. & Kamarova, T. A. (2020). Online Education: Challenges and Opportunities for Developing Key Competencies of the 21st Century During the COVID-19 Pandemic. *Advances in Social Sciences and Humanities Research*, vol. 486, *Proceedings of the Research Technologies of Pandemic Coronavirus Impact* (RTCOV 2020)

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- Profiroiu, A. (2013). Lecturer and Student Perspective Regarding Teaching Public Administration in Romania. *Transylvanian Review of Administrative Sciences*, 9(SI), 141-155.
- Raiu, C. & Mina-Raiu, L. (2022). How to Cope with Counter-Performance in Public Administration. The Case of Freedom of Religion or Belief during the Pandemic. *Transylvanian Review of Administrative Sciences*, 18(66), 81-98. doi:<http://dx.doi.org/10.24193/tras.66E.5>
- Simpson, J. M. (2012). Student perception of quality and satisfaction in online education. Tuscaloosa: The University of Alabama.
- SREPI: Societatea Română de Epidemiologie (The Romanian Society of Epidemiology). (2020). Măsuri privind prevenirea și controlul infecției SARS-COV-2 în contextul pandemiei de COVID-19 (Measures regarding the prevention and control of the SARS-COV-2 infection in the context of the COVID-19 pandemic). Retrieved from: <http://www.ms.ro/wp-content/uploads/2020/04/M%C4%83suri-recomandate-de-Societatea-Rom%C3%A2n%C4%83-de-Epidemiologie-privind-prevenirea-%C8%99i-controlul-infec%C8%9B-1.pdf>
- Srivastava, S. & Hussaini, N. (2023). Managing quality in higher education system: insights from the literature. *Management Research and Practice*, 15(1), 63-79.
- Wagner, N., Hassanein, K. & Head, M. (2008). Who is responsible for e-learning success in higher education? A stakeholders' analysis. *Journal of Educational Technology & Society*, 11(3), 26–36.