University Students During Pandemic.
A Case Study on a Faculty of Philosophy and Social-Political Science Undergraduates.

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Abstract

In this paper, we present some key features regarding a quantitative panel study conducted in 2020 at the Faculty of Philosophy and Social-Political Science, Alexandru Ioan Cuza University of Iaşi. To examine how the undergraduates perceive distance learning in the context of university closure due to the spread of COVID-19 disease, we organized two „waves" of research by questionnaire: 593 respondents in March 2020 and 499 respondents in June 2020, both samples being representative. This research had four main objectives: (a) studying comparatively the university students opinion about the decision to suspend the traditional face-to-face teaching activities; (b) studying the university students opinion about the online communications with professor or tutors, with their colleagues; (c) studying the main online activities initiated during the pandemic for academic formation; (d) constructing a statistical index of pandemic difficulties for comparative analysis within specific groups of the target population. Some of the conclusions of this study showed that during this semester, marked by pandemic context, the intensity level of the communication process between students and their teachers has increased relatively balanced for all years of study. Also, the online teaching activities carried out at a constant pace respected the pre-pandemic schedule. Thus, the time spent on learning was quite similar compared with the pre-pandemic period.

Keywords: university students, pandemic, education, learning activities, COVID-19

Résumé

Dans cet article, nous présentons quelques caractéristiques clés concernant une étude quantitative menée en 2020 à la Faculté de Philosophie et de Sciences Sociopolitiques de L'Université Alexandru Ioan Cuza de Iaşi. Afin d'examiner comment les étudiants perçoivent l'apprentissage à distance dans le contexte de la fermeture de l'université en raison de la propagation de la maladie COVID-19, nous avons organisé deux „vagues" de recherche par questionnaire: 593

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répondants en mars 2020 et 499 répondants en juin 2020, les deux échantillons étant représentatifs. Cette recherche avait quatre objectifs principaux: a) étudier comparativement l'opinion des étudiants sur la décision de suspendre les activités traditionnelles d'enseignement (face à face); b) étudier l'opinion des étudiants sur les communications en ligne avec des professeurs, des tuteurs et avec leurs collègues; c) étudier les principales activités en ligne initiées pendant la pandémie pour la formation universitaire; d) construire un indice statistique sur les difficultés liées à la pandémie pour une analyse comparative au sein de groupes spécifiques de la population cible. Certaines conclusions de cette étude ont montré qu'au cours de ce semestre, marqué par un contexte pandémique, le niveau d'intensité du processus de communication entre les étudiants et leurs enseignants a augmenté relativement en équilibre pour toutes les années d'études. En outre, les activités d'enseignement en ligne menées à un rythme constant respectaient le calendrier pré-pandémique. Ainsi, le temps consacré à l'apprentissage était assez similaire par rapport à la période pré-pandémique.

Mots-clés: étudiants , pandémie, éducation, activités d'apprentissage, COVID-19

Rezumat

Acest articol prezintă o serie de aspecte referitoare la un studiu panel cantitativ, organizat în anul 2020 în cadrul Facultății de Filosofie și Științe Social-Politice, Universitatea Alexandru Ioan Cuza din Iași. Pentru a examina percepția studenților de la ciclul de licență cu privire la învățarea de la distanță, în contextul închiderii universităților cauzată de răspândirea noului coronavirus – COVID-19, am derulat două valuri de cercetare: 593 de respondenți în martie 2020 și 499 de subiecți în iunie 2020, ambele eșantioane fiind reprezentative. Studiul a fost construit în jurul a patru obiective: (a) studierea comparativă a opiniilor studenților referitoare la decizia de suspendare a activităților educaționale desfășurate față în față; (b) studierea opiniilor pe care le au studenții cu privire la comunicarea online avută cu profesorii, tutorii sau colegii lor; (c) studierea principalelor activități online inițiate în perioada pandemiei, pentru formarea academică; (d) construirea unui index al dificultăților generate de pandemie pentru realizarea unei analize comparative între grupuri specifice ale populației țintă. O parte dintre concluziile cercetării au arătat faptul că pe perioada acestui semestru, marcat de contextul pandemic, nivelul de intensitate al procesului de comunicare între studenți și profesori a crescut relativ ușor. Totodată, activitățile de învățare online realizate constant au respectat orarele stabilite înaintea declarării pandemie. Astfel, timpul petrecut pentru învățare a fost relativ similar comparativ cu perioada de dinaintea pandemiei.

Cuvinte-cheie: studenți, pandemie, educație, activități de învățare, COVID-19

1. Introduction

The scientific debates regarding the social effects of pandemics and epidemics have been on researcher's agenda before the COVID-19 pandemic started. For instance, in 2013, Dingwall, Hoffman and Staniland have emphasized, in the context of a globalized era, the growing need to develop a Sociology of Pandemics, following the sociological statement of Strong (1990, p. 249) „on the

striking problems that large, fatal epidemics seem to present to social order; on the waves of fear, panic, stigma, moralising and calls to action that seem to characterise the immediate reaction." Dingwall, Hoffman and Staniland (2013, p. 167) argued that „a focus of attention and resources on medicine and biomedical science, then, tells less than half the story of how societies identify new diseases, how they respond, and what the consequences might be." Nowadays, all these considerations mentioned before have gained significant importance with the unprecedented spread of the novel coronavirus - COVID-19, which begun in Wuhan, Hubei province, China in December 2019 (Singhal, 2020).

Due to the rapidly spreading in 2020 of the COVID-19 disease, educational systems from all around the world were forced to adapt on the move their learning process. Thus, universities along with schools have shifted their traditional face-to-face educational activities to the online environment by using various digital platforms and resources to deal with the challenges of the pandemic crisis.

In Romania, the first case of infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been confirmed on the 26th of February 2020 (Neagu, 2020). Three weeks later, on 16th of March, Romanian President Klaus Werner Johannis has signed Decree no. 195/ 2020 which instated the state of emergency in Romania. The 49th article of the Decree provided that „During the state of emergency, courses in all educational units and institutions are suspended."

At 25th of June 2020, United Nations Educational, Scientific and Cultural Organization – UNESCO (2020a), estimated that almost 1.1 billion students from all around the world were affected by the COVID-19 pandemic, meaning that 61.2 percent of total enrolled learners from 114 countries were, at the date, out of school. Compared to the first part of April, even if we are witnessing to a constantly worldwide decrease in the number of students affected by closures of schools and universities, the global debates occurred on how educational systems could effectively respond and manage such a crisis have become increasingly important and prevalent.

Meanwhile, to ease up the replacement of traditional face-to-face teaching activities with distance learning, many international institutions, like (UNESCO), European Commission (EC) or European Association for International Education (EAIE), have developed online platforms which are gathering various tools, applications, guidelines and information's for learners, teachers and parents about shifting face-to-face educational activities to the digital environment – e.g. resources to provide psychosocial support, digital learning management systems, tools for teachers to create of digital learning content, external repositories of distance learning solutions, self-directed learning cont etc (UNESCO, 2020b). Likewise, Deutscher Akademischer Austauschdienst (DAAD, 2020) is keeping updated a large database of studies and forecasts referred to COVID-19 impact on the international higher education.

Despite discussions started about thirty years ago on how technology and information and communication technology – ICT can be used and contained informal education (Marchello & Kelly, 1989; Aczel & Hardy, 2007), the whole world needed to sudden adjust their educational tools to diminish the large impact of unexpected closures of universities and schools.

However, in 2018, Times Higher Education surveyed „how will technology reshape the university by 2030" (Matthews, 2018), comprising the views of 200 institutional leaders sampled from world's top 1000 universities. The study concluded that the vast majority of respondents were disagreeing with the idea that „digital technology will have eradicated physical lectures by 2030". In the same article, Matthews (2018) pointed out „the physical university, with its face-to-face teaching, still has a healthy future despite the wave of digital disruption." Two years later, in an opinion article appeared in Financial Time Magazine, Kuper (2020) emphasized that „online education won't replace the in-person variety, but will complement it" and „university teaching after the pandemic will be blended: a mix of both methods." Additionally, a growing range of stakeholders in education is asking themselves if the pandemic crisis will make online/ digital education go viral „earlier and to a far greater extent than any experts were previously predicting" (Lau et al., 2020). But the question mark remains on how suitable is blended education in various cultural contexts defined by major digital disparities and social gaps.

In a recent research paper, Cahapay (2020) described students who are affected by the restrictions imposed by the pandemic crisis as being „stranded" and subjects directly exposed to an increased risk of vulnerability caused by psychosocial pressures. Following a phenomenological approach, inspired by Heideggerian existential phenomenology, Cahapy found that students lived experiences are unfolding into three interconnected spaces - real space, virtual space and wished space, each of it having is own characteristics. He emphasized that these spaces are ground for themes which „highlight the experiences of riding through an „emotional rollercoaster," embracing a „new normal," and undergoing a „growth under pressure." (Cahapay, 2020, pp. 5-6). This „new normality" is beginning to be treated more and more extensively by some authors (Tesar, 2020; Gurukkal, 2020), who note the advantages, disadvantages, challenges and opportunities of transferring learning and educational activities online.

2. Recent studies on the perceptions of Romanian university students about the pandemic crisis and its impact on the learning process

During the lockdown, several online exploratory studies have been conducted in Romania to reveal university students' perceptions about pandemic crisis and its impact on their educational outcomes and higher education system, in general.

International Student Identity Card Romania – ISIC, has conducted in April 2020 a study on 2199 students aged between 15 and 27 years old about how affected are the Romanian young people by the pandemic, in general, and particularly by the restrictive measures recently imposed. The results showed the young people were more concerned about the health issues of their families and peers than the possibility of not finishing at term the school year. Likewise, 17.6 percent of respondents mentioned they were thoughtful regarding the good preparation of their final exams. Among the main shortcomings felt by students during their home study were: lack of motivation, lack of face-to-face interaction with teachers or the fact that they cannot learn well enough from online resources (Tapalagă, 2020).

A similar research topic has been also explored in April 2020 by West University of Timişoara through the Sociology Department of Sociology and Psychology Faculty. The study sample consisted of 1417 students from all 11 faculties of West University. In brief, the researchers found that the students are taking into account to a greater extent the feedback received from their teachers. Also, in the context of distance learning, the need for feedback is higher. Additionally, students consult more often with colleagues than teachers about educational tasks. The less frequent individual consultation of teachers can be seen as compensation for the feedback received, which students take into account to a large extent.

Another research to mention was conducted by the Babeş-Bolyai University of Cluj-Napoca. The survey, which comprised a sample of 487 undergraduate and master students, revealed a series of challenges and concerns connected to the process of learning and time management, emotional distress, anxiety and also issues regarding the lack of motivation during the online educational activities.

3. Research method and objectives

In the third part of this paper, we present some key features regarding the methodology of a quantitative panel study conducted in 2020 at the Faculty of Philosophy and Social-Political Science, Alexandru Ioan Cuza University of Iaşi. To examine how the undergraduates perceive distance learning in the context of university closure due to the spread of COVID-19 disease, we organized two „waves" of research.

The method used in research data collection was an online survey on a dedicated platform (www.isondaje.ro). Furthermore, the questionnaire dissemination was made especially through social media and e-mails. Also, among the main stratification criteria of the studied population we mention: *specializations* [divided into six major groups: Sociology (Soc), Social Work (SW), Human Resources (HR), Communication and Public Relations (CPR), Political Science & RISE (PS), Philosophy (Phil)], *gender* (male/ female), *home county* (Bacau, Vaslui, Botosani, Suceava, Iasi, Neamt, Other) and *residential environment* (urban/ rural).

The study has been conducted in two waves: 593 respondents in March 2020 (at the beginning of pandemic) and 499 respondents in June 2020 (middle of a pandemic). Both samples were representative (first with ±4% maximum error and the second with ±4.4% maximum error, both at the 95% level of confidence). For the data analysis, the two samples were weighted by *specializations* variable.

This research had four main objectives:

Objective 1: Studying comparatively the university students opinion about the decision to stop the classical courses; about the time spent for learning during the pandemic; about the capability of the university to sustain all the online activities.

Objective 2: Studying university students opinion about online communications with teachers or tutors, respectively with their colleagues.

Objective 3: Studying the main online activities initiated during the pandemic for academic formation.

Objective 4: Constructing a statistical index of pandemic difficulties for comparative analysis within specific groups of the target population.

4. Data analysis

Data analysis was carried out using SPSS ® Statistical Software. To analyse the perceptions of Faculty undergraduates about distance learning in the context of COVID-19 pandemic, we used descriptive statistics and some statistical tests.

4.1. University students opinion about the decision to suspend the traditional face-to-face teaching activities

From the beginning, we asked the university students about the suspension of traditional face-to-face learning activities. The results showed a significant decrease between periods of research: 74 percent from the first wave and only 57 percent from the second wave considered that the measure was good. In this case, we tested the following hypothesis:

H1. *There are significant differences between the two wave of the questionnaire in satisfaction with interruption of courses.*

Using the Mann Whitney Test, we noticed that there were significant differences in satisfaction with an interruption of courses or seminars (U=135004, Z=-5.74, p=0.000). We observed that the mean of ranks for the first wave was m1=540.94 and for the second wave was m2=635.03. With the construction in reverse order of the scale, we conclude that in the second wave the level of satisfaction is significantly lower. Thus, the hypothesis is confirmed.

In the same time, during the pandemic, we wondered that there were some technical problems for the university students living in the rural environment due to Internet connections that can lead to a higher level of dissatisfaction with courses/ seminars interruption. In this regard, we tested the following hypothesis:

H2. *There are significant differences between the residential environment of university students in satisfaction with interruption of courses.*

From the data analysis, we concluded that there are no significant differences between university students depending on their residential environment (rural or urban) in both the two waves of research (U=57059.5, Z=-1.129, p=0.259 for the first wave and U=26113, Z=-0.977, p=0.328 for the second wave). Thus, the hypothesis is not confirmed.

4.2. Time spent on learning during the pandemic

The time spent during the pandemic for academic activities is represented in Table 1. We can observe that, in the great majority, the time spent on learning is dominated by the response item „*Between 1 and 2 hours*". Also, between the periods of the research, the values have become comparable. We presume that the online activities carried out at a constant pace have been largely respected the pre-pandemic schedule. In this case, the periods spent on learning were quite similar compared with the pre-pandemic period.

Table 1. Percentages with time spending for learning on specializations and waves of research

		Specializations					
		HR	SOC	SW	CPR	PS	Phil
March	*Not at all*	5.4%	5.2%	8.3%	8.9%	6.3%	7.7%
	Less than an hour	21.6%	20.7%	18.5%	14.9%	12.5%	15.4%
	Between 1 and 2 hours	**51.4%**	**37.9%**	**40.8%**	**36.6%**	**46.9%**	**38.5%**
	Between 3 and 4 hours	17.1%	32.8%	24.2%	28.7%	25%	26.9%
	More than 4 hours	4.5%	3.4%	8.3%	10.9%	9.4%	11.5%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
June	*Not at all*	7.4%	1.2%	2.4%	7.8%	4.2%	8.7%
	Less than an hour	23.5%	20.7%	12%	19.6%	14.7%	13%
	Between 1 and 2 hours	**43.2%**	**57.3%**	**43.1%**	**39.2%**	**36.8%**	**34.8%**
	Between 3 and 4 hours	18.5%	19.5%	25.7%	23.5%	28.4%	30.4%
	More than 4 hours	7.4%	1.2%	16.8%	9.8%	15.8%	13%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

It is very important to emphasize that all the questioned university students declared that they generally spend less time with academic training, compared to the period before the suspension of face-to-face teaching activities. This result is valid for both waves of research with some minor exceptions (see table 2).

Table 2. Time spent on teaching compared with the period before the pandemic

		Specializations					
		HR	SOC	SW	CPR	PS	Phil
March	Less	**40.5%**	**39.7%**	**45.3%**	**35.6%**	**31.3%**	**50%**
	Likewise	31.5%	34.5%	26.8%	32.7%	21.9%	23.1%
	More	22.5%	13.8%	23.8%	25.7%	46.9%	26.9%
	I can't appreciate it	5.4%	12.1%	4.2%	5.9%	.0%	.0%
	Total	100%	100%	100%	100%	100%	100%
June	Less	**48.1%**	**43.9%**	**31.7%**	**41.2%**	**30.5%**	**52.2%**
	Likewise	27.2%	37.8%	28.1%	21.6%	27.4%	21.7%
	More	23.5%	15.9%	39.5%	33.3%	37.9%	13%
	I can't appreciate it	1.2%	2.4%	.6%	3.9%	4.2%	13%
	Total	100%	100%	100%	100%	100%	100%

4.3. The capability of the faculty to sustain all the online activities.

In this case, we can remind and mention that the Faculty of Philosophy and Social-Political Science from University Al. Ioan Cuza has adapted very quickly to the new pandemic context. There were also some minor delays when teachers tried to adapt and continue their work on various online platforms without a unitary strategy. At present, through the Digital Communication Direction – a special service unit of the University, a certain platform can be accessed with an institutional email by all interested users. For the university students, the perception of these technical abilities and the successful development of the online activities was an important stake to avoid communication gaps and a certain negative mood specific to this period. We considered that the *home county* of the students and the *residential environment* could have been an important independent variable to explain the perceptions about the capability of the faculty to sustain all the online activities. We tested the following hypothesis:

H3. *There are significant differences in university students perceptions of the capability of the faculty to sustain all the online activities according to the wave of the research and students residential environment.*

According to both waves of the research, we concluded that there are no significant differences between university students perceptions of the capability of the faculty to sustain all the online activities (U=157182.5, Z=-0.785, p=0.433). So, this sub-hypothesis is not confirmed. Unfortunately, unlike the optimists, 20 percent of the students were reluctant to consider that the faculty can do all these activities online and this impression was the same regardless of the second wave of field research (in the conditions in which the activity in the online was put into practice at the level of the entire university and not only at the level of a certain faculty). This fact must be an impetus to make all the necessary

adjustments, especially in the conditions in which a stage with online courses/seminars in the new academic year is foreshadowed. In the same time, it is important to ensure a high quality of all online activities as well as increased creativity and intercommunication.

For the second sub-hypothesis related with a residential environment variable, we concluded that there are no significant differences between rural and urban regarding the university students perceptions of the capability of the faculty to sustain all the online activities for the first wave (U=56828, Z=-1.018, p=0.309). For the second wave, we find that it was a significant difference between rural and urban (U=25013, Z=-1.761, p=0.05): the students from the urban area were less confident in faculty capabilities to sustain all the online activities.

4.4. Online communication process with teachers /tutors or colleagues.

The communication process with all the teachers was a key factor for a qualitative academic performance, fact which is more important for students being in their final years of study: preparation of the seminar interventions, provision with bibliographic materials in the conditions of libraries closures etc. We presumed that the *year of study* and *specializations* can be that variables who can impose differences in intensity of online academic communications. In this case, we tested the following hypothesis:

H4. *There are significant differences in the intensity of communications between professors/tutors and university students according to the year of study and specializations.*

In this case, we applied a Chi-Square Test for Association to see that the intensity of communication was different by year of study. For the first wave, we concluded that there are significant differences (Chi Square=28.68, df=6, p=0.000): the university students from the second year of study were the most active in academic communication. For the second wave, the significant differences were not preserved (Chi Square=10.58, df=6, p=0.102) even if the students in the final years increased significantly in the intensity and periodicity of communication. However, the general level increased relatively balanced for all years of study.

In the same time, we observed significant differences in intensity of communications between professors/ tutors and university students by specializations. For the first wave (Chi Square=84, df=15, p=0.000) we observed higher rates for specializations like Human Resources, Communications and Public Relations, Political Sciences. For the second wave, the significant differences have been preserved (Chi Square=68.86, df=15, p=0.000) with a significant increase for the Social Work, Philosophy and Sociology specializations.

4.5. The main online activities initiated by undergaduates during the pandemic for academic formation.

We detailed our analysis just for the second wave of research due to normal and significant increase of the personal documentation research or online academic activities.
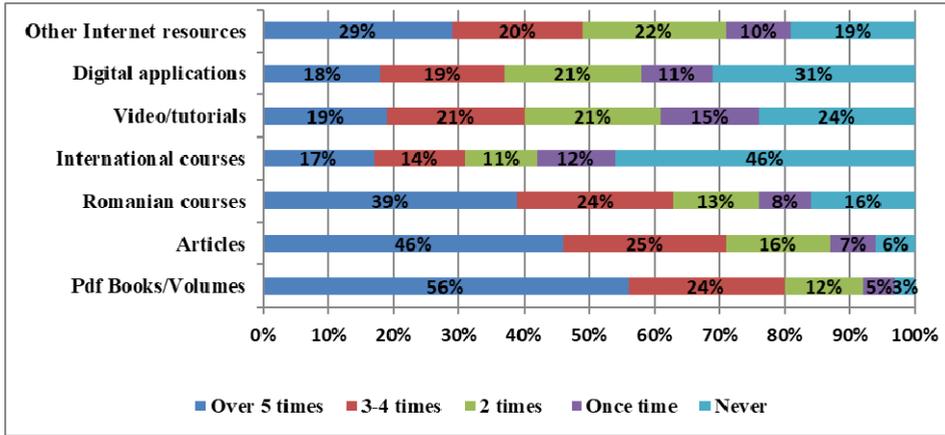

Figure 1 Main strategies for academic documentation

In fact, in a PCA analysis (KMO=0.774, p=0.000; two factors with Eigenvalues>1) we observed that all the practices stipulated in a previous graph are grouped in two main categories: printed/digital readable resources and other video or digital applications.
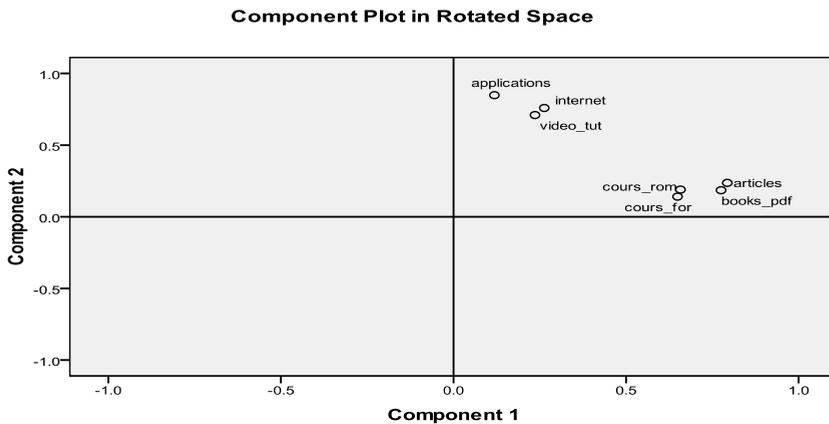

Figure 2 PCA analysis and spatial representations of the academic formative strategies

4.6. Constructing a statistical index of pandemic difficulties for comparative analysis within specific groups of the target population.

The construction of this statistical index was based on several seven specific variables of which we quote a few: (a). It was difficult for me to cover the subject at a distance, by consulting audio-video or written materials in electronic format; (b) After lifting all the restrictions, it will be difficult for me to readjust to face-to-face courses/seminars; (c) After lifting all the restrictions, I will be afraid to come to college/university because you work in the community etc. Reliability analysis was carried out on the perceived difficulties related to a pandemic situation comprising seven scale variables. Cronbach's alpha coefficient indicated acceptable reliability (α =0.763). After that we constructed the index named *Pandemiceffect* as a mean of summative values from all the cited variables and with descriptive values as follows:

Table 3. Descriptive statistic of Pandemiceffect Index

	N	Minimum	Maximum	Mean	Std. Deviation
Descriptive Statistics					
Pandemiceffect	491	1.00	5.00	3.0361	.84399
Valid N (listwise)	491				

From this table, we can observe the interval for this Index [1, 5] and Mean=3.03 points, and the higher the value of the index, the lower the negative influences of the pandemic. With this index we tested the following hypothesis:

H5. *There are significant differences in perceptions of negative influences of the pandemic by gender and residential environment.*

From data analysis we concluded that there are significant differences in perceptions of negative influences of the pandemic by gender of university students (mean rank for male=274.4; mean rank for female=227.72; U=10886.5, Z=-2.636, p=0.008): the perceptions of negative consequences are much more pronounced in the case of female university students. The sub-=hypothesis is confirmed.

In the case of the residential environment, we concluded that there are no significant differences in perceptions of the negative influences of pandemic (U=25733, Z=-1.114, p=0.265). This sub-hypothesis is not confirmed.

5. Conclusions

As we have seen, the recent debates about the impact of pandemic crisis on educational systems are becoming larger and more comprehensive. Many authors pointed out that the unexpected transfer of traditional face-to-face teaching activities to online environment involves profound structural changes to learning process. In this context, the worlwide academic community hears, reads and

analyzes various solutions proposed by international organizations and institutions for improving distance teaching or remote learning. Also, the discussions about the opportunity of blended learning are more accurate than ever, even though the debates on introducing technology on educational activities are decades old. Thus, the panel research proposed in this paper emphasizes the evolution of Faculty of Philosophy and Social-Political Science (Alexandru Ioan Cuza University of Iași) undegraduates opinions and perceptions about facing with pandemic context during almost an entire semester. The two-wave representative study is part of other empirical researches regarding the same topic, which were conducted during the spring of 2020 in major Romanian university centers like West University of Timișoara or Babeș-Bolyai University of Cluj-Napoca.

By using various digital platforms, online tools and resources, both teachers and students have tried to make this unprecented shift much smoothly, in order to adapt on the move, but rapidly teaching activities – courses and seminars. At the beginning of the pandemic period, the undergraduates were more concerned about their academic perspectives and their future educational outcomes. The university students sampled hadn`t a clear eyeview on how educational activities will be conducted, so the first month after the Romanian Emergency State Decree no. 195 was mostly characterized by uncertainity. Hower, the Faculty of Philosophy and Social-Political Science has adapted very quickly to the new pandemic context, fact which was reflected by our statistical analysis. In this context, we presumed that the online educational activities which have been constantly carried out, following the allready established pre-pandemic academic schedule, were not so much affected in terms of time spent for learning by undergraduates, being also quite similiar compared with prior period. Additionally, we concluded that certain adjustments are still required to ensure high quality online educational activitities, in order to encourage creativity and intercommunication on a larger scale. Another conclusion of our study stressed out that the level of communication and interaction process between students and teachers has slightly increased over time.

All the results presented in this paper are describing an overall image regarding the undergraduates perceptions about the impact of pandemic on learning process. However, behind the factual data are still remaining many reasons, thoughts and motivations to analyze much deeper, in a comprehensive manner. In this regard, we have in plan to conduct a qualitative sociological study on university students, which aims to reveal in-depth their educational experiences during pandemic period.

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