

# Students' Perception Regarding the Development of E-learning Activities in Higher Education

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## Abstract

*In this article we present a descriptive analysis based on the results of a research conducted regarding the e-learning process in higher education institutions. The aim of the study was to reveal students' perceptions of the distance learning process, to determine the influencing factors and to examine the potential and perspectives of this form of education for students and its use in order to improve the quality and accessibility of education.*

**Key words:** E-learning, universities, perceptions

**J.E.L classification:** A22

## 1. Introduction

In 2020, with the growing number of cases leading to the COVID-19 pandemic, the global education system has been disrupted, with the impact of imposing restrictions such as quarantine and social distancing measures, along with the closure of educational institutions, as an urgent imperative to slow down the spread of outbreaks. Higher education worldwide has been forced to transition to non-traditional learning environments, namely online learning and teaching (Pelikan et al., 2021).

Conducting remote education at all levels was a significant organizational and academic challenge; however, at the same time it was an opportune time to research distance learning as a form of education, evaluation of its specific tools and the optimization of practices in the field, as well as its social, economic, psychological determinants, to name a few (Zajdel et al., 2021).

An analysis of the results of the research conducted allows us to fill the research gaps in assessing the possibility of using distance learning in the future and in assessing the usefulness of this form of education both in the context of the type of classes (e.g. course, seminars, laboratories, etc.) and different types of educational institutions (schools, colleges, universities). An important aspect of this research was the evaluation of the form in which classes were conducted among teachers and the assessment of their capabilities and competences in operating and using digital tools for educational purposes. The period of the pandemic and the implementation of education with the use of distance learning emphasised the need to revise the systems for improving the qualifications of teaching staff in many countries, including Romania, and indicated the need to develop or improve digital teaching tools.

## 2. Literature review

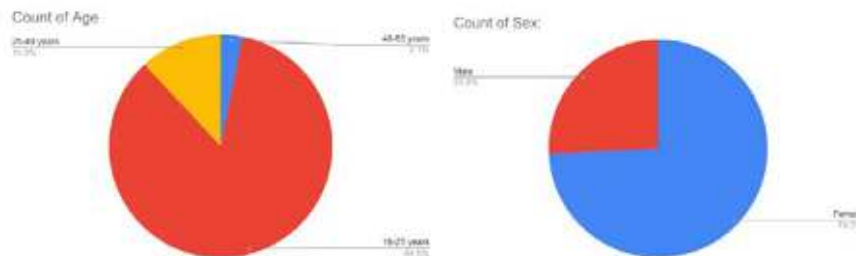
Online involves “learning that is mediated by the Internet” and is a form or subset of remote education, opposed to in-person learning (Rapanta et al., 2020, p. 2 in Agyeiwaah et al., 2021) that applies a vast set of technology applications and learning processes; it is commonly acknowledged as e-learning, web-based training, virtual learning, or net-based learning or cyberlearning (Urdan & Weggen, 2000 in Agyeiwaah et al., 2021). According to Gomezelj & Civre (2012) in this type of educational process, “teachers and students participate in educational activities, accessing virtual classroom platforms from different places and at different times through an internet connection”. A

statement made by the same authors indicate that many researchers highlighted the benefits of online learning, mentioning flexibility as well as being focused on a student-centered approach. Particularly, in higher education, online learning explores the development of metacognitive, reflective and collaborative learning among students (Campbell, 2004 in Agyeiwaah et al., 2021). Yet, online learning can be perturbed by many factors such as technical difficulties(for example poor internet connection or inadequate hardware and software), ease of use which can include aspects such as lack of technical expertise, insufficient learner orientation(Keengwe &Kidd, 2010 in Agyeiwaah et al., 2021). or psychological factors(lack of motivation, focus during courses).

### 3. Research methodology

The research took place during October 2021, and was conducted in the form of an online questionnaire designed through the Google Forms platform, which was distributed through two main social networks, Facebook and Whatsapp, being addressed to people over 18 years of age, students of higher education institutions. Following data collection, 159 answers were obtained, the vast majority belonging to the students of the Faculty of Economic Sciences within the "Ovidius" University of Constanta. Regarding the age distribution of the respondents, the majority were those aged 18-25 years (84.9%) , followed by the age category 25-40 years (11.9%) and a last category was taken into account, that of respondents aged 40-65 years (3.1%). The questionnaire was completed mainly by females (74.2%), male respondents representing 25.8% of the sample.

Figure no. 1. Demographic data regarding the age and sex of the respondents

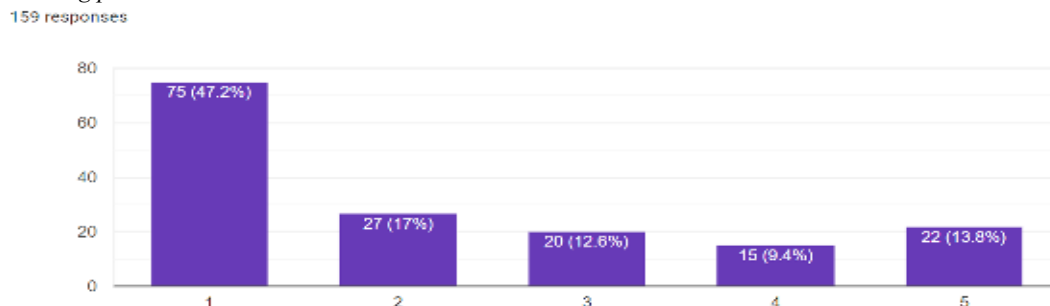


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### 4. Results

In the present study we tried to identify the students' perceptions regarding the development of online teaching activities in higher education, taking into account different aspects that could have created difficulties in the learning process. The questionnaire posed a series of questions in order to highlight the issues mentioned, asking respondents to specify their degree of agreement or disagreement, using linear scaling methods (1 being not at all, and 5, to a very large extent). The averages of the results obtained are illustrated in the figures below.

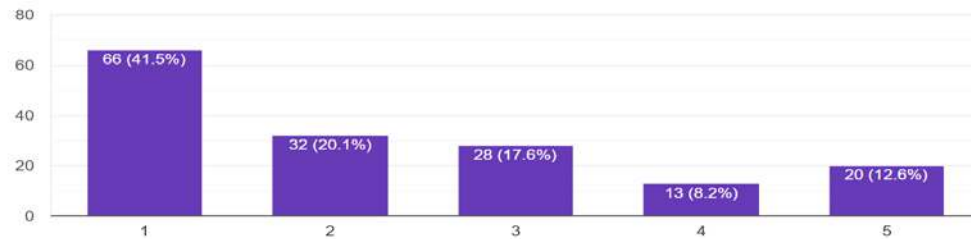
Figure no. 2. The extent to which students' insufficient level of digital skills created difficulties in the e-learning process



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Figure no. 3. The extent to which teachers' insufficient level of digital skills created difficulties for students in the e-learning process

159 responses

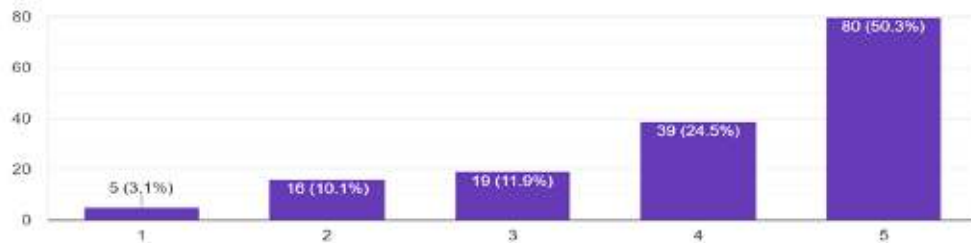


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The first two questions in the research itself (except for the demographic ones) concerned the extent to which the insufficient level of digital skills of students (Fig. 2) and teachers (Fig. 3) hindered the e-learning process. Over 47% of students responded that the insufficient level of their digital skills has not created any learning difficulties for them, while 13.8% affirm that this factor has made the e-learning process very difficult for them (to a very large extent). Also, 41.5% of the respondents claim that the insufficient level of digital skills of the teachers did not create difficulties in the online learning process, while 12.6% answered that this factor created difficulties for them in a great measure.

Figure no. 4. Evaluation of e-learning activities according to the degree of interactivity of courses and seminar

159 responses

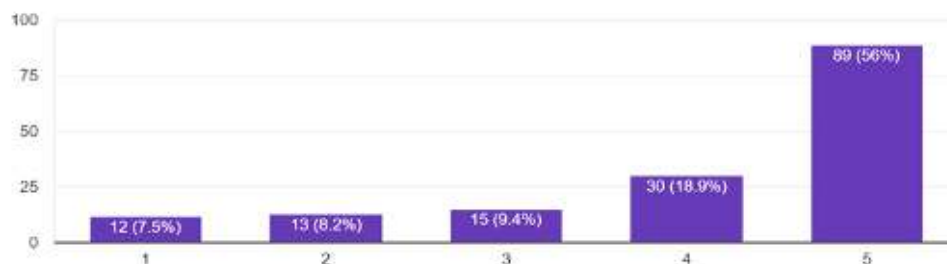


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Regarding the interactivity of courses and seminars (Figure 4), the results were satisfying, a little over half of the respondents considering the e-learning activities undertaken very interactive, while a very small percent (3.1%) categorizing them as not interactive at all. The degree of satisfaction among students regarding online teaching activities was high as well, 56% of the respondents declaring that they were very pleased, while only 7.5% stated that they were not pleased at all (Figure 5.)

Figure no. 5. The degree of satisfaction regarding the online teaching activities

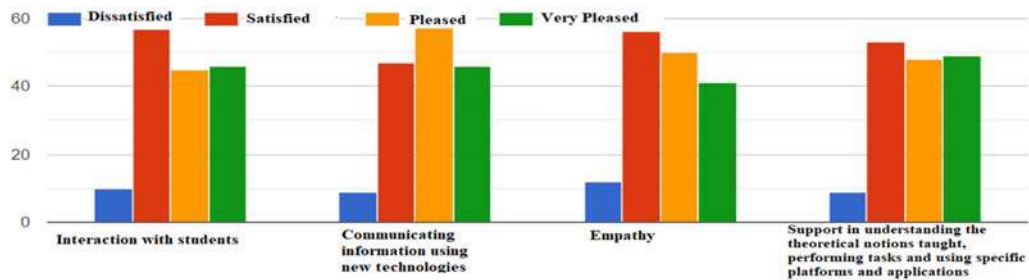
159 responses



Source: Processed by authors

As to dynamics of teacher-student relationship in the online environment, the results were the following: most students (58 respondents) declared that they were only satisfied with the degree of interaction between them and their teachers in the online learning process, 57 respondents stated that they were pleased with the way teacher used new technologies for communication purposes, and a majority said that the empathy displayed by teachers and their support offered in understanding theoretical notions that were taught in class, performing tasks and use of platforms and applications were at a satisfactoral level (Figure 6).

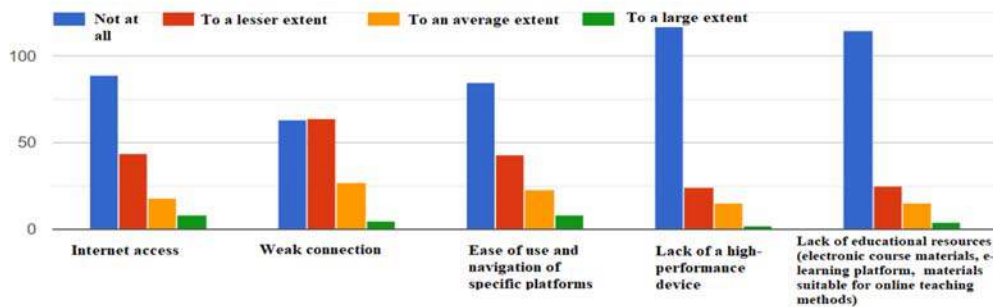
Figure no. 6. Degree of satisfaction regarding the dynamics of the teacher-student relationship in the online environment



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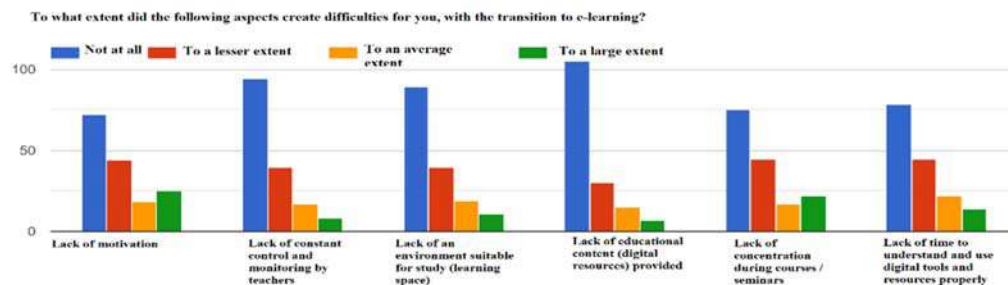
The technical difficulties encountered by students in the development of e-learning were minimal, the vast majority benefiting from internet access, connection, educational resources and the ability to easily navigate specific platforms (Figure 7). In the process of transition to e-learning, the main difficulties reported were lack of motivation and lack of concentration during courses / seminars (Figure 8).

Figure no. 7. The extent to which technical problems have created difficulties for students during their online teaching activity



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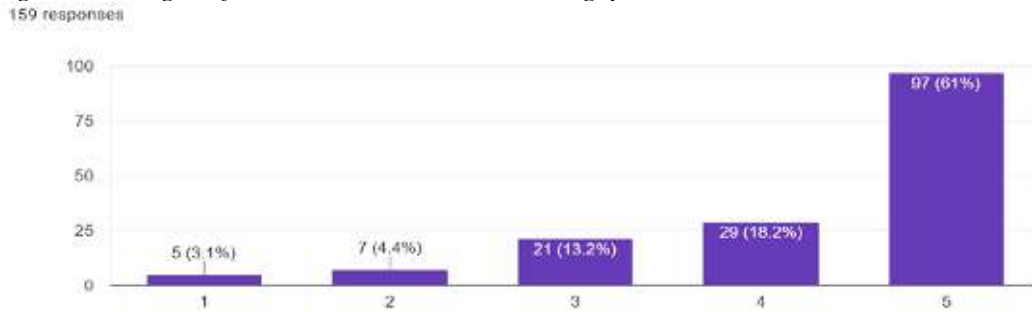
Figure no. 8. Aspects which created difficulties in the online learning process among students



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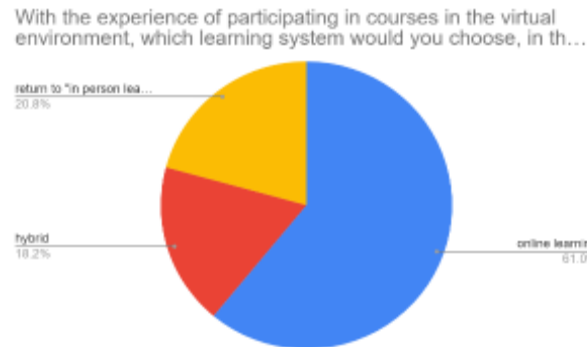
In Figures 9 and 10, we notice that a majority students have become familiarised(accomodated) with the online learning system and would choose e-learning as an option to continue their studies in this format, with a percentage of 61%.

Figure no. 9. Degree of accommodation with the e-learning system



Source: Processed by authors

Figure no. 10. Students` preferences of teaching forms(online, hybrid, in person)

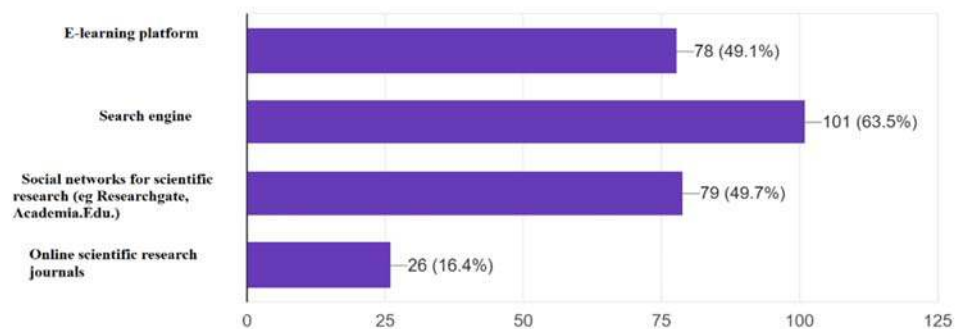


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Figure no. 11. Online channels frequently used for informational purposes

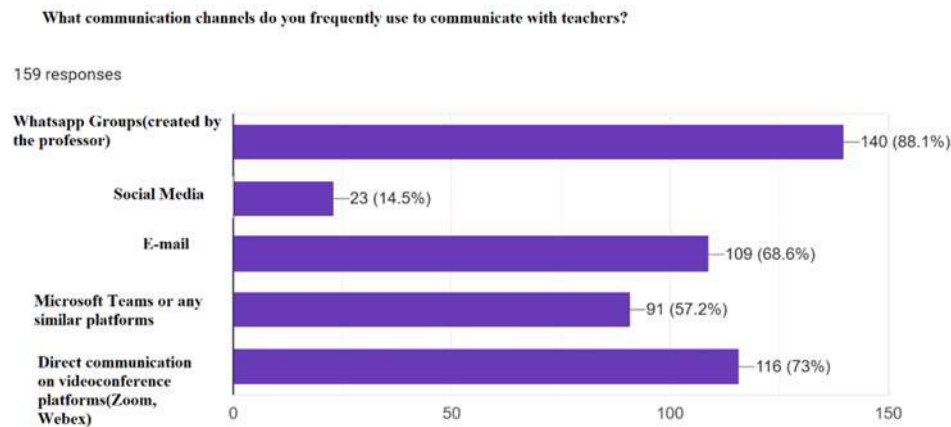
Which of the following online channels do you use frequently for informational purposes?

159 responses



Source: Processed by authors

Figure no. 12. Frequently used communication channels



Source: Processed by authors

Among the most frequently used channels by students, search engines were the most commonly used for informational purposes, followed by the e-learning platform, and WhatsApp groups created by teachers and videoconferencing platforms were nominated as being the main means of communication with teachers (Figures 11 and 12).

## 5. Conclusions, limitations and future research

This analysis contributes both to the development of the theoretical framework, as well as identifying future managerial implications concerning remote teaching, allowing to fill the research gaps in terms of evaluating e-learning, assessing its usefulness and prospects for its future use. Important aspects of this research were factors that influenced the students' e-learning process, taking into account variables such as the way the courses were conducted, the evaluation of both teachers' and students' abilities and competencies, the operation and use of digital tools for educational, informational and communication purposes. Higher educational institutions have been significantly impacted by the COVID-19 sanitary crisis, forcing schools and university personnel to face new challenges, to adapt to a new form of teaching and using new technologies, therefore continuous research in this field must be conducted, in order to improve and manage students' performance and satisfaction in the remote learning process.

Overall, the results of this study concerning students' perceptions about e-learning were favorable, most answers indicating a satisfactory level regarding the determinants of the dynamic between teachers and students; courses and seminars were deemed interactive by a majority of the respondents and it is noteworthy that most respondents affirmed that they have become highly accommodated with the e-learning system and would prefer it, rather than returning to in-person learning.

Technical difficulties were not an impediment for most students in the transition to e-learning; however, we must take into consideration other types of difficulties encountered, such as lack of motivation and concentration during courses.

The limitations of this study worth acknowledging are the defined number of attributes, which can be expanded and included in future studies for further predictions in terms of online learning; demographic variables such as the age of the respondents, who were predominantly in the youthful sector, is also a factor that could have influenced the study. Also, the sample consisted almost exclusively of students from the Faculty of Economic Sciences from the „Ovidius” University, located in Constanța, hence, views of the students may differ from those of others from other universities or faculties in other parts of the country and of course, from different countries.

## 6. References

- Agyeiwaah, E.; Baiden, F.B; Gamor, E.;Hsu, F-C, 2021. Determining the attributes that influence students' online learning satisfaction during COVID-19 pandemic. *Journal of Hospitality, Leisure, Sport & Tourism Education*, <https://doi.org/10.1016/j.jhlste.2021.100364>;
- Campbell, L., 2004. *What does the "e" stand for*. Melbourne: Department of Science and Mathematics Education. The University of Melbourne.
- Gomezelj, D., & Civre, Z., 2012. Tourism graduate students' satisfaction with online learning. *Turizam: Međunarodni Znanstveno-Stručni Casopis*, ~ 60(2), 159–174.
- Keengwe, J., & Kidd, T. T., 2010. Towards best practices in online learning and teaching in higher education. *MERLOT Journal of Online Learning and Teaching*, 6(2), 533–541.
- Pelikan ER, Korlat S, Reiter J, Holzer J, Mayerhofer M, Schober B, et al., 2021. Distance learning in higher education during COVID-19: The role of basic psychological needs and intrinsic motivation for persistence and procrastination—a multi-country study. *PLoS ONE* 16(10): e0257346. <https://doi.org/10.1371/journal.pone.0257346>;
- Rapanta, C., Botturi, L., Goodyear, P., Guardia, L., & Koole, M., 2020. Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3), 923–945.
- Urdan, T. A., & Weggen, C. C., 2000.,, *Corporate elearning: Exploring a new frontier*". New York: WR Hambrecht & Co.
- Zajdel, M.; Michalcewicz-Kaniowska, M.; Modrzyński, P.; Komarnicka, A.; Modrzyńska, J., 2021. Conditions and Determinants of Distance Education for Students during the COVID-19 Pandemic—Evaluation in the Kuyavia-Pomerania Region in Poland. *Sustainability* 2021, 13, 10373. <https://doi.org/10.3390/su131810373>