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E-Learning vs. Face-To-Face Learning: Analyzing Students' Preferences and Behaviors

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Abstract: Educational life worldwide has been shaken by the closure of schools due to the outbreak of the coronavirus pandemic. The ripple effects have been felt in the way both teachers and students have adapted to the constraints imposed by the new online form of education. The present study focuses exclusively on the beneficiaries of the educational process and aims to find out their perceptions of face-to-face and e-learning and their desire to return, or not, to the traditional form of education. These perceptions are represented by 604 students of the Politehnica University of Timisoara, who were asked to respond anonymously to an 8-question questionnaire between December 2020 and February 2021. The results show the respondents' levels of desire to return to school (especially of those who have only benefited from e-learning) and their degree of involvement during online classes. The results also specify the advantages and disadvantages of the two forms of education from a double perspective, namely that of first-year students (beneficiaries of e-learning exclusively), and of upper-year students (beneficiaries of both face-to-face and e-learning). The study points out key information about e-learning from the students' perspectives, which should be considered to understand the ongoing changes of the educational process and to solve its specific problems, thus ensuring its sustainability.

Keywords: e-learning; face-to-face learning; advantages; disadvantages; higher education; students; preferences; behaviors; COVID-19 pandemic

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1. Introduction

The most important challenge for the global education system in the last century was posed at the end of 2019 by the outbreak of the new coronavirus pandemic. No less than 1.6 billion people involved in the education system in over 190 countries and covering all continents of the world have suffered from the closure of schools, the entire shutdown process happening by May 2020 [1]. The main ally to protect all those involved in the education system—also offering the possibility of an alternative didactic process—turned out to be technology. It was the answer coming from some generalized and dominant public policies that wanted to be resilient and ready to offer an alternative to face-to-face learning. As such, the Internet became the main tool used.

During the COVID-19 pandemic, e-learning has turned into an important alternative for reforming the entire traditional education system. Both teachers and students have had to change their behaviors, their teaching/learning style, assessment methods, and so forth. This reform has brought about several benefits, but has caused tensions and frustrations among both the beneficiaries of the teaching act and the educational actors. E-learning has shown that it is necessary to model the behaviors of all parties involved. In order to streamline the educational process, especially the one carried out in the university environment, creative and constructive interventions are required. These would solve specific problems and could lead to ensuring the sustainability of education.

At this point, some questions arise. If we managed to replace face-to-face learning with e-learning in a short period of time, will things return to normal at a certain moment or not? Have the benefits of e-learning been identified that will lead to innovation in education? What are the disadvantages of this form of education compared to the face-to-face one?

Although e-learning has become a topic of discussion in the late 1990s, only now, during the 2020 pandemic, it seems that the world has focused almost entirely on e-learning for a longer or shorter period of time, adapting and re-adapting to the new reality. More and more studies [2–11] have begun to emerge in this field of research, as it has become increasingly exploratory and fertile for worldwide researchers.

The preference for and/or the necessity of e-learning has brought into question the dichotomy between this form of education and the face-to-face one. The first is defined by the specialized literature as "those specific teaching activities and information transfer mediated by electronic and digital platforms facilitated by the Internet" [12]. E-learning is part of a broader concept, namely distance education [13]. Face-to-face learning, on the other hand, is "an instructional method where course content and learning material are taught in person to a group of students", and is considered to be the most traditional type of learning instruction [14].

The dichotomy of e-learning vs. face-to-face learning and all that it entails has been given the attention of researchers for a while. Experts in the fields of education and technology have studied this topic from various perspectives, such as the differences between e-learning and face-to-face learning [15,16], the advantages and disadvantages of one over the other [17–25], students' attitudes towards one form and/or the other, their emotions, whether positive or negative, and their sense of belonging [26–32], to mention just a few. For example, Oye et al. [15] point out that e-learning is more student-centered, compared to face-to-face learning, which is more teacher-centered, as it does not focus exclusively on instructions and guidelines coming from teachers, but it is individually adjustable to the student. The difference between e-learning and face-to-face learning has also been pointed out in relation to the main sources of information, as well as the evaluation and quality of learning [16]. Whereas in face-to-face learning, students are evaluated exclusively by teachers, who represent their main source of information, and the quality of learning is strongly dependent on them, in e-learning, students' evaluations can be carried out using tools, they can access information from various documents uploaded onto the platforms, and the quality of learning is strongly dependent on both the teachers' level of digital training and their teaching style.

Most of the studies carried out in the field focus on the advantages and disadvantages of e-learning vs. face-to-face learning [17–25]. Naved et al. [17] argue that, unlike face-to-face learning, e-learning has its advantages, such as flexibility, no need to travel to school, and a low cost, requiring only an Internet connection. However, this does not mean that e-learning does not have its shortcomings, such as inequities in accessing technology or learning computer skills, or even a lack of physical space for this teaching/learning process [18]. E-learning is dependent on technology, the Internet, and various devices that not all potential beneficiaries can access [19]. Students' experience of quality learning is not only related to the teachers' skills and abilities to capture attention during the e-learning process but also to their own training, characteristics, and digital skills [20]. In e-learning, physical space should foster involvement in interpersonal relationships, thus encouraging didactic communication [21]. In addition, some studies show that e-learning does not have the same impact as face-to-face learning [22]. It seems that online students may lose their focus and miss deadlines for different tasks. Over time, both teachers and students may experience various negative effects from e-leaning, such as sight problems (due to long periods in front of the screen) or back pain, and, at the same time, they may feel the lack of activities in open spaces [23].

Other studies have highlighted results that do not favor one type of education over another but show a preference for combining them. Alsaaty et al. [24] point out that a large percentage of students in the sample analyzed in their study have assimilated information

more from face-to-face learning than from e-learning. However, they have positively perceived their experience in e-learning, even though, at first, they encountered difficulties related to usage [24]. The American researcher Michael Tagoe [25] has concluded that students prefer blended courses that combine online activities with face-to-face ones.

Another researched topic in the field of e-learning and/or face-to-face learning has been the students' attitudes and emotional states. Some studies describe students as being less satisfied with e-learning and preferring classic face-to-face courses [26]. The students accustomed to face-to-face learning and who subsequently enrolled in an online platform have developed high levels of negative emotions, such as fear, anger, or helplessness [27]. On the other hand, some studies show the students' preferences for e-learning, especially those of introverts, who may feel shy and lack confidence, of those who have learning challenges, of those who find public speaking a burden, as well as of those who are reluctant to speak in class [28]. It seems that some communities of e-learning students develop feelings of belonging and connections with other colleagues, which could gradually become a resource for knowledge and for the development of various fields of study [29]. Thus, despite the fact that the presence of students on online platforms can be quite difficult to perceive, the sense of belonging of the communities studying in online education is an important factor in the learning process [30].

Moreover, the researchers at the University of Jordan have conducted a study using an analysis grid called the Technology Acceptance Model, focusing on the perception of e-learning integration and implementation. They have shown that the e-learning experience was useful and easy to use, the subjects indicating that they understood the information and that their navigation effort was minimal [31]. Among the main important functions of the platforms used by the subjects, the forums are the most preferred because they allow communication between students and teachers in an asynchronous way. Another preferred function is the chats, as these allow real-time exchanges of messages and content between users [32].

During the past year, the researchers have focused their attention on the pandemic and its effects on education, the teaching process, and its participants. Some studies [33–37] refer to the current situation in education as "emergency remote teaching". It is described as an interchangeable and interim option between face-to-face and e-learning caused by natural disasters or situations that require distancing [38]. It is meant to exclusively provide a temporary solution that does not fully benefit from institutional support and in which students have no choice. However, emergency remote teaching does not seem to appropriately describe the situation of most universities in the world. E-learning, instead, is more appropriate, due to its particular features; it uses the dedicated platforms of universities, the professors are trained, the assessments follow a certain pattern, and the pedagogical activities adapt to this form of education [38].

With the mass transition to online education, many studies [2–11] have looked at the concept of e-learning. A large-scale study [2], involving no less than 424 universities around the world affected by the pandemic, shows that for areas and sub-domains, such as research, exchanges of experience between universities, scientific conferences, and, of course, the education process, there is a single solution, namely the adaptation of the whole process to the online environment. Seven important aspects have been identified that underlie the process of e-learning and that play an important role in optimizing it in special circumstances, such as the one created by the COVID-19 pandemic. These aspects involve the following:

1. The management and development of the Internet infrastructure to avoid disconnections
2. The use of familiar and friendly tools that help students understand and assimilate information
3. The provision of reliable and interactive electronic resources
4. The use of social networks to create communities for students so that the degree of isolation is as low as possible
5. The use of various interactive methods, such as debates or discovery-based learning

6. The provision of services to help students and teachers learn about the latest policies announced by the university and the authorities
7. The encouragement of collaboration between institutions [2].

The abundant development of this field of study has been generated by the reality of the health crisis. Within this crisis context, it seems that e-learning has more of a role in protecting the health of those engaged in the educational process. It also involves the development of opportunities and alternatives to be explored in higher education [3]. Despite the studies pointing out the benefits of the "rediscovered" e-learning [17,29,31], several studies [3–6,18] show that there are many disadvantages to this form of education. The pandemic education system is under unprecedented stress and is facing real risks [3]. Limiting social interaction produces and maintains negative emotions, reducing well-being at large [4,18]. In a report, the Organization for Economic Co-operation and Development draws attention to the emotional health of students in its efforts to promote e-learning [3]. Technology can ultimately be a tool, but it cannot replace face-to-face interactions [4]. In face-to-face learning, both teachers and students could use different intonations, facial expressions, body language expressions, and other elements to transmit all kinds of emotions or feedback. Obviously, through different platforms, such as Zoom, Webex, or Google Meet, these types of interactions are limited and produce different forms of alienation. Thus, it has been observed that both teachers and students initially felt emotions such as anxiety or even panic when they had to use online platforms. Sari and Nayir [5] show that the people involved in the teaching process who were not prepared with various digital skills before the onset of the COVID-19 pandemic but had to move their activities online, had difficulty creating and developing the teaching/learning process. Another study highlights that these digital skills needed during the pandemic cannot be acquired quickly [6]. Considering all this, it can be said that the process to adapt to e-learning has been a rather tortuous one.

Romania was also affected by the COVID-19 pandemic in the first part of 2020. As a result, most universities had to move their teaching/learning activities to the online environment. Although there were platforms dedicated to students enrolled in various forms of e-learning, the universities had to deal with an unprecedented influx to move the entire education system online.

This topic has also captured Romanian researchers' attention, who have started investigating e-learning during the COVID-19 pandemic. They have focused on subjects such as the types of platforms used in the online education process [7], the teachers, students, and parents' opinions about e-learning [8,9], the students' perceptions of the ability to learn and assimilate information in the context of e-learning [10], and the students' behaviors during online classes [11].

Not many studies have been carried out on the advantages and disadvantages of e-learning seen from the perspective of the beneficiaries of this process, that is, the students. Nevertheless, the above-mentioned studies [7–11] have included questions trying to capture the advantages and disadvantages of this form of education. Thus, in the study "Sustainability Analysis of the E-Learning Education System during the Pandemic Period—COVID-19 in Romania" [9], although it has focused only to a small extent on university education, the following positive aspects of online education were identified among teachers: the ease of teaching online, the flexibility of the work schedule, the adaptability to broad learning styles, the variety of tools available at hand, and the ease in monitoring and documenting teaching activities. The surveyed students and parents consider the main advantages of the e-learning system the flexibility of working time, the comfort of working from home, as well as the variety of documentation sources. On the other hand, teachers consider that the biggest disadvantage of the online education system is the need to adapt the courses to the new teaching conditions, followed by the student assessment system, as well as students' low efficiency in the accumulation of new knowledge. Students' main dissatisfaction, in turn, is the lack of student/teacher interactions, the lack of socialization with colleagues, and the lower level of teaching quality.

As mentioned above, there is no known perspective of the beneficiaries of the training process, namely of the students, on the advantages and disadvantages of e-learning vs. face-to-face learning. An analysis of how they perceive these changes during the pandemic is necessary and useful to ensure the sustainability of the educational act. The present study aims to fill in this gap and focuses on the students and their perspectives. It carries out sociological research on a sample of students from the Politehnica University of Timisoara, an institution that has been, since 1998, a department dedicated to distance learning based on Moodle, the so-called "Virtual Campus". This e-learning platform facilitated the transition to online teaching during the COVID-19 pandemic and was used to continue the educational process for all undergraduate, graduate, and post-graduate programs. Through this platform, which has been constantly developed and updated to new technologies, and thanks to the previous experiences of teachers with the virtual educational environment, this transition to online education has been easier compared to those universities that have not worked with such tools before, and that adopted, in this crisis situation, an emergency education strategy. The present research highlights the students' preferred form of learning and their opinions on the advantages and disadvantages of the two forms of learning discussed so far.

2. Materials and Methods

The present research was carried out through a quantitative approach based on the sociological survey method. The data were collected between December 2020 and February 2021, and the subjects were selected students of the Politehnica University of Timișoara. The answers of 604 subjects in all years of study were recorded. Given that there is a total of approximately 13,000 students enrolled at the above-mentioned university, the calculated margin of error was $\pm 4\%$. Their average age, according to the recorded results, was 20.6 years old, and their distribution by gender showed a population distribution similar to that of the entire population of students enrolled at the Politehnica University of Timisoara (60% male, 40% female).

As the aim of the study was to identify whether there are differences in attitudes among the surveyed population towards face-to-face vs. e-learning, the sample was constructed taking into account only the respondents' year of study. The variables of gender and age were not observed, being considered less suitable for the aim of the research. The reasoning behind this was that since students, depending on their year of study, experienced different forms of education, they might have developed a different attitude towards the two forms mentioned above. The sample consisted of two, approximately equal groups of students. The first group was made up of the first-year students (301 people) and stands for the students who had access only to e-learning within the focused university. The second group comprised the second, third, and fourth-year students (303 people) who had mainly access to face-to-face learning in their previous years of study. These will be further on called the "e-learning group" and, respectively, the "face-to-face learning group".

The instrument used in collecting the data was an anonymous online questionnaire, which was posted on Isondaje.ro (an online survey service). This method was adopted due to the limitations of the face-to-face meetings imposed by the COVID-19 pandemic and because, in the case of the present research, the online survey variant was considered appropriate, as almost all the students of the Politehnica University of Timisoara, that is, the surveyed population, had access to the Internet and a mobile phone to fill in the questionnaire. At the end of the lectures, seminars, or laboratory activities, the students received from the teachers the link to the online questionnaire and the guidelines to fill in the answers. There was no obligation to complete the questionnaire for any of the students, the activity being voluntary. No incentives were used to obtain answers, and the students could stop filling in the questionnaire at any time. In order to respect anonymity and confidentiality, their email addresses were not collected. The direct benefit of the students' participation in the study was the opportunity to express their opinions on their expectations and their perspectives of e-learning and face-to-face learning. The

average time required to answer the questionnaire was 15 min, and the response rate was approximately 40%.

The questionnaire used was non-standardized, and its content was validated by following several steps, namely experts' evaluation (sociologists), qualitative pretesting, and quantitative pretesting. The questionnaire consisted of 8 questions (3 open-ended and 5 closed-ended questions), plus the factual questions, that is, the ones gathering the factual data of the respondents. The open-ended questions were used to record the advantages and disadvantages of e-learning as opposed to face-to-face learning. These types of questions seemed appropriate for the purpose of the present research, as they allow the interlocutors to freely express their own opinions. At the same time, no other studies on this topic had been identified that could have provided the research team with tools and results to help them achieve the proposed objectives. The answers to these open questions involved, in the analysis stage, their grouping and coding into general categories that would allow secondary analyses.

Most of the closed questions were of a scale type, with measurement intervals of 3, 5, or 10 steps, and aimed at identifying the preferred form of education (e-learning vs. face-to-face learning), the degree of involvement in online classes compared to that in face-to-face classes, and students' learning efforts for the two forms of education. At the end of the questionnaire, factual data regarding gender, age, and year of study were included. The data were analyzed using SPSS Statistics, a software package frequently used for statistical analysis.

The analysis focused on identifying the existing differences between the two samples of students: those that benefited exclusively from e-learning, on the one hand, and those that benefited mainly from face-to-face learning, on the other hand. It mainly aimed to answer the following research questions:

- What is the students' preferred form of learning, e-learning or face-to-face learning?
- What are the advantages and disadvantages of e-learning vs. face-to-face learning?
- What are the students' levels of engagement and learning efforts during e-learning vs. face-to-face learning?
- How much do students want to return to face-to-face learning after the end of the COVID-19 pandemic?
- What are the students' online learning behaviors?

3. Results

The first objective of this study was to identify the respondents' preferred form of learning. For this, a 10-point scale question was used, where 1 shows a preference for face-to-face learning and 10 a preference for e-learning, and a mean value of 4.77 was thus recorded. The distribution of the answers is shown in the graph below (Figure 1).

As can be seen in Figure 1, the highest percentage was recorded for face-to-face learning (27.2%), being followed by the preference for e-learning (13.9%), and by those who chose 5, placing themselves in the middle of the scale (13.2%). It can be noticed that the answers are distributed unequally, meaning that the preference for face-to-face learning has a higher score on the scale as opposed to the others (by accumulating the percentages at points 1, 2, 3, 4, and 5, a total of 61.6% can be obtained, and by accumulating the percentages at points 6, 7, 8, 9, and 10, only a total of 38.4% can be achieved). This fact is also emphasized by the mean value, which is higher for face-to-face learning (5.13) compared to e-learning (4.41).

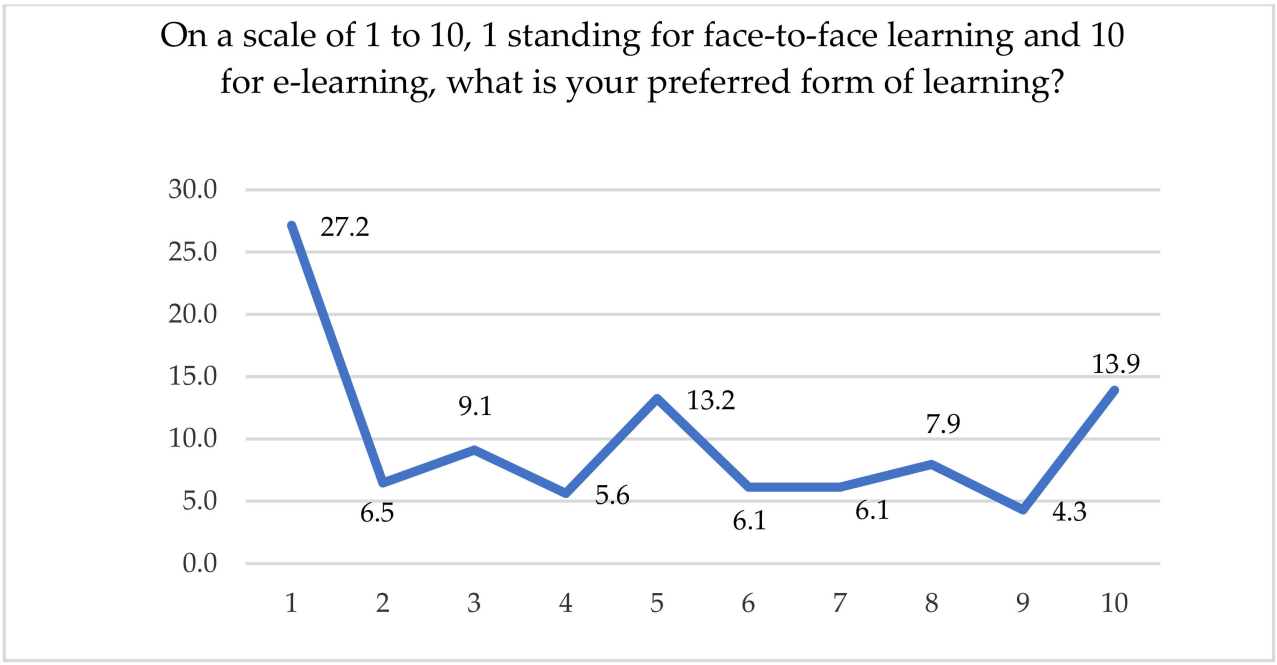

Figure 1. Students' preferred form of learning.

The comparison of the two groups has shown a slight difference between them, resulting from the fact that there was a higher preference for face-to-face learning expressed by the respondents who had access only to e-learning within the studied university (Table 1). The difference is significant from a statistical point of view and was obtained by using the *t*-test, thus, the t-value being 2.733 ($p < 0.01$). The table below (Table 1) presents the biggest differences between the two groups, which were recorded at points 8.2 and 5.

Table 1. Students' preferences for e-learning vs. face-to-face learning.

Point	E-Learning Group	Face-to-Face Group	Total Percentages
1	28.2%	26.1%	27.2%
2	9.3%	3.6%	6.5%
3	9.6%	8.6%	9.1%
4	6.0%	5.3%	5.6%
5	15.0%	11.6%	13.2%
6	6.0%	6.3%	6.1%
7	5.3%	6.9%	6.1%
8	4.0%	11.9%	7.9%
9	4.3%	4.3%	4.3%
10	12.3%	15.5%	13.9%
	100.0%	100.0%	100.0%

Another objective of this study was to determine the advantages of e-learning as opposed to face-to-face learning. As can be noticed in Figure 2, the main three advantages of e-learning, as pointed out by the respondents, are "time efficiency" (15.7%), "convenience" (14.7%), and "accessibility" (11.6%).

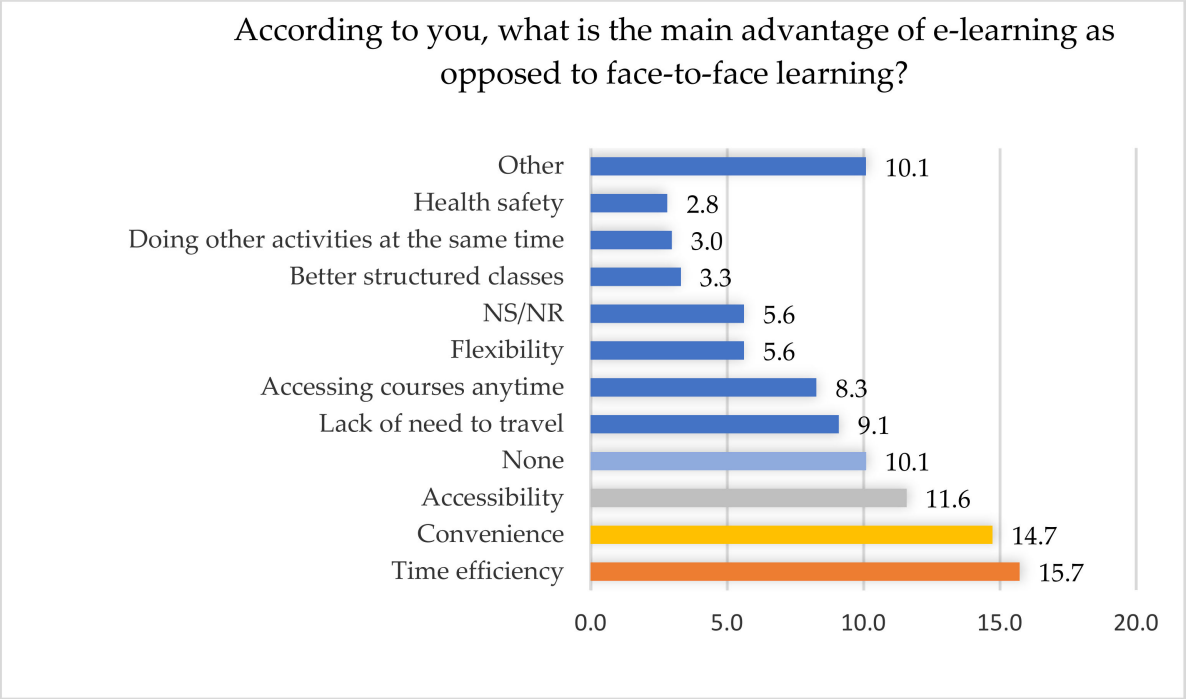

Figure 2. Advantages of e-learning vs. face-to-face learning.

Due to the fact that the answers are very similar, the category of those who saw the "lack of the need to travel" as important (9.1%) could be added to the first category of those who considered "time efficiency" as being an advantage. The respondents who stated that the courses could be accessed anytime (8.3%) could be added to those who believed that "accessibility" is an advantage.

This is also the case where, for some answers, slight differences have been recorded between the two groups of respondents (resulting from the contingency table), but they are not considered significant from a statistical point of view. As a trend, it can be seen that "time efficiency" obtained lower percentages in the case of the respondents who had access only to e-learning (13%) as compared to the respondents who also had access to face-to-face learning (18.5%). For convenience, the situation was reversed, the highest percentages being obtained for the respondents who had access only to e-learning (16.6% vs. 12.9%). "Accessibility" was chosen by 9.6% of the respondents in the first group and by 13.5% of the respondents in the second group.

As far as the disadvantages of e-learning vs. face-to-face learning are concerned, the first two categories of recorded answers are centered around the same idea, that of the lack of interaction. Therefore, 19.2% of the respondents believed that the "lack of interaction" was the main drawback of e-learning, supported by those who stated that they missed interacting with their peers (12.7%). A total of 9.6% of the respondents claimed that the technical problems encountered during the Internet connection were an important disadvantage, ranking in third place (Figure 3). Another answer that deserves to be taken into account is the "lack of practical applications" (8.8%), which could mean a huge problem for students undertaking technical studies, as far as their career's sustainable development is concerned. Figure 3 shows that the highest difference between the two groups was recorded for the "lack of interaction with peers" response. About 16.6% of the students who had access only to e-learning complained about this fact, while only 8.9% of the other respondents saw this as a disadvantage.

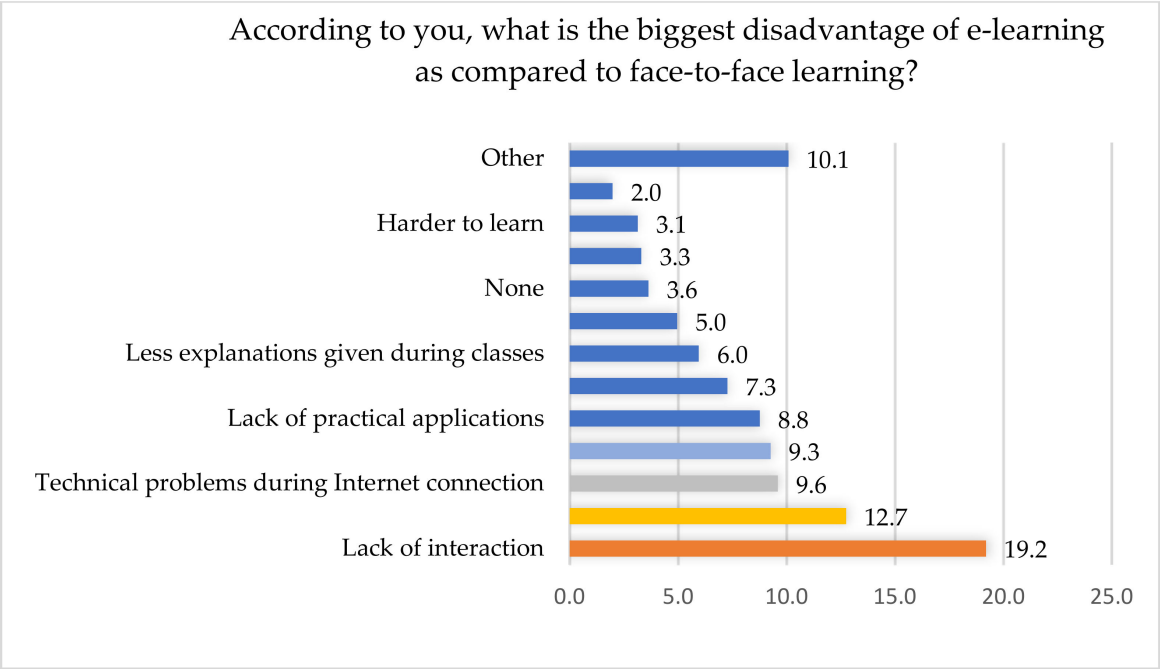

Figure 3. Disadvantages of e-learning vs. face-to-face learning.

The students' levels of engagement during the online classes in comparison with the face-to-face classes was another objective that the present study focused on. Based on the results shown in Figure 4, it can be stated that the level of engagement during e-learning is higher than during face-to-face learning. By comparing the two groups, a slight difference can be observed in that lower percentages were recorded for the levels of engagement during e-learning in the case of the students who had access only to e-learning within the university. In other words, the students who also had access to face-to-face learning believed that the level of engagement during e-learning was higher. From a statistical point of view, the difference is notable; t = −3.095 ($p < 0.02$) was obtained from the *t*-test.

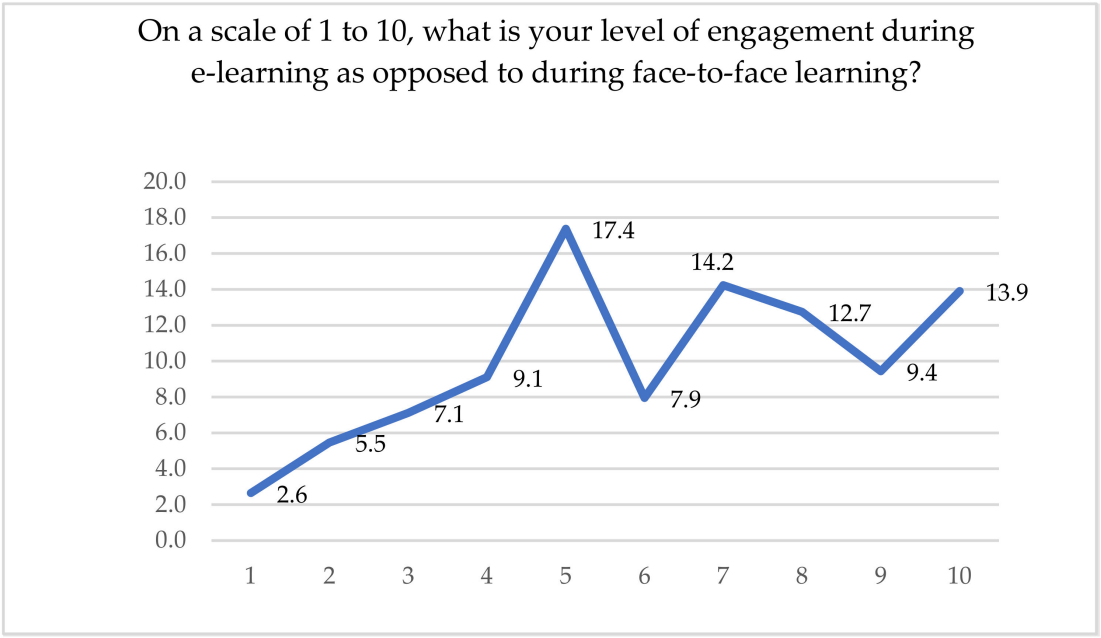

Figure 4. Students' levels of engagement during e-learning vs. face-to-face learning.

As for the learning effort during e-learning, it can be noticed that the distribution of the answers is relatively equal (Figure 5) between the respondents who considered that e-learning required a higher learning effort (31.1%) and those for whom the effort was lower (31.5%). The highest percentage was instead recorded for "the same as during face-to-face learning" (37.4%) response. No significant differences were recorded for this question between the two groups of respondents.

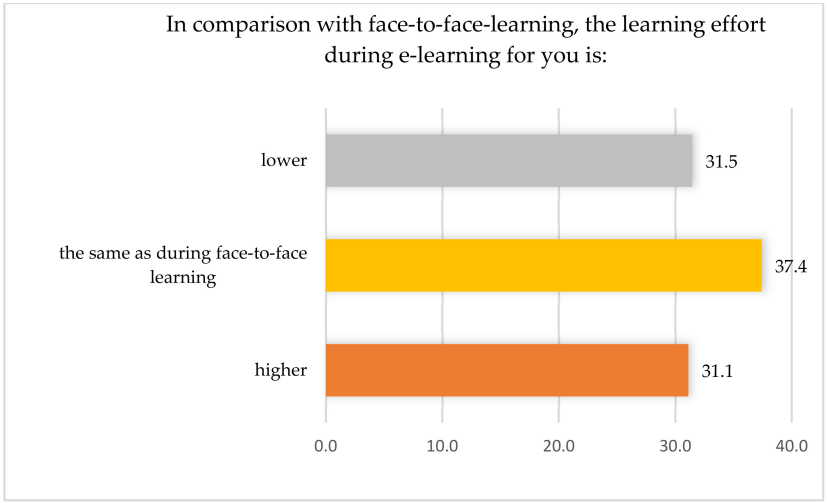

Figure 5. Students' learning efforts during e-learning vs. face-to-face learning.

More than half of the respondents asserted the fact that, after the end of the COVID-19 pandemic, they wanted to return to face-to-face learning (by accumulating the percentages recorded for "to a very large extent" and "to a large extent", a total of 61.4% was obtained). At the other end of the scale, the respondents who would like to return to face-to-face learning "to a very small extent" and "to a small extent" can be found with an accumulated total of 18.9%. The difference up to 100% stands for "to a moderate extent" response (19.7%). In this case, for the two compared groups of respondents, a significant difference was recorded from a statistical point of view ($t = -3.646$ ($p < 0.000$)). The obtained results show that the respondents who had access only to e-learning were more in favor of returning to face-to-face learning than the other respondents (Figure 6).

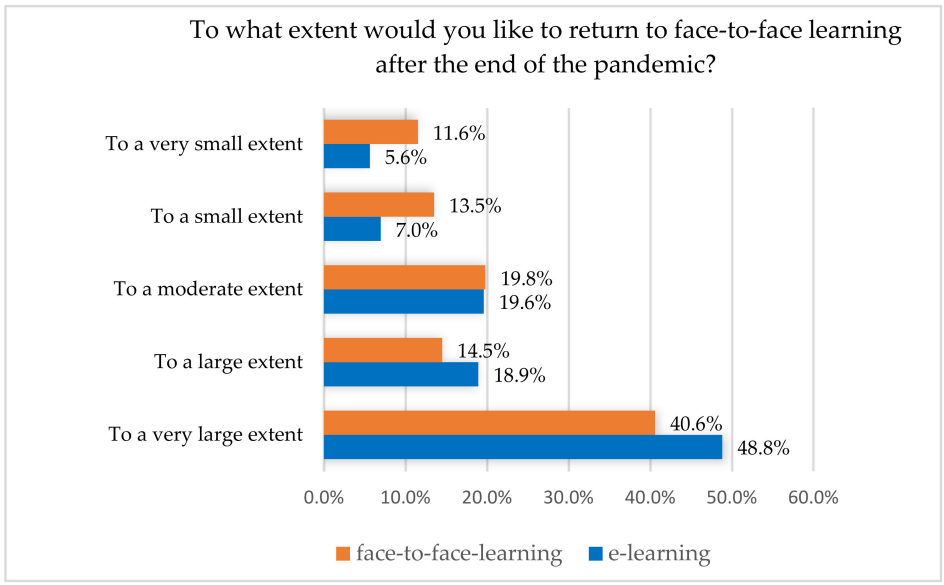

Figure 6. Students' preferences to return to face-to-face learning after the end of the pandemic.

In order to better grasp some of the students' behaviors during e-learning, a series of statements were posited. The respondents were asked to choose one of the five responses presented on a Likert scale. Almost half of the respondents (48.7%) claimed that they kept their device's camera turned off during the online classes "to a very large extent" (23.7%) and "to a large extent" (25%). A total of 30.6% stated that they kept their camera turned off "to a moderate extent", the difference of 20.7% being represented by the ones who chose "to a very small extent" (10.4%) and "to a small extent" (10.3%) responses.

Another question that the students were asked to answer was the extent to which they dressed appropriately for the online classes and whether it took them extra time to look decent as if the classes were taking place face-to-face (see Figure 7).

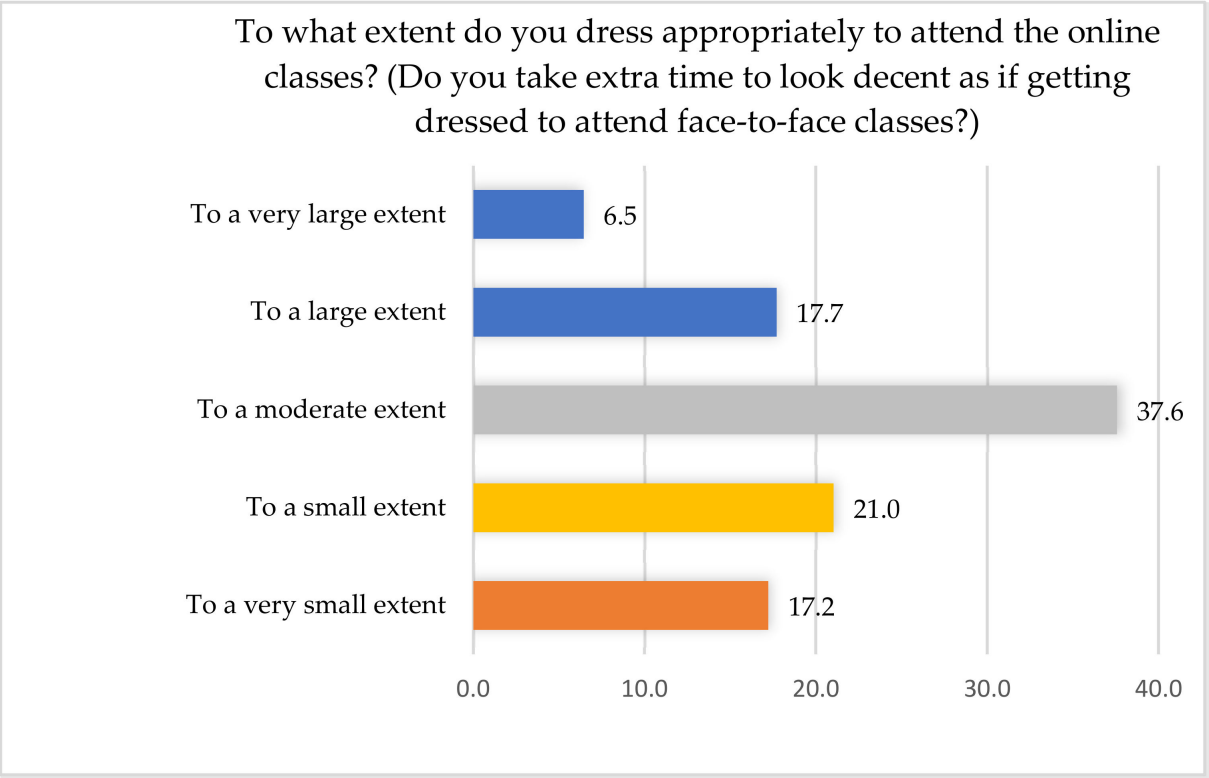

Figure 7. Students' dressing behaviors during online classes.

The distribution of the answers in the figure above show a differemce between the respondents who dressed appropriately ("to a very large extent" and "to a large extent" accumulated responses totaling 24.3%) and those who did not ("to a very small extent" and "to a small extent" accumulated responses totaling 38.2%).

4. Discussions and Conclusions

During the COVID-19 pandemic, both teachers and students had to adapt to the new social conditions and move to online education, which has become an important alternative to reforming the entire traditional education system. Given that the teachers' perspectives on e-learning during the pandemic have been presented by many studies [39–42], other researchers have stressed the importance of conducting studies that also take into account the perspective of the beneficiaries of education, that is, the students [43–45]. Therefore, the present research is part of this trend and tries to shed light on this niche in the Romanian educational space.

Within this context, the study focused on the students of the Politehnica University of Timisoara, aiming to identify their attitudes towards e-learning, capture the advantages and disadvantages of e-learning compared to face-to-face learning, the latter being subject to

steep and multiple changes in a relatively short period of time. The students' perspectives have been chosen, as they are the beneficiaries of the teaching act and can provide key information about this form of education, thus contributing to the sustainability of the educational process. In addition, this has not been studied nearly at all by specialists, hence the novelty of this study. The analysis has also focused on identifying the differences between two groups of subjects, the first formed by first-year students and representing the category of those who benefited exclusively from e-learning during their studies, and the second formed by upper-year students who benefited mainly from face-to-face learning during their two, three, or four years of study.

The results of the present research show that, among the studied population, there is a greater preference for face-to-face learning compared to e-learning. It should be noted that this preference is higher among those who benefited in their formation process only from e-learning and lower among those who benefited also from face-to-face learning. These results are further confirmed by the fact that more than half of the respondents stated that they wanted to return to the classic teaching format after the pandemic ends. As mentioned above, the desire is stronger among those who only benefited from e-learning during their studies.

E-learning, like any form of education, also has its own set of positive and negative aspects. Decoding and understanding them will help educational institutions to create strategies for more efficient delivery of educational content to the beneficiaries of this process.

Regarding the positive aspects of e-learning, the research has shown that students are particularly pragmatic, considering time-saving as the main advantage, closely followed by the comfort offered by staying home, as well as the accessibility provided by the online environment. The same positive results, such as the possibility to stay at home, the friendly environment at home, and the possibility to have access to online materials were observed in a study conducted with Polish medical students [46]. These advantages could help create courses that fit the needs of certain categories of students (those who work, who are unable to attend courses, who cannot afford to study in another city, etc.). In this way, students would be given the opportunity to complete educational tasks at their own pace, within a defined time horizon that would allow them to consider them deeply and critically.

As for the negative aspects, the main shortcoming of e-learning compared to face-to-face learning detected by the students of the present study was the lack of interaction, particularly the lack of socializing with their peers. It is important to know that interaction with peers is so important for students and that face-to-face learning cannot disappear completely, but it can eventually be complemented by e-learning. This perspective is also suggested by another study in the field [43], which supports the idea that socialization is basic for students both psychologically and in terms of carrying out common activities, such as projects. Another disadvantage that emerges from the present study is represented by the technical problems encountered in the connection. These two main disadvantages are reinforced by several studies conducted with students from other Romanian universities in the same pandemic context [3,4]. Moreover, a noteworthy disadvantage pointed out by the present research was the lack of practical applications, which proves once again that e-learning cannot be considered a long-term solution for all fields of study (e.g., engineering), some of which require face-to-face interaction in order to provide adequate practical knowledge. Similar disadvantages were also found in another study conducted with agriculture students in India, who considered the lack of Internet connection in rural areas and the lack of practical applications necessary for their field of study as serious impediments to their educational activity [47].

The present study also focused on the students' behavior of turning off the camera. This topic should probably be debated in relation to several aspects, such as the students' attention and their levels of involvement in class (with the camera being turned off, they can do whatever they want), the respect for the person with whom they interact (in this case, the teacher), and the online code of etiquette (e.g., decent clothing). Another study also conducted with the students of the Politehnica University of Timisoara [11] presented

the reasons why they do not want to turn on their cameras, namely anxiety, shyness, fear of exposure, and the privacy of the room in which they are. Although these reasons can be understood from a human point of view, from an educational perspective, the issue of fairness towards the other participants in the educational act and the effectiveness of the results of the didactic process could be raised. A debate at the university level would be required, which could lead to the obligation of turning on the camera during classes.

Another interesting topic worth highlighting is the set of answers received from the group studied on the levels of the students' involvement in online classes. Given the results (the group of older students believes that more involvement is needed in online classes than the other group that only benefited from e-learning), one might ask why e-learning seems to involve more of the respondents than face-to-face learning does. Other qualitative studies on the subject could clarify this issue and investigate whether it is related to the quality of face-to-face learning, which could be improved, or if it is just related to the transition from face-to-face learning to e-learning, which has put more pressure on those accustomed to learning in a different way.

To conclude, the present research establishes the premises for the implementation of future solutions regarding the didactic process, seen from a new perspective—that of the student. A complete return to face-to-face learning may no longer be entirely possible. Both students and teachers have already faced the advantages and disadvantages of e-learning. The question is, then, what will future education look like? Certainly, the pandemic has shown that there are other aspects of the teaching process that, in the past, could not even be imagined. As such, it is possible that the future will look totally different from an educational point of view and it will be time to move on to another level, that of blended learning. Blended learning, B-learning or BL, one of the newest pedagogical concepts of the 21st century, which combines face-to-face teaching with online teaching, thus creating a hybrid learning system, has been extensively studied by various researchers [48–54]. They have shown that this hybrid system offers the benefits of both education systems, some predicting that it could even be the "new normal" [55] in the education of the future. Following the disastrous pandemic experience, this "new normal" could be implemented in universities around the world. The university this research focused on and many other universities already have the necessary infrastructure and experience in the field, offering blended learning courses usually to people who cannot participate in face-to-face courses.

To summarize, one thing is certain, namely that face-to-face interaction cannot be excluded from the educational process. At the same time, there is no denying the fact that the benefits of e-learning, that is, accessibility, comfort, and time-saving, may become indispensable in people's future hectic daily lives.

5. Limitations of the Study

Although the present study offers some answers to several questions regarding the comparison of e-learning with face-to-face learning, it has a few limitations. It has mainly discussed only the perspectives of the students from the Politehnica University of Timisoara. Moreover, the sample is relatively small, and the respondents have a particular profile, coming from a single institution and geographical area. Starting with the results found, the research team aims to perform a series of qualitative analyses, leading to a better understanding of this phenomenon, and to expand the quantitative research and database by conducting and distributing a questionnaire to students throughout the country.

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References

1. Policy Brief Education during Covid-19 and Beyond.UN Report August 2020. Available online: https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf (accessed on 15 March 2021).
2. Huang, R.; Tlili, A.; Yang, J.; Chang, T.-W.; Wang, H.; Zhuang, R.; Liu, D. *Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in Covid-19 Outbreak*; Smart Learning Institute of Beijing Normal University: Beijing, China, 2020.
3. Education Responses to Covid-19: Embracing Digital Learning and Online Collaboration. Available online: https://read.oecd-ilibrary.org/view/?ref=120_120544-8ksud7oaj2&title=Education_responses_to_Covid19_Embracing_digital_learning_and_online_collaboration (accessed on 27 January 2021).
4. Miller, E.M. The COVID-19 Pandemic crisis: The loss and trauma event of our time. *J. Loss Trauma* **2020**, *25*, 560–572. [CrossRef]
5. Sarı, T.; Nayır, F. Challenges in distance education during the (Covid-19) pandemic period. *Qual. Res. Educ.* **2020**, *9*, 328–360. [CrossRef]
6. Deshmukh, S.R. Social Realities of Higher Education in the Age of Uncertainties. *Smart Moves J. IJELLH* **2020**, *8*, 279–289. [CrossRef]
7. Edelhauser, E.; Lupu-Dima, L. Is Romania Prepared for eLearning during the COVID-19 Pandemic? *Sustainability* **2020**, *12*, 5438. [CrossRef]
8. Obrad, C. Constraints and Consequences of Online Teaching. *Sustainability* **2020**, *12*, 6982. [CrossRef]
9. Ionescu, C.A.; Paschia, L.; Gudanescu Nicolau, N.L.; Stanescu, S.G.; Neacsu Stancescu, V.M.; Coman, M.D.; Uzlau, M.C. Sustainability Analysis of the E-Learning Education System during Pandemic Period—COVID-19 in Romania. *Sustainability* **2020**, *12*, 9030. [CrossRef]
10. Coman, C.; Țîru, L.G.; Meseșan-Schmitz, L.; Stanciu, C.; Bularca, M.C. Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability* **2020**, *12*, 10367. [CrossRef]
11. Gherheș, V.; Șimon, S.; Para, I. Analysing Students' Reasons for Keeping Their Webcams on or off during Online Classes. *Sustainability* **2021**, *13*, 3203. [CrossRef]
12. Gulbahar, Y.; E-ogrenme. Ankara: Pegem Akademi Yayinevi. 2012. Available online: https://www.pegem.net/kitabevi/51980-E-Ogrenme-kitabi.aspx (accessed on 10 March 2021).
13. Urdan, T.A.; Weggen, C.C. Corporate E-learning: Exploring a New Frontier. 2020. Available online: http://papers.cumincad.org/data/works/att/2c7d.content.pdf (accessed on 28 February 2021).
14. Face to Face Learning. Available online: https://tophat.com/glossary/f/face-to-face-learning/?fbclid=IwAR2qkc6UWW3AZW7MeYmBRIVOV4zcO5sfB5XSizz4Y1yASi86xTyCctQNot0 (accessed on 18 March 2021).
15. Oye, N.; Iahad, A. The Impact of E-Leaning on Students' Performance in Tertiary Institution. *Int. J. Comput. Netw.* 2012. Available online: https://www.semanticscholar.org/paper/The-impact-of-e-learning-on-students-performance-in-Oye-Iahad/3e20c2679208f216f20fd1f4eee4664c4df3af9f(accessed on 20 February 2021).
16. Nycz, M.; Cohen, E.B. The basics for understanding e-learning. In *Principles of Effective Online Teaching*; Buzzetto-More, N.A., Ed.; Informing Science Press: Santa Rosa, CA, USA, 2007; pp. 1–17.
17. Naveed, Q.N.; Muhammad, A.; Sanober, S.; Qureshi, M.R.N.; Shah, A. A mixed method study for investigating critical success factors (CSFs) of e-learning in Saudi Arabian universities. *Int. J. Adv. Comput. Sci. Appl.* **2017**, *8*, 171–178.
18. Beaunoyer, E.; Dupéré, S.; Guitton, M.J. COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Comput. Hum. Behav.* **2020**, *111*, 106424. [CrossRef]
19. Sadeghi, M.A. Shift from classroom to distance learning: Advantages and limitations. *Int. J. Res. Engl. Educ.* **2019**, *4*, 80–88. [CrossRef]
20. Haznedar, Ö.; Baran, B.; Eğitim Fakültesi Öğrencileri için e-Öğrenmeye Yönelik Genel bir Tutum Ölçeği Geliştirme Çalişmasi. Eğitim Teknolojisi Kuram ve Uygulama. 2012. Available online: https://dergipark.org.tr/tr/download/article-file/71817 (accessed on 3 March 2021).
21. Lowenthal, P.R.; Snelson, C. In search of a better understanding of social presence: An investigation into how researchers define social presence. *Distance Educ.* **2017**, *38*, 141–159. [CrossRef]
22. Galy, E.; Downey, C.; Johnson, J. The effect of using e-learning tools in online and campus-based classrooms on student performance. *J. Inf. Technol. Educ.* **2011**, *10*, 209–230. [CrossRef]
23. Nazarlou, M.M. Research on negative effect on e-learning. *Int. J. Mob. Netw. Commun. Telemat.* **2013**, *3*, 11–16. [CrossRef]
24. Alsaaty, F.M.; Carter, E.; Abrahams, D.; Alshameri, F. Traditional versus online learning in institutions of higher education: Minority business students' perceptions. *Bus. Manag. Res.* **2016**, *5*, 31. [CrossRef]

25. Tagoe, M. Students' perceptions on incorporating e-learning into teaching and learning at the University of Ghana. *Int. J. Educ. Dev. Using Inf. Commun. Technol.* **2012**, *8*, 91–103.
26. Tratnik, A.; Urh, M.; Jereb, E. Student satisfaction with an online and a face-to-face Business English course in a higher education context. *Innov. Educ. Teach. Intern.* **2019**, *56*, 36–45. [CrossRef]
27. Butz, N.T.; Stupnisky, R.H.; Pekrun, R. Students' emotions for achievement and technology use in synchronous hybrid graduate programmes: A control-value approach. *Res. Learn. Technol.* **2015**, *23*, 1–16. [CrossRef]
28. Stern, B.S. A comparison of online and face-to-face instruction in an undergraduate foundations of American Education Course. *Contemp. Issues Technol. Teach. Educ. CITE J.* **2004**, *4*, 196–213.
29. Akcaoglu, M.; Lee, E. Increasing social presence in online learning through small group discussions. *Int. Rev. Res. Open Distrib. Learn.* **2016**, *17*, 1–17. [CrossRef]
30. Joksimovic, S.; Gasevic, D.; Kovanovic, V.; Riecke, B.E.; Hatala, M. Social presence in online discussions as a process predictor of academic performance. *J. Comp. Assis. Learn.* **2015**, *31*, 638–654. [CrossRef]
31. Almarabeh, T. Students' perceptions of e-learning at the University of Jordan. *Int. J. Emerg. Technol. Learn. IJET* **2014**, *9*, 31–35. [CrossRef]
32. Cacheiro-Gonzalez, M.L.; Medina-Rivilla, A.; Dominguez-Garrido, M.C.; Medina-Dominguez, M. The learning platform in distance higher education: Student's perceptions. *Turk. Online J. Distance Educ.* **2019**, *20*, 71–95. [CrossRef]
33. Murphy, M.P.A. COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemp. Secur. Policy* **2020**, *41*, 492–505. [CrossRef]
34. Shim, T.E.; Lee, S.Y. College students' experience of emergency remote teaching due to COVID-19. *Child. Youth Serv. Rev.* **2020**, *119*, 105578. [CrossRef] [PubMed]
35. Aguilera-Hermida, A.P. College students' use and acceptance of emergency online learning due to COVID-19. *Int. J. Educ. Res. Open* **2020**, *1*, 100011. [CrossRef]
36. Alqabbani, S.; Almuwais, A.; Benajiba, N.; Almoayad, F. Readiness towards emergency shifting to remote learning during COVID-19 pandemic among university instructors. *E Learn. Digit. Media* **2020**. [CrossRef]
37. Mohmmed, A.O.; Khidhir, B.A.; Nazeer, A.; Vijayan, V.J. Emergency remote teaching during Coronavirus pandemic: The current trend and future directive at Middle East College Oman. *Innov. Infrastruct. Solut.* **2020**, *5*, 72. [CrossRef]
38. Hodges, C.; Moore, S.; Lockee, B.; Trust, T.; Bond, A. The Difference Between Emergency Remote Teaching and Online Learning. 2020. Available online: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning (accessed on 6 April 2021).
39. Mailizar; Almanthari, A.; Maulina, S.; Bruce, S. Secondary school mathematics teachers' views on e-learning implementation barriers during the Covid-19 pandemic: The case of Indonesia. *Eurasia J. Math. Sci. Tech. Ed.* **2020**, *16*, em1860. [CrossRef]
40. Hoq, M.Z. E-Learning During the Period of Pandemic (COVID-19) in the Kingdom of Saudi Arabia: An Empirical Study. *Am. J. Ed. Res.* **2020**, *8*, 457–464.
41. Alhumaid, K.; Ali, S.; Waheed, A.; Zahid, E.; Habes, M. COVID-19 & Elearning: Perceptions &Attitudes of Teachers towards E-Learning Acceptance in The Developing Countries. *Multicult. Educ.* **2020**, *6*, 100–115. [CrossRef]
42. Biasutti, M.; Philippe, R.A.; Schiavio, A. Assessing teachers' perspectives on giving music lessons remotely during the COVID-19 lockdown period. *Mus. Sci.* **2021**, 1–19. [CrossRef]
43. Adnan, M.; Anwar, K. Online learning amid the COVID-19 pandemic: Students' perspectives. *J. Ped. Soc. Psychol.* **2020**, *2*, 1309. [CrossRef]
44. Radha, R.; Mahalakshmi, K.; Kumar, V.S.; Saravanakumar, A.R. E-Learning during Lockdown of Covid-19 Pandemic: A Global Perspective. *Int. J. Contr. Autom.* **2020**, *13*, 1088–1099.
45. Hasan, N.; Bao, Y. Impact of "e-Learning crack-up" perception on psychological distress among college students during COVID-19 pandemic: A mediating role of "fear of academic year loss". *Child. Youth Serv. Rev.* **2020**, *118*, 105355. [CrossRef]
46. Bączek, M.; Zagańczyk-Bączek, M.; Szpringer, M.; Jaroszyński, A.; Wożakowska-Kapłon, B. Students' perception of online learning during the COVID-19 pandemic: A survey study of Polish medical students. *Medicine* **2021**, *100*, e24821. [CrossRef]
47. Muthuprasad, T.; Aiswarya, S.; Aditya, K.S.; Jha, G.K. Students' perception and preference for online education in India during COVID-19 pandemic. *Soc. Sci. Humanit. Open* **2021**, *3*, 100101.
48. Brown, R. Blending learning: Rich experiences from a rich picture. *Train. Develop. Austr.* **2003**, *30*, 14–17.
49. Rooney, J.E. Blended learning opportunities to enhance educational programming and meetings. *Assoc. Manag.* **2003**, *55*, 26–32.
50. Ward, J.; LaBranche, G.A. Blended learning: The convergence of e-learning and meetings. *Franch. World* **2003**, *35*, 22–23.
51. Osguthorpe, R.T.; Graham, C. Blended learning environments: Definitions and directions. *Q. Rev. Dist. Educ.* **2003**, *4*, 227–233.
52. Ginns, P.; Ellis, R. Quality in blended learning: Exploring the relations between on-line and face-to-face teaching and learning. *Internet Higher Educ.* **2007**, *10*, 53–64. [CrossRef]
53. Stein, J.; Graham, C.R. *Essentials for Blended Learning—A Standards-Base Guide*, 1st ed.; Routledge: New York, NY, USA, 2014.
54. Graham, C.R. Current research in blended learning. In *Handbook of Distance Education*, 4th ed.; Moore, M.G., Diehl, W.C., Eds.; Routledge: New York, NY, USA, 2019; pp. 173–188.
55. Norberg, A.; Dziuban, C.; Moskal, P.A. Time-Based Blended Learning Model. *Horizon* **2011**, *19*, 207–216. [CrossRef]