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The Views of Undergraduate Students and Faculty Members: Distance Education during COVID-19 Pandemic

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Abstract

This study aimed to examine the views of undergraduate students studying in and their faculty members teaching in distance education during COVID-19 pandemic. The sample consisted of 35 undergraduate students and 34 faculty members. The 'typical case sampling' method was used for selection of participants from different faculties of a foundation trust university in Türkiye. Sampling continued until theoretical saturation (until no new information was obtained from participants). Data was collected through online focus group interviews. Data was analyzed inductively by repetitive data collection cycles, data coding with multi-step processes and comparative analysis. Findings revealed negative, neutral and positive metaphors which described distance education during the COVID-19 pandemic. In fact, these metaphors indicated the existence of a continuum in the form of three higher order categories including the Experience of Loss, Transformation and Neutrality under which a number of themes and sub-themes were present. The present findings present a user-derived evidence base for improving distance education and therefore these findings could be considered as targets for systems aiming at improving distance education that would be delivered in the future in similar difficult circumstances.

Key Words

COVID-19 Pandemic • Distance education • Faculty members • Grounded Theory • Metaphors • Undergraduate students

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SARS-CoV-2 virus first appeared in China, then spread rapidly to become a global pandemic. As with other traumatic events, the COVID-19 pandemic seriously challenged human psychology. For example, Wang et al.'s (2020) study in the Chinese general population on the psychological effects of COVID-19 pandemic showed that 16.5%, 28.8% and 8.1% of the participants showed signs of depression, anxiety and stress, respectively. Roy et al. (2020) in an Indian population showed that 80% of the participants were concerned about COVID-19 pandemic. Studies have also shown that, during the pandemic, university students experience significant psychological problems (Zimmermann et al., 2020).

During COVID-19 pandemic, distance education has emerged as a mandatory replacement for traditional face-to-face education. Since the middle of March 2020 all the universities (both state and foundation trust) in Türkiye started to offer distance education. As in other parts of the world, this has been a challenging shift. It is almost inevitable that this challenging shift will be compounded with the psychological toll of COVID-19 pandemic among university students and faculty members. Therefore, it is important to examine the ways in which distance education has been experienced by both groups.

Several quantitative and mixed design studies have examined different aspects of university students' and faculty members' experience of distance education within the context of COVID-19 pandemic. Some studies have shown several difficulties associated with distance education based on the views of the students. Technical or technological problems (such as unstable internet connection) have been reported as the most common difficulty (Almossa, 2021). Being overloaded with information and experiencing difficulties in understanding lectures, inability to learn independently, having to spend too much time in front of the computer and being subjected to unsuitable evaluation methods were among other difficulties (Almossa, 2021; Himat et al., 2021; Ng et al., 2021). A lack of communication between students and their professors and a lack of support from professors (Kedraka & Kaltsidisi, 2020) were also reported. Other prominent difficulties for the students were disruptions in social life and daily life, unsuitability of home environment for studying and experiencing negative feelings and physiological states (Almossa, 2021; Kedraka & Kaltsidisi, 2020; Ng et al., 2021). By contrast, other studies have also shown that students perceive some advantages of distance education including the experience of positive feelings and the perception that distance education saves time and money, allows more time to spend with family, to study or to rest (Almossa, 2021; Kedraka & Kaltsidisi, 2020). Sitting in easier exams, having lenient submission deadlines, having a better understanding of the content of classes, improving one's performance, receiving support from professors, being subjected to opportunities for developing new skills have been among other advantages based on the views of the students (Almossa, 2021; Kedraka & Kaltsidisi, 2020; Khalil et al., 2020). In a quantitative study, Lassoued et al. (2020) among faculty members and students at universities in the Arab world found a range of barriers to distance education. Some of which included reluctance to implement distance education, difficulties in teaching/learning applied subjects and evaluating learning, a lack of interaction between faculty members and students, low confidentiality and protection of data and unsuitability of home environment for distance education.

These findings are noteworthy. However, quantitative research is guided by theoretical or professional views. However, since students' and faculty members' experience of distance education during COVID-19 pandemic is not

yet well-understood, it is also important that this experience is also examined by undertaking qualitative research. This is because arguably qualitative research has the potential for identifying factors that cannot be captured by quantitative research.

A qualitative study (van der Meer, 2021) among faculty members teaching in medical schools and their students, identified a number of challenges such as students not attending classes and not socializing outside the classroom, experiencing difficulties in staying connected to the medical professional community. Findings also stressed the importance of sharing emotions and experiences, adjusting one's communication style, giving group assignments, and initiating group discussions. Findings also provided some guidelines for improving distance education. Of particular importance were planning online video breaks with students, conversing via unofficial means of communication, giving creative assignments and assignments that stimulate autonomy and competition and proving opportunities for students to share their emotional experiences and interests and future career plans. Yet another qualitative study (Porter et al., 2020) among faculty members teaching in nursing faculty, found that faculty members lacked necessary skills to teach in distance education, time to prepare and review their work prior to the commencement of the classes but this transition provided opportunities to be creative in how they delivered the courses. Findings also suggested that faculty members created an engaging learning environment by giving innovative assignments, quizzes and videos. In a review on distance medical education in the context of COVID-19 pandemic, Nimavat et al. (2021) described the challenges that faculty members and students experienced. These included a general negative attitude towards distance education, difficulties in time management, a lack of consideration for personal life, experience of stress and students' decreased interest in classes.

Although previous studies have been useful in identifying some aspects of university students' experience of distance education during COVID-19 pandemic, some of these studies have been quantitative in nature and consequently were guided by theoretical or professional views. On the other hand, other studies have been mixed design studies. It is also important to examine university students' views by using a qualitative methodology because this has the potential for identifying factors that cannot be captured by quantitative research. Also, the sample of most studies included university students who were studying a particular subject. Therefore, it is important to examine the views of university students studying different subjects in a single qualitative study in order to identify commonalities. To the authors' knowledge, no such study has been carried during the COVID-19 pandemic. Qualitative findings undertaken among faculty members indicated that qualitative research could help to identify aspects of faculty members' experience of distance education in medicine and nursing during the COVID-19 pandemic in ways that were not identified by quantitative research. To the authors' knowledge no qualitative study was undertaken among faculty members who are teaching various subjects other than medicine and nursing in distance education within the same study during COVID-19 pandemic in a systematic and detailed way in Türkiye and in different parts of the world.

Therefore, the present qualitative study aimed to understand the experience of undergraduate students who were studying different subjects and of faculty members teaching various subjects in distance education during COVID-19 pandemic in a foundation trust university in Türkiye and to compare and contrast these experiences. The

findings of the present study can provide a user-derived evidence base for more efficient delivery of distance education in similar difficult circumstances. These findings can also guide future efforts to develop a user-derived questionnaire to measure the effectiveness of distance education in similar difficult circumstances.

Method

Participants

Qualitative studies collect detailed data from a small number of individuals, making the findings difficult to generalize (Miller & Crabtree, 1992). Therefore, qualitative studies utilize the concept of transferability, which means applying the findings of a study to situations like those of the study (Henwood & Pidgeon, 1992). Since the present study is a qualitative study, the sample was chosen using the purposeful sampling method. In this context, the 'typical case sampling' method was used to select participants who could provide detailed information about the subject of the research (Henwood & Pidgeon, 1992; Patton, 1990). The 'typical case sampling' method allows targeting key participants who show typical characteristics on any topic (Patton, 1990). That is, this sampling method helped select participants who could describe and illustrate what is typical of distance education during the COVID-19 pandemic (i.e., the key issues that should be taken into account when thinking of distance education during the COVID-19 pandemic) (Patton, 1990). Therefore, this sampling was considered as the best method to select undergraduate students who were studying and faculty members who were teaching via distance education in a foundation trust university during the COVID-19 pandemic. In qualitative research the use of the 'typical case sampling' method, key informants can help identify or define what is ‘typical,’ and ‘typical’ undergraduate students and faculty members can be selected through the cooperation of these key informants (Patton, 1990). In this study, 'typical undergraduate students’ in this context can be defined as students who were between the ages of 18 and 30 and were studying in distance education at various departments of the given foundation trust university. These undergraduate students were identified by the Deans of each faculty where they were studying in as key informants. 'Typical faculty members' during the COVID-19 pandemic were defined as faculty members who were teaching both compulsory and elective courses through distance education at the faculties of the given foundation trust university, were employed on a full-time basis, and who held at least a doctorate degree or were writing their thesis towards obtaining this degree. These faculty members were identified by the Deans of each faculty where they were teaching as key informants.

Typical case sampling ensured the transferability of the findings to the undergraduate students and the faculty members of other foundation trust universities in Türkiye who studied in or provided distance education during the COVID-19 pandemic (Henwood & Pidgeon, 1992). Being reflective was considered to contribute towards transferability. Being reflective meant the provision of sufficient transcript material to illustrate the themes and the sub-themes identified during the analysis. Sampling continued until ‘theoretical saturation’ was reached (Patton, 1990); that is, the data collection process continued as new information was gained, and the sampling was terminated when no new information was obtained (i.e., when additional data did not change the analysis including themes and sub-themes identified).

The sample consisted of 34 faculty members and 35 undergraduate students. The undergraduate students were studying in various faculties. Table 1 summarises their demographic characteristics. All participants were single and most were unemployed. The faculty members were teaching in faculties of Economics; Administrative and Social Sciences; Pharmacy; Health Sciences; Medicine; Arts and Sciences; Engineering; and Fine Arts, Design and Architecture. Table 2 summarises their demographic characteristics.

Data Collection

Data was collected through focus group interviews, which were video-recorded over an online platform. The interviews were transcribed before the analysis. Undergraduate students and faculty members participated in separate focus group meetings.

The focus group interviews were undertaken based on the general interview approach, which had been used in previous studies by the first author (Krespi et al., 2004; 2008; 2016; 2017a; 2017b; Krespi Boothby, 2011; Tankurt et al., 2016). In the general interview approach, several key topics are identified before focus groups interviews start and questions are drafted based on the flow of the focus group interviews. In the process, the order and wording of the questions may change (Patton, 1990). The general interview approach allows for the emergence and description of unforeseen topics before the focus group interviews begin. During the focus group interviews participants were prompted to describe the nature of distance education during the COVID-19 pandemic, difficulties experienced, the ways in which these difficulties were managed, feelings about distance education during the COVID-19 pandemic, positive and negative aspects of distance education during the COVID-19 pandemic, motivation towards distance education during the COVID-19 pandemic and ways of improving distance education in the future in difficult circumstances like COVID-19 pandemic. All focus group interviews were undertaken by the first author, MRKU. At the end of these meetings, participants were also asked to complete the sentence, 'distance education is like …… because ……..' to develop metaphors to describe distance education which was previously used (Kaleli Yilmaz & Guven, 2015). The interviews were undertaken in Turkish. The analysis was undertaken on the data in Turkish than the data included in the article was translated.

After obtaining Ethics Committee approval, participants were asked to read and approve the informed consent form via the Qualtrics platform. After the participants completed the informed consent form, they completed the General Information Form, which included questions about demographic characteristics. They then participated in the focus group interviews via an online platform. Each focus group interview lasted approximately 40-50 minutes. The focus group meetings were undertaken with faculty members between 16.06.2020 and 07.07.2020 and with undergraduate students between 30.06.2020 and 12.07.2020.

Data Analysis

Various theoretical approaches can be used for data analysis and interpretation in qualitative research. Grounded Theory (Glaser & Strauss, 1967) shaped this research. In the context of this theory, a few qualitative data analysis strategies (repetitive data collection cycles, data coding with multi-step processes and comparative analysis) have

Table 1

Demographic Characteristics of Undergraduate Students

No.	Sex	Date of Birth	Occupational Status	Faculty	Scholarship (%)	Grade
1	Male	2001	Unemployed	FoP	50	2
2	Female	1998	Unemployed	FoP	25	3
3	Male	2001	Unemployed	FoP	0	1
4	Female	1999	Unemployed	FoP	25	3
5	Male	1998	Unemployed	FoHS	25	4
6	Female	1998	Unemployed	FoHS	25	4
7	Male	1997	Unemployed	FoHS	25	4
8	Female	1996	Unemployed	FoHS	100	4
9	Female	1999	Unemployed	FoHS	100	4
10	Male	1999	Unemployed	FoEASS	Missing	1
11	Male	1999	Unemployed	FoEASS	Missing	4
12	Female	1998	Unemployed	FoM	50	
13	Male	2000	Unemployed	FoM	25	2
14	Female	2000	Unemployed	FoM	100	1
15	Female	1998	Unemployed	FoAS	100	4
16	Female	1999	Unemployed	FoAS	0	3
17	Female	1999	Unemployed	FoAS	50	3
18	Female	1997	Unemployed	FoAS	50	3
19	Male	1999	Unemployed	FoFADA	50	2
20	Missing	2000	Unemployed	FoFADA	25	1
21	Female	2000	Employed	FoFADA	50	2
22	Male	2000	Unemployed	FoFADA	25	2
23	Missing	2000	Employed	FoFADA	50	2
24	Female	2001	Unemployed	FoE	50	2
25	Male	2000	Unemployed	FoE	50	2
26	Female	1995	Employed	FoEASS	100	4
27	Male	2000	Employed	FoE	50	2
28	Male	2000	Unemployed	FoE	100	2
29	Male	1990	Unemployed	FoE	50	3
30	Female	1998	Unemployed	FoEASS	100	4
31	Male	1999	Unemployed	FoEASS	100	4
32	Male	1995	Unemployed	FoEASS	100	4
33	Male	2000	Unemployed	FoEASS	100	1
34	Male	2000	Unemployed	FoP	25	2
35	Male	-	Unemployed	FoP	100	1

Note. FoEASS= Faculty of Economics,Administrative and Social Sciences; FoP= Faculty of Pharmacy; FoHS= Faculty of Health Sciences; FoM= Faculty of Medicine; FoAS= Faculty of Arts and Sciences; FoE= Faculty of Engineering; FoFADA= Faculty of Fine Arts, Design and Architecture.

Table 2
Demographic Characteristics of Faculty Members

Participant No.	Sex	Date of Birth	Marital Status	Faculty	Title	Tenure	Previous Experience of Teaching in Distance Education	Device
1	Female	1964	Married	FoEASS	Dr.	4 years	No	Laptop
2	Female	1980	Single	FoP	Dr.	2 years	Yes	Computer
3	Male	1966	Married	FoP	Prof.	3 years and 3 months	Yes	Laptop
4	Female	1957	Married	FoP	Assoc. Prof.	8 years	No	Laptop
5	Female	1988	Single	FoP	Dr.	4 months	No	Laptop
6	Male	1985	Single	FoP	Instructor	6 years	No	Laptop
7	Female	1982	Single	FoEASS	Dr.	2,5 years	No	Laptop
8	Male	1982	Single	FoEASS	Dr.	Missing	Yes	Laptop
9	Male	1987	Single	FoEASS	Dr.	3 years	No	Laptop
10	Female	1971	Married	FoEASS	Dr.	26 years	No	Laptop
11	Female	1967	Married	FoHS	Dr.	3 years	No	Laptop
12	Female	1980	Married	FoHS	Assoc. Prof.	10 years	No	Computer
13	Female	1953	Married	FoHS	Prof.	44 years	Yes	Laptop
14	Male	1952	Married	FoHS	Prof.	30 years	No	Laptop
15	Female	1966	Married	FoHS	Dr.	8 years	No	Computer
16	Female	1977	Single	FoM	Dr.	7 months	No	Laptop
17	Male	1983	Living apart	FoM	Dr.	16 years	No	Laptop
18	Female	1984	Married	FoM	Dr.	4 years	No	Laptop
19	Male	1988	Single	FoM	Dr.	3 years	No	Laptop
20	Female	1986	Married	FoM	Dr.	10 years	No	Laptop
21	Female	1975	Single	FoAS	Assoc. Prof.	13 years	No	Laptop
22	Male	1981	Married	FoAS	Dr.	Missing	Yes	Laptop
23	Male	1982	Married	FoE	Dr.	5 years	No	Laptop
24	Female	1987	Married	FoE	Dr.	2 years	No	Laptop
25	Female	1986	Single	FoAS	Instructor	1 year	Yes	Laptop
26	Male	1973	Married	FoE	Prof.	20 years	No	Laptop
27	Male	1967	Living apart	FoE	Dr.	5 years	No	Laptop
28	Female	1984	Married	FoAS	Instructor	8 months	No	Laptop
29	Female	1987	Single	FoAS	Instructor	7 years and 10 months	No	Laptop
30	Female	1968	Married	FoFADA	Dr.	18 years	Yes	Computer
31	Male	1965	Married	FoAS	Assoc. Prof.	21 years	No	Laptop
32	Female	1979	Single	FoFADA	Dr.	2 years	No	Laptop
33	Male	1951	Married	FoFADA	Dr.	10 years	No	Laptop
34	Male	1986	Married	FoE	Dr.	2 years	No	Laptop

Note. FoEASS= Faculty of Economics,Administrative and Social Sciences; FoP= Faculty of Pharmacy; FoHS= Faculty of Health Sciences; FoM= Faculty of Medicine; FoAS= Faculty of Arts and Sciences; FoE= Faculty of Engineering; FoFADA= Faculty of Fine Arts, Design and Architecture.

been developed to analyze qualitative data systematically (Glaser & Strauss, 1967; Strauss & Corbin, 1990; Yardley, 1997). These qualitative data strategies were also used in previous studies by the first author (Krespi et al., 2004; 2008; 2016; 2017a; 2017b; Krespi Boothby, 2011; Tankurt et al., 2016).

Thematic data analysis was undertaken in parallel with the recruitment and the focus group interviews. The data was analyzed using the inductive method. That is, no theme(s) was specified in advance. Our analysis procedure followed established principles of data analysis that helped to ensure that the analysis was `grounded' in the data, rather than pre-existing theoretical or professional ideas (Henwood & Pidgeon, 1992; Patton, 1990). That is, analysis was based on patterns indicated by the data independent of previous findings on distance education (Glaser & Strauss, 1967). Interview transcripts were coded manually by using a constant comparative approach based on the Grounded Theory (Strauss & Corbin, 1990). This ensured that analysis was inductive and led by the data. More specifically, the analysis was undertaken by following a number of steps. First, the preliminary coding and analysis of a subset of transcripts was undertaken by one author (MRKU) who read and reread these transcripts. Second, this preliminary analysis was developed on the basis of the other authors reading and commenting on it and recurrent themes and sub-themes were identified. Third, these were tested and modified by 'cycling' between different sets of data (Salmon, 2002; Stiles, 1993). That is, recurrent themes identified in the preliminary analysis were compared against the new data obtained in the new focus group interviews and where necessary, the themes or sub-themes were changed or added as the analysis was further developed (Salmon, 2002). Fourth, the developing analysis was further read by and discussed with all the other authors. Lastly, the analysis was ended when no further changes were necessary and all transcript materials were categorized. Overall, the final themes and sub-themes were based and defined on the basis of common accounts provided by several participants.

In order to ensure the reliability of the data special attention was given to the comprehensibility of the themes, in addition to giving sufficient accounts that illustrated the themes (Stiles, 1993). In order to ensure the trustworthiness of the analysis (validity) (Stiles, 1993) attention was paid to coherence, searching for negative cases, reflexive validity, theoretical validity, triangulation of the analysis, theoretical validity and catalytic validity. Coherence is related to a number of characteristics including the degree to which: 1) the interpretations were comprehensive, 2) the themes and sub-themes fit the data, and 3) the themes and sub-themes were associated with the subject being studied in this case distance education during the COVID-19 pandemic (Henwood & Pidgeon, 1992; Stiles, 1993). Searching for negative cases involved looking for participants' accounts which illustrated the reverse of a theme (i.e., accounts indicating that a particular theme was not universal) (Henwood & Pidgeon, 1992; Patton, 1990; Stiles, 1993). For example, contrary to some accounts which illustrated academic development, negative cases would be accounts which illustrated the absence of such development. Reflexive validity (Stiles, 1993) was ensured by explaining how the themes and sub-themes were developed and changed during analysis. That is, this was achieved by disclosing assumptions or preconceptions of the authors in the beginning of the analysis and describing the ways in which these assumptions or preconceptions gave way to an understanding of distance education during the COVID-19 pandemic as a result of a deeper engagement with the transcript material. Triangulation of the analysis was undertaken by ensuring that different authors read and commented on the emerging analysis (Stiles, 1993).

Theoretical validity refers to the degree to which the themes, sub-themes and interpretations made are associated with theoretical ideas and/or literature findings (Miles Huberman, 1994). Catalytic validity refers to the degree to which the data and the analysis (themes and sub-themes identified) have implications for future practice and research (Guba & Lincoln, 1989). Consensus which is the same as replication in quantitative research, was achieved by following established principles or recommendations (Guba & Lincoln, 1989). Quantitizing (counting instances of qualitative findings) (Dixon-Woods et al., 2004) helped to test the completeness of the analysis. We counted the participants who provided accounts to illustrate the main themes identified during the analysis. This ensures the internal validity rather than, as in quantitative research, external validity.

Findings and Discussion

The authors' engagement in the transcript materials helped them gradually change the themes that were identified and develop the analysis. In the beginning of the analysis, it was necessary to go beyond the authors' a priori assumptions about distance education during the COVID-19 pandemic. Initially, the authors assumed that technical difficulties and negative aspects of distance education were an important part of participants' experience. Consequently, the transcript material was categorized accordingly. These themes reflected the authors' commitment to quantitative methodology and its assumptions. Close and more prolonged engagement in the transcript materials actually showed that this kind of categorization did not represent participants' experience of distance education during the COVID-19 pandemic fully and coherently. There were many more different difficulties as well as positive aspects of distance education. As a result, not only technical elements but also other aspects of participants' experience stood out as important themes. In particular, there were a wide range of gains. These gains were initially categorized on the basis of teaching related activities. However, the authors realized that there were gains that included for example, the view that distance education during the COVID-19 pandemic helped towards getting developed both academically and personally which extended to the idea that one can find positive meaning from distance education. Also, many accounts described deterioration in teaching activities as well as improvement in them. Therefore, different themes and subthemes were developed that made the analysis more coherent. More specifically, it was possible to group the views of the participants about distance education under a number of themes: nature of the distance education; technical difficulties; gains; internal states; negative and positive aspects of distance education; motivating or demotivating factors of distance education; and ways of improving distance education.

Initially, the data related to metaphors were analyzed separately and were grouped into positive, negative and neutral metaphors. Further engagement in this data helped the authors realize that initial nine groups of main themes actually illustrate what is being pictured in metaphors. In fact, metaphors were so vivid that they also incorporated internal states both negative and positive, as well as positive and negative aspects and gains of distance education during the COVID-19 pandemic as well as motivating or demotivating factors of distance education. However, more in depth engagement in the data related to metaphors helped the authors realize that the metaphors were in fact higher order categories which formed a continuum including the Experience of Loss, Transformation and Neutrality. Only, moving away from a priori knowledge based on quantitative research made possible to understand the

importance of these metaphors in the participants' experience of distance education during the COVID-19 pandemic. Accounts in italics refer to participants' accounts illustrating a given theme. Numbers refer to the numbers given to participants to identify them.

Experience of Loss

This higher order category incorporated negative metaphors and reflected what distance education during the COVID-19 pandemic actually took away from participants' life (i.e., losses incurred because of the COVID-19 pandemic). In other words, this higher order category actually indicated the view that the essence of one's existence is lost because of distance education. Tables 3 and 4 detail the use of these metaphors. For example, for faculty members of particular importance, there was a metaphor describing distance education 1"like a life without spirit…" For the undergraduate students of particular importance, there was a metaphor describing distance education as 10"It is like the unsatisfactory season of a soap opera that you have waited for a long time." or distance education being 34"a bird with a broken wing…" To the authors' knowledge previous research did not report this higher order category or these metaphors. These metaphors can be used in future educational interventions aiming at promoting better distance education practices during difficult circumstances such as the COVID-19 pandemic. These can also be used to develop systems for supporting faculty members teaching in and undergraduate students studying in distance education in future difficult circumstances such as COVID-19 pandemic.

In a more concrete way, this higher order category incorporated the experience of technical difficulties, negative internal states and the views that distance education had a number of negative aspects and is demotivating.

Technical Difficulties

Undergraduate students stated that they experienced some technical problems such as 16"freezing" and 31"disconnection of internet," poor online recordings and a lack of internet access. Other technical glitches were described as 34"some professors could not be heard, … they could not see our messages." They also mentioned some systemic inadequacies. These included 27 "absence of a system where everyone can turn on their cameras or talk instantly," low upload capacity, and insufficient number of computers. According to undergraduate students,

Table 3

Undergraduate Students' Use of Metaphors to Describe Distance Education

Part. No.	Negative Metaphors	Part. No.	Positive Metaphors	Part. No.	Neutral Metaphors
1	It is like the girl that I love. I see her but I cannot touch her.	9	It is like a door because ... it has marked a new era.	7	It is like ying and yang. … both black and white, good, or bad.
2	It is like a nice perfume but too much of it is ineffective.	12	It was like a game for me because I have created my own character and attended classes. … This virtual character went to an adventure.	8	It is like an individual. This definition varies from person to person.
3	It is like an ocean you need to know how to swim.	13	It is like an app that is working in the background. I can use it any time that I need.	21	It is like a sport video. Just watching is useless but practicing at the same time gives favorable results.
8	It is like a dish. The more stuff you add in it, the harder it gets to digest.	16	It is like freedom, like statue of liberty because in distance education we can reach to lectures anytime we want.		
10	It is like the unsatisfactory season of a soap opera that you have waited for a long time.	17	It is like future because I think the future will be shaped this way.		
15	It is like longing because it is like trying to make up for lost face-to-face education via technology.	26	It is like a bridge. Because ... this system is a system that ensures the link between the old and the new system.		
24	It is like loneliness because I had to study in my room on my own.				
25	It is like a vegetative state. … It was a process that everything was managed inside a room.				
27	It is like the space because at the beginning, everything was uncertain.				
28	It is like the missing part that we never find while doing a puzzle. … you wish to complete something, … but something is always missing.				
34	a bird with a broken wing … because … we could not go to a place like a bird who have wings.				

Table 4

Faculty Members' Use of Metaphors to Describe Distance Education

Part. No.	Negative Metaphors	Part. No.	Positive Metaphors	Part. No.	Neutral Metaphors
1	Like a life without spirit... Like miscommunication... Because there is no communication, ... Like a tree which gives no fruit... Because there is no interaction.	2	It is the necessity of our time. It is like a life jacket.	6	It is like a life jacket…. Because the ship sank. There is nothing to do anymore, but this life jacket may not be that effective.
7	It is like lecturing on your own because it is hard to inspire students.	4	It is a technological revolution … because there are so many things to discover.	8	It is like a practical effort ... because … all of us had to adapt to it as an obligation.
9	It is like pretending because it is distant. It is not real.	5	It is both a life jacket and saver and it is also supportive.	10	It is like listening a soap opera on the radio ...—its effectiveness depends on how vivid it is narrated.
14	It is like driving in a foggy day. If you are not careful, you cannot achieve your aim …and you can also hurt someone.	20	It is like a lighthouse because it has brightened our minds during quarantine.	11	I think it is just like an iceberg. We are working on the part that we can see. But if the infrastructure is insufficient, the situation can be unperceivable, uncontrollable, and unmanageable like the lower part of the iceberg. And all our efforts can be wasted.
17	It is like a long-distance relationship because you cannot be in it for a long time. It is like a flower because … it is nice to see it, but it cannot be effective if you cannot smell it.	23	It is like a newborn baby because it is open to development.	13	Snowball … If you add something on it, it will grow. But you need to be attentive, or else the snowball will melt, or it turns into an avalanche. … it could also be dangerous.
21	It is like a tunnel that you cannot see the end of it. … You cannot predict where the light is.	24	It is like technology because as the technology improves, our lives get easier.	16	It is a flower because if you care, …. if you water, it becomes fruitful. But if you do not, it will dry out.
26	It is like breaking up... because there is no face-to-face physical interaction anymore.	25	It is like Netflix; you can watch it any time you want.	18	I can say it is like a necessity. Because it is at the center of our lives.

29	It is like a video game because it is virtual. Everything was so virtual and distant.	28	It is like a lifeboat because it took us to the shore.	19	It is like an egg. If you hold it tight, you could break it. If you hold it loose, you could drop it.
30	It is like a dream because I cannot touch it.			22	It is like a wild ocean. If you can swim, it (distance education) will take your load off, will take you to the shore, to the safety. But if you cannot swim, it will choke you.
31	It is like a little amount of water … in the desert. … although it is insufficient, you need to do with it any way.			27	It is something that somehow must penetrate and be in our lives.
32	It is like a life jacket because it keeps you above water, but it does not get you out of water and survive.			34	It is just like a carbon array because it could be a diamond or graphite

professors differed in terms of the ability to use the system. Similarly, technical difficulties and 20 "technical hardware problems" were mentioned by the faculty members. Technical difficulties included freezing of the system and disconnection from the internet or a lack of internet connection. However, the experience of technical difficulties was not universal. Hardware problems included the absence of systems for asking verbal questions, uploading lengthy video recordings, using audiovisual materials, using simulating applications, blackboards and systems for instant image and speech. In addition, there were difficulties in having access to computers and the necessity for using more than one platform in this process.

These findings are not surprising and are consistent with previous findings indicating the experience of similar technical or technological problems among students (Himat et al., 2021) and faculty members such as a lack of access to internet, sufficient computers and infrastructure (Lassoued et al., 2020; Nimavat et al., 2021). However, the present findings indicate a wider range of technical and hardware difficulties that need to be considered if the aim is to improve distance education practices in the future in similar difficult circumstances.

Negative Internal States

The negative internal states were an important part of faculty members' and undergraduate students' experience of distance education. Table 5 lists these negative internal states.

For faculty members internal states involved negative cognitions including the perception that one is sacrificing oneself and negative physiological states such as headache as well as many negative emotions/feelings ranging from fear to hatred. Of particular importance, there was longing. Participant 20 explained her longing as follows: "I miss the smiles of my students very much; I miss chatting with them and making jokes during the lesson…I think they (students) miss taking lessons in classrooms, in a crowded environment, in a social environment". Still, some faculty

members experienced mixed negative internal states such as worry and angry. Faculty members like themselves also recounted that their students, and their parents experienced negative internal states including negative emotions or feelings as well as negative physiological states. As in themselves, participants also felt that the students also

Table 5

Views on the Negative Internal States

Faculty Members' Views of their Internal States
Negative feelings
Being stuck; intolerant; out of control; uncertain; dissatisfied; restless; shy Feeling empty; unhappy; alone; worthless; helpless; inadequate; distrusted; bruised; tense; strained; worried; frighthened; anxious; uneasy; doubtful; stressed; panicky; uncertain; lethargic; overwhelmed; distracted; discouraged; hateful; angry; as if it is the end of the World; longing
Negative physiological states
Having a headache; being fatigued
Negative cognitions
Perception that one is sacrificing oneself
Faculty Members' Views of their Undergraduate Students' Internal States
Negative feelings
Feeling overwhelmed; uneasy; anxious; stressed; depressed; lethargic; empty; angry; distracted; psychologically weary; being alarmed; being bored; longing
Negative physiological states
Having a disturbed sleep
Undergraduate Students' Views of their Internal States
Negative feelings
Helpless, down, sad, discouraged, uncertain, shocked,hopeless, gloom, panicky, anxious, worried, lost, stressed, frighthened, demoralised, bored, pressurised, empty, confused, irritable, uncomfortable, devastated
Negative cognitions
Having a sense of: Sacrificing one's personal life, Giving up, Not being able to focus, Being biased, Lacking discipline, Lacking trust, Devaluation, Reluctance, Failure, Perfectionism, Pessimism, Longing
Negative physiological states
Exhaustion, Suffocation, Fatigue, Lethargy, Lack of sleep, Skin reactions

experienced longing for the classroom environment and professors. Indeed, these descriptions were consistent with undergraduate students' accounts of their internal states. Also, similar to the faculty members' experience undergraduate students recounted to experience a wide range of negative feelings (such as feeling 9"down,"), cognitions (such as having a sense of sacrificing one's personal life) and physiological states (such as fatigue). Participant number 24 explained the sense of a lack of discipline as follows: "if class starts at half past 10…I would get up at 10, so I would have breakfast quickly and go to class with my pajamas on my bed or at my table. it wasn't very good for me... What I understand is that it is the school that disciplines me."

These experiences are consistent with previous findings showing a wide range of negative feelings and physiological states among students (Almossa, 2021; Ng et al., 2021) and negative feelings among faculty members (Nimavat et al., 2021). Also, another study's (van der Meer, 2021) findings stressed the importance of sharing emotions and experiences. However, the present study identified a wider range of negative internal states which included feelings but also physiological states and cognitions. These findings highlight the importance of internal states in distance education. The experience of negative internal states is likely to hinder effective delivery of distance education. More specifically, these internal states are likely to interact with the ways in which distance

education is perceived and motivation occurs in relation to teaching or studying in distance education. Future quantitative studies need to examine these effects. Therefore, systems for supporting faculty members and undergraduate students in future difficult times need to reduce the experience of negative internal states if the aim is to offer effective distance education.

Negative Aspects of Distance Education

Both groups described some negative aspects of distance education related to the delivery of the classes, assessment and evaluation, and personal life. In addition, undergraduate students also described some negative aspects in relation to administration and professors. Table 6 lists the negative aspects of distance education in relation to the delivery of the classes. Some negative aspects such as late loading of the course materials can be also experienced during face-to-face education. However, there were many negative aspects specific to distance education. There were common negative aspects to both groups such as short duration of the classes. For example, the undergraduate number 34 described this prominent negative aspect as follows: 34"A two-hour or two-and-a-half-hour class lasts 45 minutes, so I think it's kind of a joke." Another prominent and common negative aspect of distance education to both groups was the view that applied courses were taught as if they were theoretical courses. However, there were also undergraduate students and faculty members who did not perceive these negative aspects.

There were other prominent negative aspects for the faculty members, although not for undergraduate students. One of which was low participation or attendance in the lessons. Faculty member number 19 described the consequences of this as follows: "This can cause various problems in the professional life in the later stages, …, one hundred percent students focus only on passing the course, completing the academic year, but in the future, they will be doctors, architects, engineers. … They need to acquire this knowledge here." On the other hand, some participants stated that class participation increased. Another negative aspect worth noting was the perception that one as a faculty member was not natural: 21"I didn't like seeing myself on the screen, I wasn't very natural in the first lessons.", although this was not shared by others.

Indeed, based on the undergraduate students' experience there were a number of consequences of these negative aspects. One of which was non-attendance to the classes. Other consequences included the classes remaining abstract and facing the dilemma of getting high marks and not learning properly: 19"even though we got high marks, we didn't learn anything from the thing we got high marks." Relatedly, the lessons were compared to YouTube videos: 21" I didn't feel like I was living a university life, sometimes I was asking myself what's the difference from … watching videos on YouTube." These consequences have not been reported before. Contrary to face-to-face education, undergraduate students emphasized that independent learning required from distance education was difficult to achieve: 8"I see it as a situation where accessing information is easy but managing the process is very difficult. I mean, I think it is a platform with more responsibility. … I think that you need to study more or to do more research, you need to allocate more time." They recounted several barriers to independent learning. Although some barriers can also be relevant to face-to-face education such as a lack of obligation to attend the course and

Table 6

Views on the Negative Aspects of Distance Education Related to the Delivery of the Classes

Undergraduate Students	
Short duration of the classes	Laboratory studies being stopped
Absence of extracurricular activities	Canceling the internship programs
Limited library resources	Late loading of the course materials
Theoretical teaching of applied courses	Not using any teaching tools
Receiving emails at inappropriate times	Requiring make-up lessons
Early start of the lessons	Not repeating the unrecorded lessons
Being held responsible for the topics that were not taught	
Faculty Members	
Short duration of the classes	Repeating lessons
Students having no obligation for attending the classes	Not doing synchronous lessons
Doing make-up lessons because due to technical problems	Inability to offer applied courses
Not being able to communicate	Increased opportunities for cheating
Not being able to cover the full curriculum	Becoming estranged from the computer
Not being given the recordings of the lectures	Not being able to benefit from body language
Applied courses being taught as if they were theoretical courses	Not being interactive in the lessons
Parents' reluctance to pay full fees and student complaints	Low attendance or participation in the lessons
A lack of opportunities for an ongoing measurement	Not being natural while giving lectures

inability to teach 26"more interactively due to a limited time," undergraduate students particularly stated that their professors could not benefit from the body language of their students.

Short duration of classes (Almossa, 2021) and not being able to learn independently (Himat et al., 2021) have been reported before among students although not in faculty members. Nevertheless, the present findings extend the literature by providing a wider range of such aspects based on the views of both groups. Also, these negative aspects of distance education were not universal. This finding suggests that the experience of distance education does not necessarily entail the experience of negative aspects.

In terms of assessment and evaluation, as probably in face-to-face education, undergraduate students mentioned pop quizzes, meaningless or too many assignments and insufficient exam durations. However, the experience related to student presentations was clearly specific to distance education: 31"I can't see anyone (other students) while making a presentation - you can see the professor … that's all. I felt like I was making a wasted presentation, I don't think anyone is listening to me." As probably in the face-to-face education, in addition to different deadlines, difficult assignments, plagiarism, 5 "copying," injustice in marking, problems with question banks and changes made to the marking system were also mentioned. In line with this, among faculty members there was the view that distance education lacked opportunities for an ongoing measurement. Although not universal, this view extended to the idea that distance education 27"increases the opportunities for cheating a little more." In fact, low attendance in the lessons was perceived as being associated with cheating. Faculty members also recounted that they became estranged from the computer: 29 "it took me one week to prepare the homework and two weeks to read it… After a while, I got estranged from the computer. I really didn't want to see any electronic device in front of me." Similar negative aspects have been also reported by previous studies in the context of distance education among students (Khalil et al., 2020) and faculty members (Nimavat et al., 2021). Systems aiming at promoting the effective delivery

of distance education also need to target these negative aspects of distance education as these will also likely have an adverse effect on undergraduate students' performance. Future studies also need to examine these effects.

Negative aspects of distance education in relation to personal life formed an important part of both groups' experience. Common to both groups was lack of socialization. Indeed, although not universal, many undergraduates students recounted that their 26"social relationships were … damaged", 34"social skills were declined", their 17"financial opportunities declined." Faculty members when reflected on their students' experience they also felt that their students' personal life got also affected. Accordingly, faculty members felt their students were not able to go out, were 3"staying away from each other socially", were 7"not leaving the house", and were 7"deprived of the social environment". Faculty members stated that the deterioration of students' social life might have had a negative impact on their academic success. On the other hand, some faculty members stated that the social lives of their students did not suffer and that distance education would have had a positive effect on students' success: 23"Thanks to distance education, they received the lesson in 2 hours, focused, … and asked me the question directly and did their homework. They did so much better". Similarly, although not universal, many faculty members felt that they themselves 7"were trapped in the house" and expressed that theirs and their students' social lives were disrupted. The classroom environment emerged as an opportunity to socialize, as one faculty member put it: 31"Classroom is both an academic environment for us, but also a special environment where we socialize with our students." This finding suggests that distance education does not necessarily entail difficulties in socializing. Disruptions in social life have been reported by previous studies among students (Kedraka & Kaltsidisi, 2020) and faculty members (van der Meer, 2021).

Relatedly, faculty members also asserted that concepts such as day and night, weekend, and overtime disappeared and the balance between personal life and work got deteriorated. Moreover, relatedly, they stated that the personal boundaries disappeared, and they complained that they led an unhealthy lifestyle. 29 "concepts of day and night …hours, sleep hours got mingled. Eating and drinking patterns were disturbed excessively". This boundary problem was linked to their students' lack of discipline. Despite this, faculty members felt that their popularity decreased. Faculty members also reported that distance education 28"brought burden to the house order", created 26" some problems in private life" and caused changes in family dynamics: 8"many times I never left my room from morning to evening. This, in fact, had an impact on the family". This situation also led to a situation where all the roles became mingled: 28"motherhood, also classes and exams, everything became mingled… The biggest problem was being a full-time mother and an employee at the same time during the pandemic".

Not surprisingly, negative aspects of distance education related to administration formed a minor part of undergraduate students' experience. They stated that they were not able to plan because they were being informed at the last-minute. However, those related to faculty members formed a large part of their experience. According to undergraduate students, as in probably face-to-face education, a lack of sufficient English of both faculty members' and theirs but as probably different from face-to-face education, the unsuitability of domestic conditions also affected participation in the lessons. On the other hand, other undergraduate students recounted that it was possible to

be 14"interactive." Getting feedback helped towards being interactive. Nevertheless, although not universal, undergraduate students complained that they could not communicate with the faculty members outside the classes.

Based on the undergraduate students' experience negative aspects related to faculty members formed some continua. On one hand, there was the view that faculty members 4"could not adapt to the system," because of a lack of training and facilities to give lectures such as having an old laptop and the system being inflexible: 27"since our professors had a scheduled time and duration, no matter what they had to record the lessons at this scheduled time, and this seemed obligatory. … they had to look well, they had to tidy up their rooms, they had to put their children to sleep." On the other hand, there was the view that they can adapt to the system. Another continuum was related to whether faculty members were understanding. On one hand, there was the view that the faculty members were understanding: 28"we had professors who say 'can you tell me what the problem is? Can you give me the details of the problem?' 'We want to help you... the students like you.'" and that the students 8 "could easily reach them (professors) via e-mail when there was a part that we did not understand." On the other hand, there was the view that faculty members were not understanding or they were neutral. Relatedly, the views that faculty members kept their cameras turned off, did not conduct live lessons, reproached their students, were 11 "stressed" and were unwilling to teach were also mentioned. Consequently, undergraduate students distanced themselves from the course. Some of these findings can also be a characteristic of face-to-face education such as faculty members being stressed and being unwilling to teach. A lack of effective communication or interaction and opportunities to give feedback and difficulties in delivering the curriculum (Nimavat et al., 2021) have been reported previously among faculty members, although not in undergraduate students. Moreover, to the authors' knowledge, these continua and their probable consequences have not been reported before among undergraduate students and faculty members in the context of distance education during the COVID-19 pandemic. Academic performance of undergraduate students who perceive their professors at the negative end of these continua will be adversely affected. Therefore, future studies need to examine these effects.

Overall, the present findings extend the literature by providing a wide range of negative aspects of distance education which is likely to affect the delivery of distance education in negative ways. Future quantitative studies can also examine this effect. Therefore, systems for supporting distance education in future difficult times also need to reduce these aspects if the aim is to offer effective distance education. In particular, barriers to independent learning, lack of socialization among others need to be targets of systems aiming at increasing the effectiveness of distance education in difficult circumstances.

Demotivating Factors for Faculty Members

Faculty members considered distance education as demotivating. These demotivating factors were outlined in Table 7. Some demotivating factors were related to their professional role whereas others were related to personal and academic life. Most of the former factors were also considered as negative aspects of distance education. Based

Table 7

Demotivating Factors

Faculty Members' Views on Demotivating Factors for Themselves
Professional role
Not being able to give practical lessons, not being able to be interactive in the lessons, an increased workload, low student participation in the lessons, students being disinterested, being under pressure to give a pass mark, students getting others to do their homework for money or cheating
Personal life
Experience of internal states including uncertainty, feelings of worthlessness and loneliness, being forced to take an unpaid leave, being perceived as working less, deterioration of the balance between personal life and work
Academic life
Inability to do research
Undergraduate Students' Views on Demotivating Factors for the Faculty Members
Faculty members being accustomed to face-to-face education, student non-participation in the lessons, the fact that even students attending the classes not participating in class discussions, feeling helpless, students not putting any effort into lessons or homework, technical problems, putting effort to manage time, being unhappy while giving homework, marking homework, student objections
Undergraduate Students' Views on Demotivating Factors for Themselves
Student role
Changes in the course syllabus, having lessons at early hours, restrictions in reaching and communicating with the faculty members, not being able to focus on the lessons, the haste to complete the homework,
Technology
Assessment and evaluation
Cheating becoming normal
Personal life
Internal states such as fear, lethargy, uncertainty, A lack of intrinsic motivation
Academic life
A lack of opportunities for applying what is learned and for academic development
Faculty Members' Views on Demotivating Factors for their Undergraduate Students
Student role
Not being able to communicate face-to-face, attending the lesson at home, working alone at home, a lack of equipment and the lessons being recorded
Personal Life
Negative internal states experienced by students including dissatisfaction, uncertainty, anxiety, inability to concentrate A lack of social life

on the views of the undergraduate students the fact that even those who attended the classes were not participating in class discussions was demotivating for the faculty members. This extended to feeling helpless which was also demotivating: 1"I can see the helplessness in the eyes of the professors, 'For God's sake, are you here', their eyes

say…., the professor feels like he/she is lecturing in vain, I think my professors' motivation levels to lecture to a computer decreased."

Although not stated by the faculty members, undergraduate students also thought that faculty members 8"being unhappy while giving homework," 3"marking homework," and student objections were among other demotivating aspects of distance education for the faculty members. In addition to 22"students' disinterest", faculty members felt demotivated because of the pressure they were under to give a pass mark to their students: 11"We gave high grades to their homework. We were told, in fact, not to put pressure on them. …I can say that this reduced my motivation a little bit". Another demotivating factor for the faculty members involved the students getting others to do their homework for money or cheating.

In terms of personal life, the experience of internal states was also considered as demotivating by the faculty members. Of particular importance another demotivating factor involved being perceived as working less: 27" Although we, as faculty members, did not spend less effort than our previous work as in face-to-face education, I felt that this was not perceived as such from the outside … which was a bit demotivating". Again, the deterioration of the balance between personal life and work, also mentioned as a negative aspect of distance education was also considered as demotivating. In terms of academic life, inability to do research was a demotivating factor.

The importance of motivation in education is well known. Although many of these demotivating aspects can also be relevant to face-to-face education, to the authors' knowledge the present study is the first study which identified a wide range of factors which demotivated faculty members during COVID-19 pandemic based on their point of view and that of their undergraduate students. These findings highlight the importance of motivation in teaching and provide information on the specific ways in which faculty members can get demotivated in distance education. Therefore, these factors can be also viewed as targets of systems aiming at supporting faculty members teaching in distance education in future difficult times such as COVID-19 pandemic. These systems need to reduce demotivating factors during distance education if the aim is to offer effective distance education.

Demotivating Factors for Undergraduate Students

The undergraduate students reported several demotivating aspects of distance education for themselves. Faculty members also thought that their students had low motivation and recounted different demotivating factors. These demotivating factors were outlined in Table 7. Based on the experience of both groups these demotivating factors were related to student role and personal life. In terms of student role, faculty member number 17 recounted the lessons being recorded as a demotivating factor as follows: 17" After a while, they got relaxed…at first, they followed the lessons with curiosity, then they realized that they could listen to the same lesson again afterwards. In that case, they said 'why should I get up and listen at ten in the morning? I will listen later". In terms of personal life both undergraduate students and faculty members mentioned the experience of internal states as demotivating for the undergraduate students. Based on the views of the students, there were also some demotivating factors related to technology, assessment and evaluation and academic life. In terms of assessment and evaluation there was the view that 35"cheating has become normal." Also, in terms of academic life, a lack of opportunities for applying what is

learned and for academic development was noteworthy as demotivating: 35"We can't do anything that can help us with our academic career, we have to sit at home with our hands tied, frankly, this was a really bad motivation."

Although some demotivating aspects can also be relevant to face-to-face education, to the authors' knowledge, these aspects of undergraduate students' experience have not been reported before in the context of distance education during the COVID-19 pandemic. These findings provide information on the specific ways in which demotivation takes place among undergraduate students based on their point of view and based on the views of the faculty members. Therefore, these factors can be also viewed as targets of systems aiming at supporting undergraduate students during distance education in future difficult times. These systems need to reduce demotivating factors for the undergraduate students during distance education if the aim is to offer effective distance education.

Transformation

This higher order category which incorporated positive metaphors reflected actually the kinds of positive elements brought by the COVID-19 pandemic. Tables 3 and 4 detail the use of these metaphors. Of particular importance were faculty members' metaphors describing distance education as a technological revolution and as a newborn baby, and those of undergraduate students describing distance education being like the statue of liberty or a bridge or a door. In essence, this higher order category reflected the view that distance education during the COVID-19 pandemic had the power to transform the faculty members and the undergraduate students for the better i.e., it helped to transcend conventional views on education. To the authors' knowledge previous research did not also report this higher order category or these metaphors. In a more concrete way, this higher order category incorporated the experience of positive internal states and the views that distance education had a number of positive aspects and gains, and is motivating for both groups.

Positive Internal States

Many positive internal states were described by the faculty members. There was for example, not only feeling full of hope, 2" feeling safe" and 9" feeling self-efficacious" but also not feeling empty. Other positive internal states included 4"feeling excited", 10" being happy, being self-confident", 29" feeling good…being calm,… feeling peaceful", 24" feeling relaxed", 25" feeling valued", and 16"being curious". By contrast comfort and hope emerged as the only positive internal states in the experience of the undergraduate students: 34"When online education started, it seemed like a hope…thanks to our professors, we were going to be able to carry out the process somehow." In addition to the 25"feeling of comfort for being at home," there was also comfort in relation to distance education itself: 16"we were told that we could watch the lessons comfortably again later and we would not have any problems with grades."

These positive internal states are consistent with previous findings showing the experience of many positive feelings among students (Almossa, 2021; Kedraka & Kaltsidisi, 2020), although not in faculty members. Contrary to these previous findings, in the present study the undergraduate students experienced a limited range of positive internal states. These differences may be due to methodological and/or cultural differences. Future research may

examine these differences. As far as the authors are aware no previous study identified these positive internal states among faculty members. These findings suggest that teaching or studying in distance education during the COVID-19 pandemic entails the experience of positive internal states which included not only emotions and feelings but also cognitions (such as self-efficacy). These findings highlight the importance of internal states in distance education and indicate that the experience of distance education during the COVID-19 pandemic does not entail only the experience of negative internal states but also positive internal states. The absence of these internal experiences will compromise the effectiveness of distance education and it is likely that its presence will facilitate attempts to deliver high quality distance education. Therefore, future quantitative studies need to examine these effects. Therefore, systems for supporting faculty members and undergraduate students need to promote the experience of positive internal states if the aim is to offer effective distance education.

Positive Aspects of Distance Education

Both groups mentioned a wide range of positive aspects of distance education. These positive aspects of distance education were related to lessons and personal life.

Positive aspects of distance education related to lessons formed a large part of faculty members' and undergraduate students' experience of distance education. The fact that the lessons especially the theoretical ones, can be taught, and the ability to allocate more time to lessons were mentioned by the undergraduate students: 1"I was able to devote more time to the theoretical part of my graduation project and other projects as I had a lot of time…I was able to write the articles I needed to write and do the research I needed to do, in more flexible hours." Undergraduate students recounted that the recording of the lessons helped to solve the problem of overlapping class times in face-to-face education and to follow the classes more easily even when they were ill. However, the experience of these positive aspects was not universal in that for some undergraduate students the classes being recorded was not perceived as a positive aspect of distance education: 27"I started telling myself that now I could quit the lesson after a very long lecture hour. There was an audio recording, there was a video recording: However, they were definitely not watched by me afterwards, because these were ongoing things and I started to skip watching all the recordings of all the lessons."

In addition to being given homework instead of exams, undergraduate students asserted that participation in classes was easier: 13"Students can write comfortably…, they can ask whatever they want to but when they talk face-to-face in class, this is not possible, they can be shy, they can be embarrassed." In this process, the undergraduate students also emphasized the importance of the faculty members' support. Through distance education, undergraduate students stated that they 26"saved both time…and money," in particular in terms of the content of the courses: 2 "In this process, I felt that I saved time in some lessons.…when the professor summarized the important points in one hour and sent the slide, we could work and get the same effect."

Faculty members also mentioned similar positive aspects related to the lessons. These included completing the curriculum and teaching in new and different ways: 26"I had a website. I added the videos of the solutions of the problems to that website with a YouTube link". Another participant mentioned the use of blackboard and video recording: 23"I actually used a blackboard in the home environment to teach the lesson in the first weeks. And I

recorded short videos using this board and uploaded them to the system before the lessons". Although some faculty members perceived recording of the lessons as positive, others disagreed. At the same time, according to faculty members, distance education provided both students and themselves with the opportunity to attend the lessons from anywhere.

Faculty members, although not the undergraduate students, mentioned other positive aspects that were related to the classes but went beyond the actual delivery of the classes. These included good library facilities, meetings, an increased interest in the course, opportunities for using different measurement and evaluation methods (for example, giving homework instead of exams and vice versa), improving lecture notes, transferring lecture notes to digital media and using lesson time more efficiently, as well as a higher percentage of sitting in the exams and the improvements in students' grades.

In terms of personal life, undergraduate students mentioned spending more time with family: 15"I'm in (city name). Right now, my school is there but my family lives in a different city. We hardly saw each other. … It was very good, to see my family, to relieve longing." Working from home, not commuting to work (1"the positive aspect was being able to stay away from the crowds and minimize the risk of the disease"), and laxed style of clothing were also mentioned: 17"There is a comfort, for example, you can give your lectures while you are wearing pajamas, tracksuits and shorts". Faculty members recounted that being at home also enabled them and their students to save money and time: 25" It seemed to me that it provided extra time…it was a very efficient process in terms of saving time, like the roads or other factors".

Previous studies have reported saving time, travel, and money, convenience of attending classes, having more time for family and studying, better understanding of the content of classes and receiving support from faculty members as positive characteristics of distance education among students (Almossa, 2021; Kedraka & Kaltsidisi, 2020), although not among faculty members. The present findings extend the literature by providing a wide range of positive aspects related to the delivery of the classes and personal life. Overall, these findings indicate that the experience of distance education does not entail only negative aspects but also positive aspects. The perception of positive aspects of distance education is likely to promote effective delivery of distance education. Future quantitative studies can also examine this effect. Systems for supporting faculty members and undergraduate students in distance education in future difficult times need to promote the perception of these positive aspects if the aim is to offer effective distance education.

Gains

The gains were an important part of the faculty members' and undergraduate students' experience of distance education during the COVID-19 pandemic. Faced with a style of teaching/learning that they were not familiar with, faculty members and undergraduate students gained experience in compensating for negative aspects of distance education. For both groups these gains included academic and personal development. For faculty members, these gains have been also related to fulfillment of professional role and helping student cope. For undergraduate students, these gains also involved learning to cope. Refer to Table 8 for a more detailed outline of these gains.

Based on the undergraduate students' experience, academic development included improving one's foreign language skills, learning 8"how to prepare homework, how to write an article", engaging in 18"career planning," and

Table 8

Gains of Distance Education

Faculty Members
Fullfillment of Professional role
Using extracurricular means: Telephone, WhatsApp, Systems offered by the university like ALMS and OIS
Using practical strategies: Adapting class schedule to the students; giving students homework; using course booklets and lecture notes and question banks; encouraging students to communicate verbally rather than in written format; making use of slides and videos; scheduling additional lessons and lessons for helping towards exams; extending the duration of the lessons; giving extra points for participation; clarifying the rules; working on a one-to-one basis; giving more detailed information on a given topic.
Undertaking motivational activities: Joking; making the lessons funnier; talking to and chatting with the students; listening to music; using role plays; receiving feedback; adapting the content of the course to COVID-19 pandemic; organizing meetings and online seminars; teaching students to have access to information quickly; giving responsibility to the students in the lessons in a balanced way
Management of technical problems: Getting support from research assistants; increasing internet quota; using platforms like Zoom and WhatsApp; using spare computers; providing computers to students; sitting closer to the modem; sending objections to the relevant units
Helping students to cope
Formulating stress-reducing sentences; empathising with the students; spending the first 10 minutes of the lesson for conversation; using soothing techniques; giving responsibility to the students in the lessons in a balanced way.
Academic development
Attending to training programs; reading and writing articles; developing technical skills; adapting distance education to one's style of teaching; helping students to develop themselves academically
Personal development
Gaining positive experience
Developing personal qualities: becoming adaptable; flexible, patient; less prejudiced; developing perseverance; thinking positively; overcoming fear of camera
Returning to studentship
Learning to find practical solutions to practical problems: Trying not to think; self-soothing; goal setting
Allocating time for oneself
Getting professional support for self-improvement
Finding positive meaning from distance education: Going inwards; developing a sense of reckoning; rebirth and discovery; realizing that an era is closing down and another one is opening; appreciating the importance of health; appreciating individual shortcomings; transcending oneself.
Undergraduate Students
Learning to cope
Assistant teachers playing a mediating role, being in touch with faculty members and family members by phone and email, meeting with the Dean, distracting oneself, reading books, watching soap operas, exercising, creating a WhatsApp group, conditioning oneself, focusing on studying, lessons which had poor audio and video recordings being repeated, being offered additional lectures which helped to catch up with the lessons, asking questions
Academic development

improving one's foreign language skills, learning how to prepare homework, learning how to write an article, engaging in career planning, adapting to 21st century
Personal development
Working towards being healthy, preparing for the future by gaining experience Finding positive meaning from distance education: appreciating the value of school, appreciating the value of education, appreciating the concept of family, developing a desire to help humanity

adapting to 21st century: 26"I found that I was a student who was more nervous in online conversations, … or was shyer in these video conversations. However, I discovered that being involved in technology somehow provided adaptation to today's world." For faculty members one important way by which academic development manifested itself involved adapting distance education to one's style of teaching: 10" I think that I adapted distance education to my own style … sharing day to day experiences that are not related to the lesson at the beginning of each week, guiding students and preparing them for life…I couldn't do distance education; I did something like a mixture of the two". The faculty members also stated that they also helped students to develop themselves academically: 1" I gave books for them to read…. I suggested articles. I said to them 'improve your foreign language". On the other hand, some faculty members commented that 6" Distance education slightly decreased the academic feeling". Therefore, the experience of academic development was not universal. To the authors' knowledge, no other study identified the ways in which academic development was experienced in the context of COVID-19 pandemic among both groups. Therefore, these findings extend the literature by providing a wide range of ways in which academic development takes place in difficult times such as the COVID-19 pandemic.

Similarly, many accounts described different ways of getting developed personally for both groups. For undergraduate students, personal development consisted of working towards 18"being healthy," and preparing for the future by gaining experience: 14"I think distance education was like a simulation of the future because human relationships follow such a path and we had a trial run. In the future, … many more years later human relationships will not be face-to-face. … I think that almost everything related to human beings will be carried out in this way with technological tools." For faculty members these included for example, gaining positive experience and developing personal qualities, such as 30"being less prejudiced and overcoming 22 fear of camera". This extended to the idea of returning to studentship as well as understanding changing relationships: 13" Their siblings came and they introduced them to us, …, there were some things that did not happen when we were face-to-face with the students. … everyone introduced their dog to us…our dog always came to online lessons". There was also getting professional support for self-improvement as in: 22 "I had my own concerns about my external appearance due to excessive focus on academia…Well, how does my face look? How is my voice perceived? … How is my intonation, my pacing? … I got support from a filmmaker about this".

For both groups, personal development extended to finding positive meaning from distance education. Undergraduate student number 34 described this as follows: "I can say that I questioned life more. I realized what was more valuable, in fact, every day is the same…when I went out, I thought that a lot of things started to seem worthless because I was doing the same things all the time…you can say that … I started to question the meaning of the issue." Finding positive meaning involved appreciating 19"the value of school." and 18"education, the concept of

family," and developing a desire to help humanity. For faculty members, finding positive meaning included not only going inwards but also developing a sense of 26"reckoning", 10 "rebirth, discovery" such as realizing that an era is closing down and another one is opening, as well as appreciating the importance of 30 "health", and one's 10"shortcomings" and transcending oneself: 2"We learned, got used to, adapted, transcended ourselves…I said we transcended because we learned … the university's system. We learned Zoom". To the authors' knowledge, these findings have not been reported before among both groups in the context of distance education during the COVID-19 pandemic. These findings indicate that the experience of distance education does not entail only the experience of difficulties, on the contrary, it also involves the experience of some gains. Personal development especially finding positive meaning which is in line with post- traumatic growth (Tedeschi & Calhoun, 1995; 2004) can be a mechanism by which academic performance and motivation to study are fostered during distance education. This needs to be examined in future studies. Overall, systems aiming at improving distance education in future difficult circumstances need to promote the experience of coping strategies and development, especially personal development and finding positive meaning in particular and gains in general. That is, these systems need to promote the experience of gains in faculty members and undergraduate students if the aim is to offer effective distance education in difficult times such as the COVID-19 pandemic.

To fulfill their professional role, faculty members gained experience in using many different strategies such as using extracurricular means and undertaking motivational activities. Some motivational strategies included strategies such as 1" listening to music", 21" talking and chatting with the students", receiving feedback and adapting the content of the course to COVID-19 pandemic. However, one participant did not use innovative options such as *25 sample videos* to avoid ethical problems. Meetings and online seminars were also organized by getting support from different platforms such as Zoom. Students were also taught to have access to information quickly. Although the faculty members emphasized the importance of giving responsibility to the students in the lessons, they emphasized that this should be done in a balanced way.

As another area of gain, faculty members recounted that they helped students to cope by for example, formulating 24"stress-reducing sentences" and empathizing with the students. Indeed undergraduate students also mentioned that they learned how to cope as a gain: 16"when I encounter the slightest problem, I will no longer whine, and I will say that … I went through more difficult processes." In addition to stressing the mediating role of assistant teachers, undergraduate students stated that the faculty members and their families helped them cope for example, by being in contact with them by phone and email and meeting with the Dean. Other strategies included strategies such as distracting oneself, reading books, 18"exercising," and focusing on studying. However, other undergraduate students said that they could not communicate with the faculty members as they would like because of not being face-to-face, and this situation made it difficult for them to cope and increased their level of stress and anxiety. Therefore, the experience of learning to cope was not universal. Learning to cope and its related strategies have not been reported before in the context of distance education during the COVID-19 pandemic. These findings are not surprising but can be considered as useful strategies for developing distance education practices in the future in similar difficult circumstances.

Motivating Factors for Faculty Members

Undergraduate students felt that faculty members were generally motivated. However, there were also undergraduate students who disagreed: 28"the professors were demotivated and this changed the way they taught the lessons. They had difficulty in focusing on their lessons, which affected us, the students. Also, there were problems in transferring knowledge." Therefore, the view that faculty members were generally motivated was not universal.

According to undergraduate students and the faculty members themselves, factors motivating the faculty members were related to both professional role and personal life. Refer to Table 9 for a more detailed outline of these motivating factors. In terms of professional role, undergraduate student number 2 expressed her views as follows: "I saw that the professor was happy to motivate the student to attend the class by saying 'Guys, come, get your tea and coffee." In this way, I saw that he/she invites the student to the lesson with pleasure. The fact that he/she can do this motivates him/her." Based on the views of the faculty members themselves, the fact that the lessons could even be taught and the view that they could manage this process well emerged as most important sources of motivation. However, these were not sources of motivation for all faculty members. Increased students' interest in the lessons were also considered as motivating: 10" The effort of my students for their homework motivated me".

In terms of personal life, based on the views of the undergraduate students. 1"working from home" and being with family emerged as other factors that motivated the faculty members: 11"We have professors whose families are in (another city) and come here every week, for them it might have been motivating to stay at home and spend time with their families." Similarly, saving time and being at home, also described as positive aspects of distance education, were mentioned as sources of motivation by the faculty members: 25" Being able to do something for my future plans or goals or…having a flexible side to my job was a huge advantage for me, a serious source of motivation". However, other participants did not perceive being at home as motivating: 24"our office or the classroom was an environment where we were more disciplined, managing the whole process at home made me lose motivation in the first place". Of particular importance, positive self-suggestion such as 16"This is an experience for me, I will learn this", and breaking the routine 9" by allocating space to do sports at home", were also among motivating factors related to personal life.

Although the importance of motivation is well known, to the authors' knowledge the present study is the first study which identified a wide range of factors which motivated faculty members during COVID-19 pandemic. These findings highlight the importance of motivation in teaching and provide information on the specific ways in which faculty members can get motivated in distance education. Therefore, these factors can be also viewed as targets of systems for supporting faculty members teaching in distance education in future difficult times such as COVID-19 pandemic. These systems need to promote motivating factors if the aim is to offer effective distance education.

Motivating Factors for Undergraduate Students

Students perceived themselves as motivated. Faculty members also thought that the students managed to motivate themselves. According to faculty members, undergraduate students were motivated because they felt that they

Table 9

Motivating Factors

Faculty Members' Views on Motivating Factors for Themselves
Professional role
Being able to teach, managing this process well, being able to interact, getting positive feedback from students, students getting high grades, increased students' interest in the lessons
Personal life
Being at home, saving time, being able to produce or to achieve something, the feeling that one is useful, positive self-suggestion, breaking the routine
Undergraduate Students' Views on Motivating Factors for the Faculty Members
Professional role
Being able to do make-up lessons, organizing extracurricular classes and giving creative homework,
Personal life
Working from home, being with family
Undergraduate Students' Views on Motivating Factors for Themselves
Student role
Raising marks, understanding and learning the lessons better, being supported by the faculty members through giving a homework instead of an exam and giving appropriate assignments
Personal life
Allocating time to oneself, family support, being at home
Academic life
An increased opportunities for professional development, acquiring professional knowledge
Faculty Members' Views on Motivating Factors for their Undergraduate Students
Student role
Listening to lectures while in bed, classes being recorded
Personal life
Being at home, flexibility and saving time

managed to adapt to the pandemic conditions, and that the lessons were not stopped. Participants stressed that during this process informing the students every step of the way was very important. In order to motivate themselves, undergraduate students were thinking positively about the lessons: 2"You have the chance to listen to the points you missed, or if you could not follow during the lessons from the recordings." They also reported to motivate themselves on the basis of some future incentives such as 10"I will have a nice vacation after I finish the homework and I will have a rest." According to faculty members and undergraduate students themselves, motivating factors for the undergraduate students were related to student role and personal life. The undergraduate students also reported motivating factors related to academic life. Refer to Table 9 for a more detailed outline of these motivating factors.

In terms of student role, undergraduate students recounted that they were supported by their professors, and this support took the form of 9"giving a homework instead of an exam," and giving appropriate assignments. However, giving a homework instead of an exam was not motivating for all undergraduate students. Of particular importance, faculty members recounted that listening to lectures while in bed was motivating for the undergraduate students: 1"

someone said, ‘Professor, I got up in the morning, now I'm in my bed, I'm listening to the lessons from where I sleep, which is a very good thing".

In terms of personal life, based on the views of the undergraduate students family support – 28 "having my family by my side gave me motivation" – and being at home were also motivating: 15"I was at home in a safe area, this is a little more positive, I would say motivating." Being at home, flexibility and saving time were also among factors that motivated the students according to the faculty members. In terms of academic life, an increased opportunities for academic development were also among motivating characteristics for the students: 4"I have more time to improve myself.…I had the chance to attend them (online conferences), … I am thinking about internships abroad, … I am a little motivated in terms of how I can improve myself. … It has been a bit of motivation for me to learn a language, so I can say that we found motivation in terms of self-development."

These findings indicate a wide range of factors that undergraduate students themselves and faculty members considered as motivating for their students. These findings also highlight the importance of motivation in teaching and provide information on the specific ways in which undergraduate students can get motivated in distance education during difficult times such as the COVID-19 pandemic. Therefore, these factors can be also viewed as targets of systems aiming at supporting undergraduate students during distance education in future difficult times, such as COVID-19 pandemic. These systems need to promote motivating factors during distance education if the aim is to offer effective distance education.

Neutrality

In between the continuum from the experience of loss and transformation described above, this higher order category incorporated the neutral metaphors and reflected the view that distance education provided during the COVID-19 pandemic could turn out to be both a positive and a negative experience. Table 3 and 4 detail these metaphors. Of particular importance were the metaphors describing distance education as an iceberg and a life jacket by the faculty members and as ying and yang by the undergraduate students. This higher order category indicates that the experience of loss and transformation can actually occur simultaneously as evidenced by accounts on the nature of distance education. Similarly, there was a simultaneous experience of both positive and negative internal states. Still, there was also the experience of no internal state. Arguably, positive experiences in relation to distance education can be maximized by paying attention to ways of improving distance education outlined. To the authors’ knowledge the simultaneous experience of loss and transformation represented by this higher order category has not been reported before.

Nature of Distance Education

Both faculty members and undergraduate students considered distance education during the COVID-19 pandemic as a new experience. Faculty members emphasized the distance education team’s dedication and sacrifice, and especially the team’s spirit, as being very important for the success of distance education but pointed out that the students did not recognize how rapid and smooth the transition was: 17" Some of them (students) did not realize how

lucky they were, because they (students) were able to start education immediately". Distance education was considered as a challenge by both groups.

Both groups' views on the process of distance education formed some continua. The first continuum was related to how the process of distance education was managed. On one hand, among undergraduate students there was the view that distance education 17 "was managed very well." On the other hand, there was the view that this was not the case as described as being 34"not like in school." The same was also recounted by the faculty members. The second continuum was related to whether distance education was satisfactory. On one hand, there were undergraduate students who were 9"satisfied," while others indicated that they were 27"not satisfied at all." Dissatisfaction with distance education extended to the idea that 27"distance education should definitely not be undertaken." For some undergraduate students, dissatisfaction was associated with oneself rather than distance education. Although some faculty members stated that they were satisfied with the process, others said that they were not satisfied. One reason for dissatisfaction was that distance education was not appropriate for applied subjects. The last continuum was related to whether one adapted to distance education. Although some undergraduate students stated that "adapted to the new process", others recounted that they could not adapt. Relatedly, some faculty members recounted that they were caught unprepared and had difficulties in adapting to the transition: 4" In order to provide a proper and professional education, a long preparation period was needed. … We got straightaway into this education with the materials we used in face-to-face education". In contrast, other faculty members stated that they were able to overcome this by *34 revising the material,* despite being caught unprepared.

One continuum identified in the present study, satisfaction versus dissatisfaction is consistent with previous mixed findings among students (Himat et al., 2021) although not in faculty members. However, to the authors' knowledge, no study among undergraduate students or faculty members in the context of distance education during the COVID-19 pandemic reported findings consistent with the other continua. It can be argued that undergraduate students or faculty members who are at the negative end of these continua will be at risk of experiencing difficulties in teaching or studying in distance education. These effects need to be examined in future quantitative studies.

There were also differences in terms of preferred style of education among both groups. Some preferred face-to-face, some others preferred distance education and still others hybrid education for several reasons. In addition to technical disruptions, undergraduate students emphasized that a lack of 10"eye contact" and other difficulties experienced in distance education adversely affected classroom management, unlike in face-to-face education: 28"In face-to-face education, we could ask our questions more easily, we could express ourselves more clearly, we could understand our professors better. Our professors could analyze us much better, and they could shape the teaching style according to the way they analyzed the class." Still other undergraduate students stated that they would like to have "21 "both distance and face-to-face education." Faculty members advocating face-to-face education explained the reasons as to why face-to-face education was necessary as follows: 19" the mood of the person while lecturing to the audience is different from the mood to the computer in front of him". Conversely, the reasons for advocating distance education were explained as follows: 33" I don't even wish to think that such a system didn't exist in such a dangerous process. … I have to describe this system not as useful, but as necessary". Other faculty members

preferred hybrid education: 18" I think that home or distance education can also be beneficial for some courses". They also recounted the reasons for these preferences such as face-to-face education providing opportunities for interaction. These different preferences for educational style are not surprising and reflect the reluctance or unwillingness of some faculty members and undergraduate students to accept distance education because of being accustomed to face-to-face education. These are also in line with previous findings showing preference for distance (Khalil et al., 2020) or hybrid education (Ng et al., 2021) among students.

Ways of Improving Distance Education

Several ways of improving distance education were also mentioned. These have been related to the system, classes and broader aspects. These are listed in Table 10. In terms of the system, of particular importance some faculty members thought that the existing system needed to be improved for example, by enriching the software and ensuring the harmony of the different systems used: 23" the system where we enter the final grade, and the system where we enter the grade temporarily, …, were different from each other". Relatedly, some faculty members suggested using a single system rather than a number of different systems. Other faculty members recounted that it was necessary to switch to a new system. Still other faculty members emphasized that the university should have its own system. These faculty members also recommended that the system 1"was more interactive like zoom", 23"was more fluid…objective", and had a number of features including 17" a quick play option", 23" an increased visuality", 12" an increased variety of materials", and 26 "option for the students to talk". On the other hand, faculty members recommended that distance education could be offered as an option, and realistic virtual classrooms and laboratories could be used. Faculty member 34 described the virtual classroom as follows: "Each student chooses his/her own place, and there is a small image of the student on the desks.…you can even put a body instead of this image, … I think it would be nice if there was such a thing as an avatar that could walk in that classroom, in such a three-dimensional simulation environment…it would be nice for your fellow students to raise their hands and ask questions…when they press the button, the avatars there will raise their hand.… I think it would be a legend in the house.…this virtual reality has improved a lot". Undergraduate students also recommended that a number of improvements were made to the system such as switching to 16"video communication," reviewing the audio and video system and increasing the capacity of the system: 31"They used to say that a thousand people can participate in the system. … this number of participants can be increased. It can be 2000 people."

Of particular importance in terms of classes, undergraduate students recommended that lessons should be held in either hybrid or face-to-face format, and 27 "should be definitely moved into a system that is more interactive, where students and professors are integrated in the school environment more." In cases where this was not possible, they recommended that no distance education should be provided. 18"Doing the exams…under the supervision of professors at school," and changing the homework system such as giving short-term assignments were among ways of improving distance education. Various strategies for tracking class attendance such as 13"writing the school numbers on the chat panel," were also recommended. In addition to lengthening the duration of the lesson hours, undergraduate students also recommended the use of different teaching tools such as 10"giving examples instead of reading the slide." Although these ways of improving distance education were mentioned, some undergraduate

students were happy with the quality of teaching. More importantly, the undergraduate students stressed that 26"organizing … the environment where the professor lectures," was important. In relation to this area, faculty members suggested that increasing the duration of the lessons to 90 minutes, making attendance compulsory, not

Table 10

Ways of Improving Distance Education

Undergraduate Students
System
Moving into a more interactive system
Improving the system: switching to video communication, reviewing the audio and video system, making the video viewing screen more practical by rewind keys or by fast viewing, increasing the capacity of the system
Using new remote support software options such as Any desk
Carrying out an optimization study
Classes
Holding the lessons in either hybrid or face-to-face format
Providing no distance education
Doing the exams under the supervision of professors at school
Changing the homework system: giving homework instead of exams, giving short-term assignments, being marked on the basis of more than one homework, being assigned homework according to the facilities available
Tracking class attendance: Writing the school numbers on the chat panel, giving a questionnaire during the lesson and asking to write student numbers, accepting the students to the lesson one by one
Organizing the teaching environment: paying attention to the physical characteristics of the teaching environment, paying attention to the clothes, avoiding a dark teaching environment
Lengthening the duration of the lesson hours
Using different teaching tools: giving examples instead of reading the slides, telling a story and drawing the student into it, loading the slides to the system, making small laboratory videos
Applying the pass and fail system
Broader aspects
Increasing the facilities offered by the university such as computers
Training professors on using the system and on communication with students
Giving students and professionals psychological support
Increasing extracurricular activities
Faculty Members
System
Using a single system rather than different systems, switching to a new system, university having its own system, having a more interactive system like zoom, having a more fluid…objective system, having a system with a number of features including a quick play option, an increased visuality, an increased variety of materials, and an option for the students to talk, enriching the software, ensuring the harmony of the different systems used, system allowing students to connect to the video and audio system
Classes
Offering distance education as an option, using realistic virtual classrooms and laboratories, better coordination, planning, development of standards, offering training to faculty members for lecturing in distance education and preparing course materials, not scheduling lessons in the morning, increasing the duration of the lessons to 90 minutes, making attendance compulsory, not recording the lessons, giving one-to-one practical lessons, and standardization of the assessment system, exams being held at the university or could be conducted by careful monitoring
Broader aspects
Organizing communication skills seminars, increasing extracurricular activities, receiving psychological support, getting professional support

recording the lessons, giving one-to-one practical lessons, and standardization of the assessment system. Compulsory attendance extended to the view that the lessons needed to be interactive. However, some faculty members argued that compulsory participation either way would not make any difference.

In terms of broader areas, of particular importance the faculty members recommended offering training to faculty members for lecturing in distance education and preparing course materials as well as organizing communication skills seminars, increasing extracurricular activities, and receiving psychological support: 1"Since we are in an uncertain period for students, for us, for our country, for the world, what would it be like to get psychological help? What would happen to students and us? "

Some ways of improving distance education including improving infrastructure or technology, having more flexible evaluation and marking systems, improving course content such as preparing more engaging teaching materials have been documented by previous studies among students (e.g Han & Demirbilek, 2021). Also, among faculty members previous qualitative studies have also reported similar suggestions such as giving creative assignments and assignments that stimulate autonomy and competition, and providing opportunities for students to share their emotional experiences, interests, and future career plans (van der Meer, 2021). The ways of improving distance education identified in the present study extend the literature by providing other ways of improving distance education and therefore, may contribute towards the development of effective distance education that would be delivered in the future in similar difficult circumstances.

Conclusion

There has been a shift from face-to-face education to online education because of the measures taken to reduce the spread and burden of COVID-19 pandemic. These measures challenged universities and faculty members alike. Distance education seemed to be an indispensable tool to ensure the continuity of education in pandemic circumstances. The present qualitative study aimed to understand the views of faculty members and undergraduate students on distance education during COVID-19 pandemic in a foundation trust university in Türkiye.

Findings revealed negative, neutral and positive metaphors which described distance education during the COVID-19 pandemic. In fact, these metaphors indicated the existence of a continuum in the form of three higher order categories including the Experience of Loss, Transformation and Neutrality under which a number of themes were present. These included the nature of distance education, technical difficulties, gains, negative and positive internal states, negative and positive aspects of distance education, demotivating and motivating factors, and ways of improving distance education. Surprisingly, in general terms, views of distance education were mostly consistent across both groups. Moreover, each group was able to infer to the experience of the other group empathetically. This highlighted the two-way-process of teaching and learning.

The present findings provide a user-derived evidence base for future distance education practices in difficult times, such as COVID-19 pandemic. That is, many faculty members' and undergraduate students' views identified in the present study can be viewed as targets for systems aiming at supporting faculty members and undergraduate

students in difficult times if the aim is to offer effective distance education. Arguably, technical problems and hardware difficulties need to be reduced to a bare minimum.

However, more importantly, these systems need to promote gains, personal development which took the form of finding positive meaning from distance education. In particular, finding positive meaning took the form of for example, transcending oneself and appreciating the importance of health and developing personal qualities such as becoming less prejudiced among faculty members and appreciating the value of school, education, appreciating the concept of family, developing a desire to help humanity among undergraduate students.

These systems also need to foster positive internal states (such as self-efficacy, hope, comfort and safety) and to reduce negative internal states (such as anxiety, depression, and stress, a sense of sacrificing one's personal life, being fatigued, having a lack of sleep) as well. Another group of targets for these systems need to be negative and positive aspects of distance education. In particular, problems in assessment and measurement, cheating, teaching applied courses like theoretical courses, deterioration of balance between personal life and work, disappearance of boundaries, unhealthy lifestyle, problems in personal life, changes in family dynamics, difficulties experienced in independent learning, facing the dilemma of getting high marks and not learning properly need to be targeted. In terms of positive aspects, these systems need to promote the use of different measurement and evaluation methods and teaching in new and different ways.

These systems need also to target the demotivating factors (such as students getting others to do their homework for money or cheating, the experience of negative emotions or feelings, deterioration of the balance between personal life and work, and inability to do research). Motivating factors such as students' interest in the lessons, being able to produce and to achieve, feeling that one is useful and the use of positive self-suggestions) need to be promoted.

In terms of ways of improving distance education mentioned by the undergraduate students and faculty members in the present study, particular attention need to be given to factors such as using realistic virtual classrooms and laboratories, better coordination, planning, development of standards, offering training to faculty members for lecturing in distance education and in preparing course materials, increasing extracurricular activities and receiving psychological support. The present findings could also guide future studies in developing student-derived and faculty-member-derived questionnaires for examining the quality and the effectiveness of distance education. That is, the themes and sub-themes identified in the present study can be used to formulate questions for the questionnaires measuring the quality and the effectiveness of distance education practices in difficult times such the COVID-19 pandemic.

Ethic

Ethical approval was obtained from Istinye University, Humanities and Social Sciences Research Ethics Committe dated 05/06/2020 and numbered 2020/7 (decision number: 04).

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Conflict of Interest

There is no conflict of interest.

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