

Using Online Photovoice (OPV) to Understand Youths' Perceptions of Distance Education during COVID-19

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ABSTRACT

In this study we aimed to investigate young college students' experienced problems and support resources regarding online or distance education during the COVID-19 pandemic. We used an innovative technique, Online Photovoice (OPV) method to collect data. The research includes the theoretical framework created to understand the factors that facilitate and complicate online/distance education processes for prospective teachers in the COVID-19 pandemic. Therefore, the framework consisted of Ecological Systems Theory (EST), Community-Based Participatory Research (CBPR), and OPV. In the analysis of the data, we used Online Interpretive Phenomenological Analysis (OIPA). The study sample consisted of 153 young university students in three universities in the south and southeast of Turkey. The data collection tool was created as an online form consisting of four parts: introduction, general information, and consent form; questions on the most important facilitator and the most important barrier in your life for your online/distance education during the COVID-19 process using OPV; and demographic questions section. When the facilitating factors obtained from the study data were examined, 11 main themes emerged. These main themes were having online or distance education (37%), technology, computer, internet, and helpful course programs (30%), and private space (10%). On the other hand, 16 complicating main themes have emerged including insufficient technology (32%), problems with online education (15%), and financial issues (12%). The participants attributed facilitators and barriers to EST levels, respectively: individual/intrapsychic factors (47%, 43%), microsystem (19%, 48%), exosystem (36%, 37%), and macrosystem (26%, 34%).

Key words: Online and Distance Education, Online Photovoice (OPV), Photo Voice, Online Interpretive Phenomenological Analysis (OIPA), Community-Based Participatory Action Research (CBPR), COVID-19, Pandemic, College Students, Youth

EFFECTS OF COVID-19 ON HIGHER EDUCATION STUDENTS

COVID-19 (severe acute respiratory syndrome-coronavirus-2) has spread in almost all parts of the world, caused global

concern, and affected all age groups (World Health Organization [WHO], 2020; Suhail et al., 2021; Tanhan, 2020; Tanhan et al., 2021a). Since the outbreak of COVID-19 has highlighted many problems and challenges in the field of health, it continues to

unexpectedly affect societies in biological, psychological, social, spiritual, and economic terms (Arslan et al., 2020; Cao et al., 2020; Çiçek et al., 2020; Rajkumar, 2020; Suhail et al., 2020; Tanhan, 2020; Tanhan et al., 2021a, 2021b, 2021c). Although college students are young and generally not found in any of the coronavirus infection risk groups, they constitute a significant group experiencing COVID-19.

Many countries affected by the pandemic have tried to slow the spread of the pandemic by taking measures; such as, banning public events and gatherings, workplace closures, stay-at-home restrictions, domestic and international transport restrictions, testing, and contact tracing (Gewin, 2020; Lau et al., 2020; Owusu-Fordjour et al., 2020; Tanhan et al., 2021a; 2021b; 2021c). Efforts to reduce the spread of the COVID-19 virus among youth and adults have also led to widespread closures of universities and other educational institutions in many countries.

COVID-19 GLOBAL ADVERSE EFFECT ON COLLEGE STUDENTS' LIFE

COVID-19 has affected almost all the world college students and their education (Gewin, 2020; Goyal, 2020; Lau et al., 2020; Tanhan et al., 2021; UNESCO, 2020). Physical closure of educational institutions has been an effective way to reduce the spread of the virus but has also created difficulties for students, educators, families, and employers (Aslam, 2020; Owusu-Fordjour et al., 2020; Tanhan, 2020). The pandemic has caused major changes in the academic and social lives of college students (Tanhan et al., 2021b, 2021c). These changes have significantly affected the transition to online classes, closed libraries, changing communication channels and administrative support, new assessment methods, different workloads, and performances (Bezerra, 2020; Cao et al., 2020; Gonzalez et al., 2020; Kamarianos et al., 2020; Khan, 2020; Owusu-Fordjour et al., 2020; Tormey et al., 2020). The social lives of higher education students were affected due to reasons such as moving to parent's houses or tenements as a result of closed dormitories, not being able to meet friends or relatives, travel restrictions, and being stuck abroad (Cao et al., 2020; De Vos, 2020; Ma & Miller, 2020; Liu et al., 2020; Pan, 2020; Tanhan, 2020; Tanhan et al., 2021b, 2021c). Students' financial anxiety, concerns about job loss, future education, and careers have increased with the destabilization of family income (Elmer et al., 2020; Kmietowicz, 2020; Moreno et al., 2019; Tanhan et al., 2020; Xiao, 2020).

Studies have shown that the COVID-19 outbreak negatively affects university students' education, life quality, and psychological health. In these studies, an increase in anxiety, depression (Son et al., 2020; Tanhan, 2020; Tanhan et al., 2020; Zimmermann et al., 2020). Also, suicidal ideation, and worsening quality of life were reported among university students (Son et al., 2020). Fear of having a parent or an acquaintance infected with COVID-19, worry about getting the virus (Cao et al., 2020), decreased face-to-face interactions with other people such as friends, changes in sleep patterns and eating habits due to social isolation were stated (Kmietowicz, 2020; Son et al., 2020; Xiao, 2020). Prohibitions such as bans on outdoor activities (running, walking, etc.) and emotions

such as frustration and anger have negatively affected many individuals' mental health, leading to their increased depression and anxiety (Brooks et al., 2020; Browning et al., 2021; Cao et al., 2020; Elmer et al., 2020; Liu et al., 2020; Son et al., 2020). In the report published in *Young Minds* (2020), it was stated that due to the pandemic, 83% of young people think that their mental health conditions have worsened due to the suspension of educational activities, loss of routine, and limited social communication. Similar to the studies mentioned above from different countries, Turkish college students also experienced both difficult and positive experiences during the pandemic (Doyumğaç et al., 2021; Genc et al., 2021; Subasi et al., 2021; Tanhan, 2020; Tanhan et al., 2021a, 2021b, 2021c).

Online/Distance Education during the COVID-19 Period

From a technological perspective, the COVID-19 pandemic has led to major, sudden and unprecedented developments in the use of digital technologies and media all over the world (Guitton, 2020; Tanhan et al., 2021b, 2021c). While the access and use of virtual digital spaces before COVID-19 was not a priority for everyone (Lupac, 2018; Tanhan et al., 2020), it has become a necessity to maintain our basic social structures during the pandemic period (Beaunoyer et al., 2020). In the face of the pandemic, education has been disrupted, at least 91% of students' education has been interrupted worldwide, and online or distance education has been put into use as a solution tool by many countries (Gonzalez et al., 2020; United Nations [UN], 2020; Yen, 2020). In this study, online education and distance education were used interchangeably.

Getting the existing education system online in a matter of days requires a major and difficult change (Howlett et al., 2009; Schollosser & Simonson, 2009). According to Jaques and Salman (2007), online teaching can be both facilitating and challenging for students and educators. First, a detailed lesson plan design, teaching materials such as audio and video content, and technical support teams are required to complete online teaching (Dill et al., 2020; Doyumğaç et al., 2021; Lim, 2020; Rohman et al., 2020; Subasi et al., 2021). However, due to the sudden emergence of COVID-19, many educators faced challenges such as lack of online teaching experience, the necessity of early preparation, and lack of support from educational technology teams (Alam, 2020; Doyumğaç et al., 2021; Lee, 2020; Subasi et al., 2021). Moreover, additional questions have emerged, such as how students who do not have access to computer and internet facilities will receive the education and how teachers will provide practical training (Tanhan, 2020). Some of students at home may not have internet facilities or the correct setup such as books, computers, and high-speed internet connection (Adam et al., 2020; Alam, 2020; Aydın & Erol, 2021; Bao, 2020; Baticulon et al., 2021; Doyumğaç et al., 2021; Tanhan et al., 2021a, 2021b; Subasi et al., 2021).

Studies examining the effects of distance education in the period of COVID 19 have shown that low-income students are disadvantaged compared to their more affluent peers (Adnan & Anwar, 2020; Alam, 2020; Aucejo et al., 2020;

Kapasiaet et al., 2020; Tanhan, 2020; Thongsri et al., 2019). Some students without secure internet access or technology find it difficult to attend online lessons. In terms of access to technology, there is a gap between and within countries according to income groups and underdeveloped or developing countries are at a disadvantage. For example, according to OECD data, 95% of students in Switzerland, Norway and Austria have a computer that they can use for schoolwork, while in Indonesia, this number is only 34% (Li & Lalani, 2020). Likewise, the main source of information in Tanzania is still radio. Although 79% of the society owns a mobile phone, the telephone is usually owned by the head of the family. This situation and the slow internet speed make it difficult for students to receive internet-based/supported education (Todd, 2020).

In addition, research indicates that during online education, students have difficulty concentrating on academic work due to the distracting environments in their homes, and their education is interrupted by family members and household chores (Doyumğaç et al., 2021; Tanhan, 2020; Tanhan et al., 2021b, 2021c). In addition, lack of accountability and social media, internet and video games, lack of interaction and staring at computer screen for too long, and a monotonous lifestyle negatively affect students' focus on academic work (Tanhan, 2020). Most studies reported that students' academic performance was affected by the pandemic, and the biggest perceived difficulty was the sudden transition to online lessons. Most of the students particularly complained of sudden changes in the curriculum, lack of technical knowledge of technological devices (Alam, 2020; Owusu-Fordjour et al., 2020), technical problems with online applications, and difficulty of online learning (Alam, 2020; Huckins et al., 2020; You & Kang, 2014). They expressed concerns about their progress in research and classroom projects due to restrictions imposed to maintain social distance and lack of physical interaction with other students (Adnan & Anwar, 2020). The most common obstacles were reported as difficulty in adjusting learning styles, having to fulfill responsibilities at home, and poor communication or lack of clear instructions from educators.

In the studies conducted during the pandemic period, it was stated that the most suitable system for this period was distance education, although the limitation of interaction (Terenko & Ogienko, 2020). It was understood that teacher candidates preferred traditional education to distance education (Karatepe et al., 2020). Although it is a comfortable and easy system, it was concluded that it was not suitable for practice lessons (Altun Ekiz, 2020). The teaching profession identity was negatively affected due to the inability to practice teaching (González-Calvo et al., 2020).

The Effects of Online Education on University Students in Turkey during the COVID-19 Period

After the COVID-19 was declared as a pandemic by the World Health Organization on March 11, 2020, universities in Turkey also suspended face-to-face teaching and rapidly switched to online digital formats in education on March 23 (Doyumğaç et al., 2021; Keskin & Özer, 2020; Serçemeli & Kurnaz, 2020; Tanhan, 2020; Tanhan et al., 2021b, 2021c; Yılmaz,

2020). This sudden change due to the COVID-19 pandemic has affected the education of teacher candidates like all other university students in Turkey, and studies investigating the effects have increased (Doyumğaç et al., 2021; Tanhan, 2020; Subasi et al., 2021). It was noted that qualitative studies were conducted in which distance education was evaluated mainly through taking the opinions of teacher candidates and education stakeholders (Akdemir & Kılıç, 2020; Duman, 2020; Er-Türküresin, 2020; Özdoğan & Berkant, 2020).

In Turkey, before COVID-19, it was stated in the research about the opinions of teacher candidates on distance education that face-to-face education was necessary for the most effective education to take place (Kıralı & Alcı, 2016). It was concluded that the success of education depends on the learner and that distance education is generally unsuccessful (Öztaş & Kılıç, 2017). Research has reported that the problems encountered in distance education revolve around lessons, systems, and exams (Doyumğaç et al., 2021; Subasi et al., 2021; Tanhan, 2020). It was emphasized that the lack of practice and communication causes the problems experienced in the lesson, and therefore students are distracted from the lesson and suffer from attention deficit (Tanhan, 2020). They also stated that these negative situations make the lesson inefficient and boring and decrease learning effectiveness (Doyumğaç et al., 2021; Kan & Fidan, 2016; Subasi et al., 2021).

The study of Eti and Karaduman (2020) examining the effect of the COVID-19 pandemic on the professional competencies of prospective teachers stated that 40.9% of the teacher candidates feel professionally competent, 38.6% feel the need for professional development and 20.5% feel incompetent. In the studies, the opinions of teacher candidates and education stakeholders on the advantages and disadvantages of distance education were examined (Doyumğaç et al., 2021; Er-Türküresin, 2020; Özdoğan & Berkant, 2020; Subasi et al., 2021; Tanhan et al., 2021c). The advantages are stated as; economy, repetition, time and space flexibility, the ability to meet the educational needs during the pandemic period, the prevention of virus infection, the importance of technology in education, and the development of technological skills (Doyumğaç et al., 2021; Er-Türküresin, 2020; Özdoğan & Berkant, 2020; Subasi et al., 2021). The disadvantages are lack of permanent learning, problems arising from measurement and evaluation, disciplinary problems, insufficiency of resources such as internet and computers, system problems, technical problems, loss of motivation, inequality of opportunity in education, inadequate communication and interaction, inadequate socialization, and unpreparedness for the distance education process (Er-Türküresin, 2020; Özdoğan & Berkant, 2020; Subasi et al., 2021), and the process did not meet academic expectations (Akdemir & Kılıç, 2020). Likewise, in the results of another study examining pre-service teachers' views on distance education practices, pre-service teachers stated that distance education practices were not effective, but instructive (Düzgün & Sulak, 2020).

The Aim of the Study

The purpose of this study was using Online Photovoice (OPV; Tanhan, 2020; Tanhan & Strack, 2020) to investigate the

facilitators and barriers classroom teaching department students, in Turkey, experienced for online or distance education during the COVID-19 pandemic. Many researchers used traditional photovoice in many different areas (Argan et al., 2020; Goodhart et al., 2006; Kong et al., 2021; Lögdberg et al., 2020; Nykiforuk et al., 2011; Sever & Özdemir, 2020; Russinova et al., 2018; Tsang & Lian, 2021). We have found OPV includes all advantages of OPV, and it has transformed disadvantages of traditional photovoice into advantages. OPV has many more advantages compared to traditional photovoice as it has been found in many different recent effective research (Genc et al., 2021; Doyumğaç et al., 2021; Subasi et al., 2021; Tanhan, 2020; Tanhan et al., 2021a, 2021b; Tanhan & Strack, 2020). Therefore, we preferred to use OPV rather than traditional photovoice.

Theoretical Framework

Researchers highly stressed using theoretical framework for more effective studies and also use of contextually sensitive approaches (Tanhan & Young, 2021). Ecological Systems Theory (EST; Bronfenbrenner, 1979, 1989; Bronfenbrenner & Evans, 2000; Tanhan, 2019, 2020), Community Based Participatory Research (CBPR) and Online Photovoice (OPV) constitute the theoretical framework of the research. In accordance with this theoretical framework, the Online Interpretive Phenomenological Analysis (OIPA) approach was used in the analysis of the data. Active advocacy is an important concept that constitutes the infrastructure of the study, CBPR, and OPV. Many researchers used EST in different disciplines (Karabulut Demir, 2007; Harnett, 2009; Coşkuner, 2013; Varıcıer, 2019; Tanhan, 2019, 2020; Tanhan & Francisco, 2019; Tanhan & Strack, 2020; Tanhan et al., 2020; Tanhan & Young, 2021). And many other researchers called to use CBPR (Tanhan, 2020; Tanhan & Strack, 2020). Aligning with CBPR, researchers called for active interdisciplinary social advocacy to enhance the effect of research results (Doyumğaç et al., 2021; Goodhart et al., 2006; Tanhan, 2020; Tanhan & Francisco, 2019; Tanhan et al., 2020). For more detailed information for pieces constructing our theoretical framework please see Tanhan (2020).

Online Photovoice (OPV)

In order to develop a more effective/rich research method and achieve strong results with less time for both researchers and participants, the research was structured on the basis of Online Photovoice (OPV) developed by Tanhan and Strack (2020) and adapted into Turkish by Tanhan (2020). Tanhan and Strack (2020) developed OPV using the traditional photovoice method/technique of Wang and Burris (1997). Thus, including the advantages of traditional photovoice and transforming its disadvantages, OPV has become a more effective, easy, fun, economical, and comprehensively usable method in many different contexts (for more detailed information see, Tanhan, 2020; Tanhan & Strack, 2020). While the main goals of traditional photovoice and Online Photovoice (OPV) are similar, OPV focuses on problems and other life-related issues and positive aspects (Tanhan, 2020; Tanhan & Strack, 2020).

OPV has been transformed into an innovative technique that is much more suitable for many contexts by including the advantages of traditional photovoice and eliminating its limitations in periods like COVID-19 when it is difficult to have face-to-face communication. With COVID-19, the demand for OPV has increased considerably. Many researchers have started to use OPV rather than traditional photovoice (e.g., Doyumğaç et al., 2021; Subasi et al., 2021; Tanhan, 2020; Tanhan et al., 2021a, 2021b, 2021c). The main purpose of OPV is to address issues such as difficulties, struggles, problems and raise the general well-being level by conveying unheard and completely unknown experiences and stories to other relevant and authorized persons, institutions, and organizations. Given the limitations of research during the COVID-19 period and the objectives and theoretical framework of the current research described above, OPV is expected to yield more effective results when used in the context of CBPR, EST, and active social advocacy (see Tanhan, 2020; Tanhan & Strack, 2020 for more information).

Method

In the study, the theoretical framework stated above was used to understand the factors that facilitate and complicate online/distance education processes for prospective teachers in the COVID-19 pandemic more effectively and holistically.

Participants

One hundred fifty-six teacher candidates in department of classroom teaching studying at three universities in the south and southeast of Turkey participated in the study. Out of 156, 153 formed the final sample, allowing their data to be used for research. Three people were not included in the study because they disapproved of their data being used for the research. The research was conducted entirely online, and the research link was conveyed to the researchers through social media accounts and the relevant people in the CBPR group.

Further demographic data are as follows: 38 of the participants were male and 113 were female, two participants did not want to specify their gender. According to their grade levels, 38 were in the second grade, nine were in the third grade, and 106 were in the fourth grade. The ages of the participants were in the range of 19-39, with an average age of 22. The socio-economic level was stated as low by 42 participants, medium by 108 participants, and high by three participants. In terms of marital status, 146 participants stated that they were single, six participants were married, and one participant was divorced.

Eighty-three participants stated that they stayed in a house/apartment with a garden during the COVID-19 pandemic. In contrast, 63 participants remained in a house/apartment without a garden, four participants marked the other option, and three participants marked both options for the house they live. The majority of the participants (89.54%) stated that they were not diagnosed with COVID-19, and 4% stated that they worked as a healthcare worker during the pandemic.

While 57 participants attended online/distance education using their smartphones, 42 participants attended using their

personal computers, 34 attended using their smartphones and personal computers; eight participants attended using smartphones and other people's or organizations' smartphones/computers and eight participants attended using other people's or organizations' smartphones/computers, four participants stated that they did not follow online/distance education. Further demographic information is given in the findings section in Table 1.

Procedure

In this study, OPV, an innovative technique, was used to understand the most important factors facilitating and complicating online/distance education from the participants' perspectives. Before starting the research, the permission of the ethics committee was obtained. The researchers sent the link of the data collection tool to the teacher candidates studying in the department of classroom education at the education faculties of the three universities included in the study. The research has been done entirely online due to the COVID-19 pandemic. In the study, volunteers among the participants and other people related to the subject (e.g., teacher, researcher, academician) were included in the CBPR group. Thus, they formed the stakeholder procedure, which is an important step in the theoretical framework of the research (using OPV along with CBPR in the context of EST during the COVID-19 pandemic). Throughout the whole process, these stakeholders communicated with the group created via both email and especially WhatsApp. Thus, stakeholders accompanied the study from the beginning to the end of the research. They contributed voluntarily in all processes except the writing of the article.

Table 1. Descriptive, contextual factors related to online education conditions of participants during the pandemic (N=153)

During the pandemic to what level you (0 not at all and 100 completely)	<i>M</i>	<i>SD</i>
Faced economic difficulties	52.11	29.85
Followed social distancing rules	83.09	17.93
Prefer online/distance education to face-to-face education	36.55	34.39
Have access to the internet	71.04	26.93
Have a personal computer or tablet	69.08	38.36
Use computer for online/distance education	68.73	34.93
Have a personal smartphone	95.50	12.96
Use your smartphone for online/distance education	82.66	25.39
Are satisfied with online/distance education	38.39	29.84
Identify yourself as a spiritual person	74.30	21.10
Identify yourself as a religious person	61.26	27.82
Find religiosity/spirituality plays a crucial role in your life	71.81	26.90

Which religion or spirituality movement align with: Islam (%66), none (%2.6), other movements (%2.6), and left empty (%28.8).

Data Collection Tools

In the study, researcher's ethical consent information and demographic questions, a video in which the researcher explains the OPV technique, an M4A consisting of only the audio recording of this video, and a document explaining what is told in the video in written language were collected in an online form and delivered to the participants. At each step of the form, the participant was given the options to understand that step by means of text, video, or audio recording.

The online form consists of four sections: Section 1: Introduction, General Information, and Consent Form; Section 2: The Most Important Facilitator in Your Life During the COVID-19 Pandemic (Support, Resource); Section 3: The Most Important Barrier in Your Life (Worry, Issue, Problem, Obstacle) During the COVID-19 Pandemic; Section 4: Demographic and a Few Questions on Online/Distance Education.

Informed consent form

The consent form was presented to the participants, which included the information that the ethical consent of the study was obtained and whether they have consent to the use of their data for research when they participated in the study. In the consent form, two options are presented: "yes, I consent my data to be utilized for research" or "no, I do not want my data to be utilized for research. I am curious about the research and for this reason I participate". This question was asked at the beginning of the form (tentatively) and asked again at the end of the form. According to the participants' final consent, the information given was included in the study.

Demographic information form

This form included questions about age, gender, marital and socioeconomic status, and class level of the participant. In addition, in the form containing the questions specific to COVID-19, some contextual questions have been posed, such as the situation of economic distress during the COVID-19 process, the story of COVID-19 diagnosis, the level of preference of online or distance education to face-to-face education, the level of social distance practice, the type of education preference, the availability of the internet and technological tools, the level of technology use, the level of satisfaction with online education, and their spiritual life, see Table 1.

Video, audio, and written documents explaining OPV and participation in OPV

Participants were presented with three options (video, audio, and written) describing each step in the form. Thus, even if the participants did not know OPV, which is innovative, they were able to participate easily. In addition to the video, audio, or written documents in each step of the form, Tanhan (2020) prepared a video for those who want to learn OPV much more in-depth, and the audio recording of this video was shared at the beginning of the study. The first

section includes (1) what OPV is and (2) participating in OPV. Considering the limited internet resources, in line with the theoretical framework of the research, audio and written options, which require less internet, are also presented in addition to video.

Online photovoice (OPV) steps

The five steps of the OPV, which were employed separately for both facilitating factors and barriers in the research form, followed in parallel with the explanations in the study by Tanhan (2020). In the first step, participants were asked to think and write at least one or at most 10 of the most important factors that facilitate online/distance education for themselves and/or the community they live. In the second step, the participants are asked to take photographs representing the most important facilitator they identified in the previous step. In the third step, after deciding on the most important factors and the photograph to represent them, the participants were asked to write a concise, meaningful, and complete caption (story) to explain them. It has been stated that the stories can be written using SHOWED questions, an acronym created with keywords by Tanhan and Strack (2020) (For detailed information, see Tanhan, 2020; Tanhan & Strack, 2020). Tanhan (2020) adapted SHOWED questions and acronyms to Turkish as GÖZSAN. Since we did the study in Turkish, we used GÖZSAN questions and acronyms. You can see SHOWED acronym below:

- S: What do you See in the picture representing a facilitator for you or your community population as part of your online/distance education during the COVID-19 process when you consider your education and department/major, meaning primary school teaching?
- H: What is Happening in your photograph/picture? (Briefly describe).
- O: How does it relate to (y)Our life or your community?
- W: What is it that creates or contributes to this most important facilitator? What is it that creates or contributes to this most important barrier?
- E: What do you Experience (feelings, thoughts, behaviors) while taking the picture, writing your message, and submitting them?
- D: What can we (as mental health professionals, educators, researchers, peers, etc.) Do about this?

The participant considers the most important facilitator and its photo and story in the fourth step and determines at least one at most three summary words, themes, or metaphors, not exceeding ten words. In the fifth step, the participants were asked to mark which of the system/s (individual/intrapsychic; microsystems; exosystems and macrosystems) they attributed (see Table 4) to the facilitator, photograph, caption and summary word or themes they shared for the research.

After the participants completed these steps for the most important facilitator, they followed the same steps for the most important barrier. Tanhan (2020) gave detailed information about these steps in his study. Some other researchers also employed OPV and its stages in different contexts, such as close relationships (Genc et al., 2021), mental health (Tanhan, 2020; Tanhan et al., 2021a), education (Doyumğaç

et al., 2021; Subasi et al. al., 2021; Tanhan 2021b, 2021c) and special education subjects (Öğülmüş et al., 2021) and found the stages useful.

Data Analysis

OIPA, an important component of the theoretical framework, was used in the research as adapted and suggested by Tanhan and Strack (2020) and Tanhan (2020). In the first stage of the five-step analysis, incomplete/repetitive data in photographs, captions and themes were eliminated and consent forms were checked. In the second stage, it was examined whether all photographs, captions and themes contain personal information. In the third stage, facilitating themes were grouped under main themes. Fourth, the complicating themes were grouped under the main themes.

As can be seen in the findings section, two separate tables were created for the facilitator (Table 2) and the complicating (Table 3) main themes. At the last stage, it was examined which of the EST systems the facilitating and complicating themes were attributed. Detailed information about OIPA can be found in Tanhan (2020) and Tanhan and Strack (2020) works.

FINDINGS

Some contextual, demographic information of the participants are given in Table 1. In this study, 11 main facilitators (Table 2) and 16 main complicating themes (Table 3) have been found. There were 153 participants in total.

Table 1 contains some demographic information that is thought to facilitate the interpretation of the research findings. Eleven main themes that facilitate distance/online education are listed in Table 2.

Below are two examples (Photographs 1 and 2) of the facilitating main themes presented in Table 2, from the photographs, titles, and themes of the participants:

The Participant Submitted the following Story/Caption for Photograph 1

I used to see myself as a talentless, unskillful person. That's why I've never tried hobbies like painting before. But during this Covid-19 pandemic, I was so bored at home that I started to scribble with the paper and pen I got. After a while, I said to myself, 'Why don't I draw something?' and started doing pencil drawing. Then I wondered about the linoleum print I saw on social media and started researching. I watched videos about linoleum printing on a video hosting site. I learned how to make linoleum printing by following the video lessons..... I don't think there is an obstacle taking people away from realizing their abilities. A person who can act with his will surely destroys his prejudices against himself one day, albeit slowly.

The Participant Presented the Following Themes for the Photo and the Caption

"Art, technology, hobby."

Table 2. Facilitating main themes of distance/online education during COVID-19

Facilitating Main Themes	Total number of participants (N= 153)	%
1. Access to distance education (access, following lessons easily)	56	37
2. Technology, computers, internet, learning apps	46	30
3. Private space (home, room, study environment)	15	10
4. Saving time	11	7
5. Hobby: Gardening, sports-nutrition, reading books	9	6
6. Financial opportunity - economic factors	9	6
7. Spending time with the family	9	6
8. Helpfulness, solidarity, support	6	4
9. Social isolation (Social responsibility, mask, distance)	6	4
10. Devoting time for oneself	4	3
11. Planning for the future	4	3

Table 3. Complicating main themes of distance/online education during COVID-19

Complicating Main Themes	Total number of participants (N: 153)	%
1. Technological insufficiency (Lack of computers, lack or absence of internet, slow internet connection)	49	32
2. Online education (not efficient, not being able to focus, not being motivated enough, low motivation)	23	15
3. Financial insufficiency (monetary insufficiency)	18	12
4. Lack of practice (not being able to do internship / online internship, virtual practice)	15	10
5. Presence of unpleasant feelings (hopelessness, anxiety, worry, feeling of loneliness, feeling of inadequacy, meaninglessness, fatigue)	15	10
6. Teachers giving too much homework	14	9
7. Inadequacy of online education software (non-functional programs; ZOOM, EBA, etc.)	12	8
8. Physical inconvenience of the houses (scarcity of the number of rooms, smallness of the room, insufficient table, house not heating up, noise, crowded house)	11	7
9. Absence of effective communication on online platforms: (irregular class hours (early-late), lack of teacher-student orientation, incorrect language use)	11	7
10. Social isolation	10	7
11. Failure to provide financial aid by the state	9	6
12. Too much exposure to computer, camera, phone, tablet, etc.; misuse of these tools/related eye complaints	9	6
13. Pandemic rules and violation of these rules (Social distance violations, throwing masks on the ground, mandatory mask use)	7	5
14. Insufficient infrastructure (lack of electricity, power cut)	7	5
15. Bio-psychosocial disorders, changes	4	3
16. No difficulties	3	2

The Participant Submitted the Story/Caption below for Photograph 2

When the pandemic started, I thought that we would be away from lessons for a long time and that our education process would be longer because we would not be able to receive education. Still, I learned that distance education would begin thanks to technology-internet. Thus, our education process would not be prolonged, and our education would not be interrupted. With the help of phones, tablets, computers, and even television, students do not fall behind, on the contrary, they facilitate the learning process as they can watch the lecture recordings as much as they

want. Students who miss the course for some reason can open the lecture recording and catch up in the same way, and therefore their education is not interrupted. Students who cannot take notes in the face-to-face education process can stop the lecture recordings in distance education as they wish, take notes, and return to the lesson.

Of course, the benefits of technology and the internet are countless, but the most important point is that it can save time. ...Lessons that would normally last longer can be shorter and more understandable thanks to distance education because the elements that may negatively affect the course of the lesson are eliminated in distance education....

Table 4 . Attribution of the facilitator and barrier themes to EST levels

EST Levels Themes	Individual/ Intrapsychic	Microsystem	Exosystem	Macrosystem	All together
Facilitator	47% (n = 72)	19% (n = 29)	36% (n = 55)	26% (n = 40)	37% (n = 56)
Barrier	43% (n = 66)	48% (n = 74)	37% (n = 56)	34% (n = 52)	42% (n = 64)

We allowed the participants to attribute the factors to more than one level; N = 153



Photograph 1. The participant submitted the photo to share the most important facilitator (support, strength) for online/distance education during COVID-19



Photograph 3. The participant submitted the photo to share the most important barrier (concern, issue) for online/distance education during COVID-19



Photograph 2. The participant submitted the photo to share the most important facilitator (support, strength) for online/distance education during COVID-19



Photograph 4. The participant submitted the photo to share the most important barrier (concern, issue) for online/distance education during COVID-19

Theme: “Technology-internet, Time saving, Distance education, Taking time for yourself.”

Sixteen main complicating (worries, problems) themes emerged from the study data. These main themes and percentages for 153 participants are presented in Table 3.

Above are two examples (Photographs 3 and 4) of participants’ photographs, captions and themes for the main complicating themes pre-sented in Table 3.

The Participant Submitted the following Story/Caption for Photograph 3

I think that the facilitating aspect of the pandemic is very limited. Students were especially negatively affected by

this situation. I do not think that the training given in this process is very productive. A generation of distance education victims is coming, who temporarily learns knowledge and does not enjoy learning because they do not practice what they learned. Although our teachers want to undergo this process with the highest efficiency, I do not think this is provided for everyone. First of all, although technology is developed and thought to be widespread, many students do not have technological means. If distance education is to continue, this problem should be solved in the first place..... We cannot participate actively in classes as in face-to-face education,

and when we do, we cannot get feedback immediately in some cases. This situation puts us students in a position where we are only the receivers of information. In distance education, the bond between student-teacher is no longer the same as in face-to-face education....

The Participant Presented the Following Themes for the Photo and Caption

“Distance education, technological inadequacy.”

The Participant Submitted the following Story/Caption for Photograph 4

I would like to talk about the problems experienced in village schools during the covid pandemic. Even more difficult times were waiting for those young children who are already fighting against the conditions of nature. These children go to school for their education without complaining about snow, rain, mud. Virus... Online lessons that entered our lives with Covid-19 affected the village children the most. Most students also had to attend online lessons while helping their families, herding and doing fieldwork. I wish their only problem were to attend lessons. They struggled with impossibilities. Even though they had a phone, there was no network and for this they tried to connect to the lessons by going up to the highest hills of the village. We live in a world where geography is destiny. What kind of contribution would the education students receive at the top of those mountains have?....

The Participant Presented the following Themes for the Photograph and Caption

“Lack of infrastructure, lack of technology, financial inadequacy in the village.”

DISCUSSION

In this study, the experiences of university students with distance education in the ongoing COVID-19 pandemic were examined with the OPV method (Tanhan, 2020; Tanhan & Strack, 2020). The results were discussed by integrating demographic results under the titles of facilitating and complicating themes created by analyzing the participants' answers. Finally, comments on the general results are given.

Discussion of Facilitators

The participants mostly emphasized the advantages of being at home due to the pandemic when the facilitating factors were examined. They mentioned that it is easier to attend classes with distance education and the facilitating effect of listening to the lessons again. In addition, some participants stated that having private spaces is an important facilitating effect. Since March 14, 2020, dormitories have been closed due to distance education, and students studying there have returned to their families homes. Many students stay in dormitories in Turkey (KYGM, 2021), and the number of libraries per capita (1/70000) is ten times lower than in European countries (Yılmaz, 2017). For these reasons, some students may have their private areas in

their homes in a better condition than dorms. Moving to the family has also had a positive financial impact on students and their families during this period. Studying in a different province than their families can be economically challenging for families with low income in Turkey. Finally, the time saved by attending classes from home without going to school for university students during the pandemic, there are other positive facilitating factors such as taking time for oneself, planning for the future, and hobbies. Our results are similar to other research results using the OPV technique in the context of COVID-19 (Doyumğaç et al., 2021; Subasi et al., 2021; Tanhan, 2020; Tanhan et al., 2021a, 2021b, 2021c).

Discussion of Barriers

According to results, economic factors are at the forefront for participants. These economic difficulties can be divided into social and individual. From a social point of view, Turkey ranks last among European countries regarding internet speed (Sade, 2019). At the same time, when we look at the internet access rates in Turkey, approximately 10% of the population does not have internet access. From an individual point of view, the rate of students having a computer, tablet, or smartphone that they need for distance education is similar to the results of this study, and a significant proportion of students do not have these tools (Tanhan, 2020). The demographic results of this study are consistent with this information. The results also show that smartphones are the most important part of distance education. The majority of the participants follow online lessons on their smartphones. Smartphones are approximately four to six inches in size, and the programs they support are limited. No research or news could be found in the literature review about distance education (theoretical education, practice, and homework) being designed for smartphones. Furthermore, Turkish teachers were trained on this subject. In sum, it is thought that distance education provided with smartphones has difficulties in many ways.

Secondly, the limitations of teachers' competence in distance education can be mentioned. Giving more homework than necessary, not doing the lessons on time, not using the factors that will motivate the students can be explained by the incompetence of the teachers. Although Öztaş and Kılıç (2017) state that the success of education depends on the learner, it shows that meeting the needs of students in modern education and the competence of teachers is also important in distance education (Kaya, 2017). Communication difficulties (Altun Ekiz, 2020; Tanhan, 2020), situations that make the lesson boring (Doyumğaç et al., 2021; Kan & Fidan 2016), and problems in practice (Düzgün & Sulak, 2020) make learning difficult for students. Teachers can take responsibility and produce solutions (Feldman, 2007; Tanhan, 2020) against problems arising from courses, systems, and exams (Doyumğaç et al., 2021; Tanhan, 2020; Subasi et al., 2021). This complicating situation continues after the transition to distance education, with no university in Turkey providing training for teachers to increase competence and/or orientation for students. As a result, in the results of this study supported by Eti and Karaduman (2020), some of the students feel incompetent in the field they graduated from.

Thirdly, emotional challenges that may arise due to distance education have been found in this study. Participants stated that because they are exposed to technological communication tools too much, they experience emotional problems such as not being motivated and not being able to focus; and physical problems such as eye pain and headache. It is inevitable to use technological tools in the distance education process. The rates of watching television and using social media in Turkey are over five hours a day before the pandemic (Turnacı, 2020). In addition to these, the compulsory exposure to technological tools due to distance education tires many students, especially young people who live in apartments and have to stay at home use technological devices for both school and entertainment purposes due to the scarcity of other alternatives. As a result, the time spent on the screen can increase to high rates, creating emotional difficulties for students.

In short, Rapanta et al. (2020) emphasize the necessity of implementation and infrastructure studies aiming to increase learner-teacher interaction in distance education processes. In Turkey, these infrastructure studies should be given importance in terms of economics and teacher competence. Also, Murray et al. (2019) emphasize that with the transfer of teacher training programs in universities to distance education processes due to the pandemic, education programs' perspectives and responsibilities should also change. The changing characteristics of the teaching practice course with distance education show that it negatively affects the professional competencies of teacher candidates (González-Calvo et al., 2020). It seems that it is too late to take the necessary steps to change this situation. Priority should be given to short-term changes in education, and studies in this area should be initiated. In general, these results are similar to other studies that focus on online or distance education using the OPV technique (Doyumğaç et al., 2021; Subasi et al., 2021; Tanhan, 2020; Tanhan et al., 2021b, 2021c).

Comments on Facilitators and Barriers

Similar to previous studies (Tanhan et al., 2021a; Tanhan et al., 2021b; Subasi et al., 2021), this study showed youth had common barriers to distance education during the COVID-19 pandemic. Economical difficulties and internet access are two significant results for educators and policymakers need to pay attention to. Also, family support, comfortable level of at-home, and time-saving are found in literature and this study as facilitators (Subasi et al., 2021; Tanhan et al., 2021a, 2021b). As a collectivist culture, Turkish youths receive family supports (Kağıtçıbaşı, 2013). Turkish families create a better environment for their children; therefore, they study in a comfortable place and save time. In sum, results show that the main barriers were related to the low economic level and facilitators were related to cultural supports and its influences.

In addition to all these, it is important to pay attention to contextual factors we provided in Table 1. The results align quite a lot with some other recent studies (e.g., Doyumğaç et al., 2021; Subasi et al., 2021). We believe researchers, educators, administrators and all others spend time with youth college students need to understand how contextual factors affect people as previous researchers stressed

(Tanhan & Francisco, 2019; Tanhan, 2020). Future researchers can investigate these contextual factors more effectively through OPV. For example, aligning with spiritual or religious movements or totally abiding such an affiliation among youth college students has been one of the critical questions for many disciplines and administrators. For example, we had *one open-ended and optional to respond question* related to which movement/s they align with. We had expected that very few people will respond and openly share their affiliation to this question considering historical spiritual/religious contextual processes in Turkey and around the globe. Therefore, we found it interesting and also meaningful that about 66% shared that they align with Islam, 2.6% with "other movements," and also 2.6% with none, and finally 28.8% left empty. However, we also feel curious not to have any people affiliated with other main spiritual/religious movements (e.g., Christianity, Buddhism). We feel it is possible that about 30% did not feel safe to even share and talk about this sensitive topic even in an anonymous research survey assuring all confidentiality. Therefore, researchers can conduct further OPV studies to work with such groups whose voice are not heard and expressed, which is one of the main goals of OPV.

Limitations

The main form of this study was in Turkish, which may have led only those who speak Turkish to participate. Due to the COVID-19 conditions, the research was conducted only online, which may have prevented the participation of those who do not have internet and electronic devices (e.g., telephone, computer). Students may not have been fully motivated for this study, which was carried out when students were tired of online platforms and screens or were exposed to electronic environments too much. In addition to all these, the results could have been different if more students from the university had participated. The absence of participants from other countries may also have affected the results of the study.

In addition to this limitation, it needs to be noted that the literacy ability of participants influences results. Examining results showed the researchers that several participants' responses are not the direction of the questions. In literature, OPV is related to participants' literacy (Tanhan, 2020; Tanhan & Strack, 2020). Participants sometimes needed to revise responses and still it was difficult to examine some data; therefore, they were removed.

Implications

Implications for educators

Participants stated that they could not get enough efficiency from online education, they could not focus, their motivation was low and effective communication could not be provided. In this regard, educators can ensure that research-observation-based tasks are presented in the course by assigning tasks in which students can actively participate in the process to increase the course's efficiency. Web 2 tools can also be used in this regard. In addition, to support class participation, class hours can be arranged in a way that facilitates the participation

of students. It was stated that the teachers gave excessively homework. In this regard, it can be suggested that educators may explain the necessity and purpose of the homework given to the students and be more sensitive about whether the homework they give is helpful for learning. Upon expressing the inadequacy of the software used in education, such as ZOOM, educators can use this software more effectively.

Regarding the difficulty experienced in the absence of a practice area (not being able to do internships, etc.), it can be suggested that educators increase the efficiency of the process by participating in online internship practices and providing feedback. Contextual studies and services are important in education (Arslan & Tanhan, 2019). Therefore, more effective results can be obtained if educators consider our results from a contextual perspective.

Implications for Mental Health Professionals

Making group counseling within the scope of both career counseling and mental health counseling widespread in order to develop coping mechanisms for existing economic difficulties would be helpful on an individual and social basis. In addition, awareness activities against the uncertainty that emerged during the pandemic period can help individuals get rid of their future concerns and adapt to their current life situations (Arslan et al., 2021). In this context, it is thought that it may be beneficial to deliver awareness trainings to university students through online consultation methods. It is very important to consider contextual conditions and act accordingly when providing mental health services (Arslan et al., 2020; Demir et al., 2021; Tanhan, 2019, 2020; Tanhan & Young, 2021).

CONCLUSION

In this study, we aimed to use Online Photovoice (OPV) to understand the main facilitators and barriers of online or distance education for youth college students. We had 153 youth college students from the classroom teaching departments from different universities in Turkey. We benefited from EST, CBPR, and OPV to collect and used OIPA to analyze the data. Based on the results, 11 main facilitators themes and 16 barrier themes emerged. The first main facilitator themes were having access to online or distance education (37%), technology, computer, internet, and helpful course programs (30%), and private space (10%). The most important barriers were lack of sufficient technology (32%), online education (15%), and financial issues (12%). The participants attributed facilitators and barriers more to individual/intrapsychic levels compared to other levels of EST. Our results align with other previous research. We used OPV as a new qualitative method and OIPA as a new analyses approach can be used to understand online or distance education.

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