

Perception of online education during COVID-19: Online Photovoice (OPV) and ecological systems theory

Ahmet Tanhan, Besra Taş, Zuhail Agilkaya-Sahin, Seth C. W. Hayden, Ozan Korkmaz & Orhan Gürsu

To cite this article: Ahmet Tanhan, Besra Taş, Zuhail Agilkaya-Sahin, Seth C. W. Hayden, Ozan Korkmaz & Orhan Gürsu (23 Aug 2023): Perception of online education during COVID-19: Online Photovoice (OPV) and ecological systems theory, British Journal of Guidance & Counselling, DOI: [10.1080/03069885.2023.2247544](https://doi.org/10.1080/03069885.2023.2247544)

To link to this article: <https://doi.org/10.1080/03069885.2023.2247544>



Published online: 23 Aug 2023.



Submit your article to this journal [↗](#)



Article views: 338



View related articles [↗](#)









View Crossmark data [↗](#)

RESEARCH ARTICLE



Perception of online education during COVID-19: Online Photovoice (OPV) and ecological systems theory

Ahmet Tanhan ^{a,b,c,d,e}, Besra Taş ^f, Zuhale Agilkaya-Sahin ^g, Seth C. W. Hayden ^{h,i}, Ozan Korkmaz ^j and Orhan Gürsu ^k

^aEconomic and Social Research Center – ESAM, Ankara, Turkey; ^bDepartment of Counselling, The University of North Carolina, Greensboro, NC, USA; ^cDepartment of Counselling, Adiyaman University, Adiyaman, Turkey; ^dInstitute for Muslim Mental Health, Belleville, MI, USA; ^eAssociation for Contextual Behavioral Sciences, Turkey Chapter, Istanbul, Turkey; ^fDepartment of Counseling, Istanbul Sabahattin Zaim University, Istanbul, Turkey; ^gDepartment of Counseling, Istanbul Medeniyet University, Istanbul, Turkey; ^hDepartment of Counselling, Wake Forest University, Winston-Salem, NC, USA; ⁱDepartment of Counseling, President of National Career Development Association, Broken Arrow, OK, USA; ^jDepartment of Counseling, Karamanoglu Mehmetbey Üniversitesi, Karaman, Turkey; ^kDepartment of Philosophy and Religious Sciences, Burdur Mehmet Akif Ersoy University, Burdur, Turkey

ABSTRACT

In this research, we used Community-Based Participatory Research, Ecological Systems Theory and active interdisciplinary social advocacy perspectives as part of our theoretical framework. Our sample consisted of 530 counselling undergraduate students with 481 consenting to participate by sharing the most important main facilitators and barriers for their online or distance education during COVID-19 pandemic. We used Online Photovoice methodology to get the students lived experiences focusing on their counselling major and Online Interpretative Phenomenological Analysis to analyse shared experiences. Thirteen main facilitators emerged (e.g. The contribution of technology in distance education, 22%; computer, PC: Technological tools, 18%; internet, 14%) and 22 main barrier themes emerged (e.g. lack of technological tools and related knowledge, 16%; transition to distance education, 13%; emotions that are difficult to cope with, 12%). We also examined how participants attribute these facilitator and barrier themes to Ecological Systems Theory levels.

ARTICLE HISTORY

Received 6 July 2022
Revised 20 March 2023
Accepted 8 August 2023

KEYWORDS

Counselling education;
Community-Based
Participatory Research
(CBPR); pandemic; online
and distance education;
Online Photovoice (OPV)

Educational institutions were at the forefront of the areas deeply affected by the Covid-19 pandemic worldwide (Tanhan, 2020; Tanhan et al., 2021). Many countries including Turkey have adopted the use of digital technologies to maintain the educational process (Angoletto & Queiroz, 2020; Doyumğaç et al., 2021). Since 16 March 2020, Turkey has been carrying out this process with distance education using digital technologies to provide effective education and training.

In Turkey at the beginning of the pandemic, it was moderately accepted that educational activities were carried out in the form of distance education but distance education has been difficult for some people who were living in rural areas without technology and internet reacted to this (Doyumğaç et al., 2021; Tanhan, 2020). It has been so difficult to accept that the understanding of education, which has been going on for centuries, suddenly moved to an individual dimension and could be provided over the internet (Köse, 2021). In a sense, the requirements of this broad new normal in society and more specifically in the education system have taken place in our lives despite resistance by some (Kurt & Odabaşı, 2020).

CONTACT Ahmet Tanhan  tanhanahmet3@gmail.com  Department of Counselling, School of Education, Adiyaman University, 02040, Adiyaman, Turkey

Online learning environments, which are the new paradigm of today's modern education (Sun et al., 2008), are becoming more common (Arbaugh, 2000; Doyumğaç et al., 2021; Tanhan, 2020). Online learning, which is created with content delivered remotely and brings students and instructors together through tools such as video conferencing, computer conferencing, internet, electronic chat, live lecture applications, provides significant advantages in terms of education by providing access to large audiences regardless of time and place (Dziuban et al., 2013). Online education allows different interaction and multimedia and gets easier day by day (Doyumğaç et al., 2021; Dziuban et al., 2013).

Although this form of teaching can be more flexible, low-cost and practical (Doyumğaç et al., 2021), it also poses a risk due to reasons such as insufficient technological infrastructure, lack of skills to use technology, users not having sufficient time for training to learn the system and not establishing well-grounded course structure that will provide immediate feedback and support (Balaban, 2012; Tanhan, 2020; Tanhan et al., 2020).

The transition to distance education in the Covid-19 period has led to various negative consequences for many people in terms of biopsychosocial, spiritual and economic terms, and also caused serious problems especially for students (Çiçek et al., 2020; Tanhan, 2020; Tanhan et al., 2021). The COVID-19 outbreak has caused serious problems in many areas in general (Gürsu & Bayındır, 2016) and seriously affected university students (Akyol et al., 2020; Gençalp, 2020; Kürtüncü & Kurt, 2020; Laher et al., 2021; Sarıtaş & Barutçu, 2020). It has revealed that higher education students staying in their homes cannot fully fulfil their physiological and psychological needs (Tanhan, 2020; Tanhan et al., 2021; Tiryaki et al., 2020). Inability to maintain social and romantic relationships, isolation, loneliness, anxiety for the future, economic problems, alienation from the school environment and anxiety are indicated among the problems affecting mental health and subjective well-being (Doyumğaç et al., 2021; Genc et al., 2021; Subasi et al., 2023; Tanhan, 2020; Tanhan et al., 2021; Tümkaya et al., 2021). In relation to university students' experience with online education during the pandemic, positive developments were indicated such as flexibility in place and time while the sudden implementation of eLearning had discouraging implications for user's mental health and socialisation (Mushtaha et al., 2022).

COVID-19's effect on students in mental health areas

Covid-19 affects university students in general, as well as students in the field of mental health. In a study conducted on students of the psychology department, it was found that psychology students' mental health problems worsen relatively during transition times such as Covid-19 (Laher et al., 2021; Tanhan et al., 2021). Accordingly, during the Covid-19 pandemic, some of the undergraduate psychology students mentioned factors preventing them from attending distance online education such as not being able to understand the lessons, lack of resources, lack of interaction with lecturers and other students, being easily distracted and difficulty being motivated. Being confined to home due to the pandemic creates a trapped or claustrophobic mood in students, and this situation brings along symptoms of stress, anxiety, fear, loneliness, excessive thinking, emotional exhaustion, hopelessness and depressive symptoms (Tanhan, 2020; Tanhan et al., 2021). There are indications of increase in levels of depression for university students over the course of the pandemic (Stamatis et al., 2022). In addition, a study of Filipino counselling students found that fear of COVID-19 infection predicted indicators of anxiety, depression and stress (Galanza et al., 2023). It is observed that immediate environment, friends and families are effective as support mechanisms (Laher et al., 2021; Tanhan, 2020).

Researchers in Turkey used OPV to understand the mental health of students during the pandemic and found that students faced many mental health problems (Doyumğaç et al., 2021; Genc et al., 2021; Tanhan, 2020; Tanhan et al., 2021). These researchers determined that students experience contextual problems such as biopsychosocial, moral and economic factors in the online

education process, and that lack of healthy social interaction can lead to some serious biological, psychological, social, spiritual and economic problems from micro to macro levels.

Gaps in the literature

When we look at the literature on the studies on the Covid-19 pandemic, we see that both in Turkey and in the world, quantitative studies that generally guide participants with questions at a certain level are more common. This research has also generally focused on psychopathology limiting the consideration of positive aspects of functioning. OPV, designed to consider both negative and positive dimensions of functioning has been utilised on various topics such as distance education (Doyumğaç et al., 2021; Subasi et al., 2023; Tanhan et al., 2021; Tümkaya et al., 2021), special education (Öğülmüş et al., 2021), close relations (Genç & Arslan, 2021) and mental health (Tanhan, 2020; Tanhan et al., 2021). However, no study that focuses on the educational life of students studying in the department of psychological counselling and guidance in relation to the pandemic has been found.

As mental health professionals and those who train them, it is important to understand the manner in which counselling students go through this process. However, while conducting research with people who have gone through difficult processes such as pandemics, OPV was found to be useful as it elicits positive aspects of life apart from difficulties (Tanhan, 2020; Tanhan & Strack, 2020).

Purpose of the research

We had three main objectives including (1) understanding the most important biopsychosocial spiritual and economic facilitators and complicators for the online education of the students studying in the department of psychological counselling and guidance within the context of Covid-19 from the unique perspective of the participants through the OPV methodology; (2) actively advocating with the volunteer participants to increase the factors that make life easier to a desired level by delivering the results to relevant and competent persons online and to resolve the issues by effectively addressing the factors that make it difficult and (3) investigating to which levels of Ecological Systems Theory (EST) counselling students attribute facilitating and challenging factors.

Value of the study

The deficiencies mentioned in the gaps in the literature were partially eliminated by the researchers, and a well-grounded theoretical framework was used as suggested in previous studies (Tanhan, 2020; Tanhan & Young, 2021). Thus, three main goals targeted by the researchers have been achieved. Researchers, acting with volunteer participants, continue to develop meaningful and critical dialogues by conveying the results of the research, the second main objective, to the relevant persons, institutions and organisations through active advocacy.

Theoretical framework

In the theoretical framework of the research, active interdisciplinary social advocacy is created through ecological systems theory (EST) and community-based participatory research (CBPR) (for more information see: Tanhan, 2020; Tanhan & Strack, 2020). In accordance with this theoretical framework, we used OPV to collect data and Online Interpretive Phenomenological Analysis (OIPA) to analyse the data. Active advocacy is a very important concept that complements all of these and makes the data obtained in the research even more meaningful, and especially that constitutes the infrastructure of the OPV, CBPR and the study as a whole.

Ecological Systems Theory (EST). EST was developed by Bronfenbrenner (1977) to provide a comprehensive developmental framework of multiple factors that provide layers of influence on

individuals throughout their lives. According to this system, the individual is at the centre of the model and other systems are gathered around the individual (Tanhan, 2019). Researchers from various disciplines have benefited from EST (Demir Öztürk et al., 2020; Genc et al., 2021; Tanhan & Francisco, 2019; Tanhan & Young, 2021).

Community-Based Participatory Research (CBPR). CBPR refers to the goal of collaborating with the community to improve the quality of life more effectively. CBPR is an alternative research paradigm based on the collaboration of researchers with individuals, groups, communities and institutions to solve the problems of communities and contribute to their well-being (Tanhan & Strack, 2020; Wal-lerstein & Duran, 2006).

Active Interdisciplinary Social Advocacy. The concept of social advocacy is to address the issues and increase the general well-being by informing the relevant and authorised persons, institutions and organisations about the research (Goodhart et al., 2006; Tanhan, 2019, 2020; Tanhan & Francisco, 2019).

Online Photovoice (OPV). Tanhan and Strack (2020) developed Online Photovoice (OPV) as an extension of Wang and Burris (1997) traditional photovoice. Compared with traditional photovoice, OPV enables more effective elicitation of participation of diverse participants. OPV offers advantages in terms of contextual factors such as time and cost. Developed for use in situations where meeting face-to-face is impossible or very difficult due to pandemics, security problems, conflict or natural disasters, OPV is one of the qualitative research methods/techniques used to increase the general well-being at the individual and society level and to address existing issues in the most effective way. OPV has been reported to be therapeutic in terms of facilitating the person to create space for their own biopsychosocial spiritual and economic issues and processes (e.g. Armiya'u et al., 2022; Tanhan, 2020; Tanhan & Strack, 2020).

Online Interpretative Phenomenological Analysis (OIPA). Tanhan and Strack (2020) developed OIPA based on traditional Interpretative Phenomenological Analysis (IPA). Tanhan (2020) used it with OPV for the first time to understand mental health during COVID-19 context. OIPA allows participants and researchers to protect lived and shared experiences. Previous researchers provided in-depth information on OIPA (Tanhan, 2020; Tanhan et al., 2021; Tanhan & Strack, 2020). We have provided detailed information on OIPA in the analyses section.

Method

The present study, which aimed to explore the facilitators and barriers of online/distance learning, was conducted on a sample of psychological counselling and guidance students from different Turkish universities during the Covid-19 pandemic started in 2020. The data were collected within the explained framework by means of an innovative tool, the online photo-voice method (OPV).

Participants

In Turkey, counselling programmes are available as graduate and mostly as undergraduate programmes. We recruited our participants among students at counselling undergraduate departments of four different universities from different parts of Turkey, at which four authors of this paper are located. The geographical location is meaningful for Turkey. While western parts of Turkey are more developed and provide more opportunities for students, the eastern parts are less. Accordingly, the different regions (west, middle/Anatolian, east Turkey) and their varieties were covered and represented in the sample. Four of authors who are lecturers at psychological counselling departments conducted the research at their own universities' psychological counselling departments. The study was announced to their own classes but also to the rest of the department. There were no bonus points given to the participants. In terms of participation, 530 students completed the study; 49 did not consent and reported that they were curious about the study or completed the study to get some bonus credits for their courses. 481 consented for their data to be used

in the study: 116 participated from a private university (name of the university blanked and we provided the names in the manuscript sample for the editors) in European part of Istanbul (western Turkey); 139 participated from a state university (name of the university is blanked) located in Anatolian/middle part of Istanbul; 52 participated from (name of the university blanked) another state university located also in the middle of the country and the rest (174) participated from (name of the university blanked), a state university from east of Turkey. In terms of education level 25 students (5.2%) were in their first year, 148 (30.8%) in the second, 194 (40.3%) in the third, 98 (20.4%) in the fourth year and 16 (3.3%) students either did not report or were in their extended years. Their age ranged from 18 to 45 ($SD = 3.36$). 75.8% of the sample consisted of female participants, 23.8% of male, 0.4% did not want to mention sex. The majority of the sample was single (93.68%). The economic status of the sample was mainly middle (85.68%).

Measures

The online study was conducted on the basis of OPV method which is explained in detail below. Additionally, questionnaires consisting of the following were also applied to the sample:

Informed Consent Form. The consent form informed participants about the study and guaranteed voluntary participation. The consent statement was given at the beginning and at the end of the study. This application on two occasions allowed the participant to review his/her first decision and agree on participation after completing the whole survey. Only surveys giving the last consent were assessed in the data analysing process. The first author obtained ethical approval of the study from [removed for anonymity] university he has been working, a state university in the east of Turkey (IRB approval number: [all details are removed for anonymity]). We provided institutional review board information and documents to the participants. Previous OPV researchers found asking consent two times to be very meaningful (e.g. Tanhan, 2020; Tanhan et al., 2021). The participants and other researchers also reported having consent question two times to be very meaningful, effective and protecting the participants' rights. When a study is very long, it makes sense to ask consent question two times. Therefore, we asked consent at the beginning of the study that was a temporary question to just let know the participants that we are asking for the consent. This final consent question was obligatory to respond and was valid consent question to decide whether we include their data or not. In this study, we had 39 students who did not consent at the first, temporarily and voluntarily consent question. And we had 49 students who did not consent at the last consent question that was obligatory consent question. All these mean we had 481 who consented out of 530 total participants.

Demographic Information Form. This form consisted of questions on demographic information of the participants, such as age, gender, country and city of residence, marital status, socioeconomic status, education level, major and job type. Moreover, the survey comprised COVID-19-specific questions, such as the level of economic problems experienced during COVID-19, history of COVID-19 diagnosis, the level of practicing social distance.

Questions on online education conditions. The online education conditions of the sample were examined via eight closed-ended questions; seven were to be answered on a percentage scale indicating 0% not at all to 100% always/very much. The last question was a multiple-choice question. We have provided the questions and response percentages in [Table 1](#).

Questions on religiosity and spirituality. Previous studies via OPV (e.g. Tanhan et al., 2021) on the effects of online or distance education revealed that even when participants score high in religiosity and/or spirituality these *do not always necessarily* emerged as facilitators for online or distance education when asked through OPV. Thus, to collect data to compare we also asked four close-ended questions regarding religiosity and spirituality, again with a scale from 0% not at all to 100% always/very much. We have provided the questions and response percentages in [Table 1](#).

Table 1. Counseling students' responses to COVID-19 contextual questions

| During the pandemic to what level you ... (0 not at all and 100 completely) | <i>M</i> | <i>SD</i> |
|---|----------|-----------|
| Faced economic difficulties | 40.74 | 27.98 |
| Followed social distance | 79.07 | 21.28 |
| Prefer online/distance education to face-to-face education | 43.5 | 33.46 |
| Have access to internet | 80.80 | 21.76 |
| Have a personal computer or tablet | 77.77 | 33.72 |
| Use computer for online/distance education | 76.87 | 31.97 |
| Have a personal smartphone | 95.58 | 14.46 |
| Use your smartphone for online/distance education | 79.88 | 27.04 |
| Are satisfied with online/distance education | 46.67 | 28.29 |
| Identify yourself as a spiritual person | 68.65 | 22.04 |
| Identify yourself as a religious person | 60.71 | 25.37 |
| Find religiosity/spirituality plays a crucial role in your life | 75.10 | 23.92 |

Note: We made all these questions voluntarily to respond considering sensitive contextual pandemic process and very meaningful yet sensitive questions (e.g. religiosity).

Procedure

Previous OPV studies suggested to implement different versions to increase participation (Tanhan, 2020; Tanhan & Strack, 2020). Thus, the participants in the current study were given three different options (video, audio, written) to learn about OPV and the procedure of the survey. In these introductory materials, which were developed by the first author (see Tanhan, 2020) the meaning of OPV and the ways for effective and meaningful participation in OPV were explained.

OPV procedures

In this study the five procedures, implemented in the first OPV study during COVID-19 (Tanhan, 2020), were used to facilitate effective, enjoyable and easy engagement. The five procedures indicated below (shown on the facilitator example) were valid for both of the variables; the most important facilitator and the most important barrier. The participants followed the same steps for the most important barrier (concern, issue). There were no time limits for the steps, the participants could proceed at their own pace.

Step 1: Facilitators (support, strength): "List, at least one and at most ten, important facilitators for distance/online education during COVID-19". The participants enter these facilitators in a box on the survey form.

Step 2: Photos for the most important facilitator(s): "Take one or more photo(s) representing the most important facilitator". The participants are asked to take their own pictures and not to use any pictures from the internet.

Step 3: Uploading photos and stories: "Upload only one photo by choosing the most representative one for you". Here, participants are asked to write a story that would accompany their photo best by means of the "SHOWED" acronym. In the current study, the Turkish adaptation (GÖZSAN) by Tanhan (2020) of SHOWED was implemented.

- S: What do you **see** in the picture representing a facilitator for you or **see** community for online/distance education during COVID-19 pandemic?
- 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?
- 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?

Step 4: Theme(s) or Metaphor(s): "Provide at least one and at most three themes or metaphors to summarise your photo and story". Participants are wanted to determine a metaphor or theme that would reflect their photo and story.

Step 5: Attribution of the facilitators to Ecological System Theory (EST): “Specify the levels of systems (individual/intrapsychic, microsystem, exosystem, macrosystem or all) that contribute to the development of these facilitators from their unique perspectives”. Participants shall identify the systemic levels that improve the facilitator.

Analysis

Online Interpretative Phenomenological Analysis (OIPA). The present study was analysed by means of the OIPA. Two different teams each consisting of two researchers analysed the data in five stages: controlling photos, captions, themes and research form for missing data; filtering the data for confidentiality; forming main clusters for the facilitator themes; forming main clusters for the barrier themes; comparing main themes according to commonalities and differences and examining attribution of themes to levels of EST by the students.

Results

Descriptive for some contextual factors related to online education conditions of participants during the pandemic. Total participants N responded to the following questions changed from 443 to 474. Responding to these questions was voluntarily.

When we asked through an open-ended and voluntarily question whether they feel committed to a religious or spiritual tradition, 265 indicated Islam, six indicated spiritual movement, seven indicated none and the rest of the participants left the question empty.

Main facilitator themes

In this study, 13 main facilitator themes emerged. Main themes and 478 participants are shown in Table 2. All themes are discussed and analysed in the discussion section with existing literature. The researchers included some direct photos, stories and themes from the participants, especially who collaborated with us in our CBPR group throughout the study. We chose the most

Table 2. Main themes related to the factors that facilitate distance education for psychological counselling and guidance programme students during the COVID 19 process.

| Main Facilitator Themes | | % | N = 478 |
|-------------------------|---|----|------------|
| 1. | The contribution of technology in distance education: Providing time flexibility, being accessible from anywhere, repeating, offering richer content. | 22 | 105 |
| 2. | Computer, PC: Technological tools. | 18 | 86 |
| 3. | Internet: Continuous network connection, globalisation, access to information. | 14 | 69 |
| 4. | Comfortable study environment: personal study desk, room and course materials (computer, book, etc.). | 14 | 69 |
| 5. | Reading books, textbooks, bibliotherapy (Online Read-Reflect-Share) | 10 | 50 |
| 6. | Spending time in nature | 10 | 46 |
| 7. | Family: Being together, spending time together, knowing that you are with the family. | 9 | 44 |
| 8. | Spending time efficiently: Saving time, having own time. | 9 | 43 |
| 9. | General biopsychosocial spiritual well-being: Peace, relaxation, being healthy, spirituality, religious belief, patience. | 9 | 41 |
| 10. | Positive perspective: Perseverance, motivation, goodness, meaning of life, hope, love, well-being, hope, freedom. | 8 | 36 |
| 11. | Sense of trust, economic security: Financial income, getting what you do, patience. | 5 | 24 |
| 12. | Hobbies and arts: Gardening, mandala, painting, playing musical instruments, raising animals, doing sports, hiking, trekking. | 4 | 20 |
| 13. | Daily routines: TV series, movies, drinking coffee, drinking tea, cooking, listening to music, travelling, workload. | 3 | 14 |

Note: *478 valid respondents. We combined the themes represented under 3% of total number (478) following the completing all the analyses as Tanhan (2020) suggested.

representative ones and the ones followed SHOWED. We discussed the themes more in detail in the discussion section.

We provided two representative photos, stories and themes submitted by the participants.

Facilitator Photographs, Captions and Summary Words/Themes



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

The participant submitted the following story/caption for the facilitator:

I am a final year student in the psychological counselling department. I was alarmed when I heard that we will continue education at home due to the Covid Pandemic. However, after the distance education infrastructure was established in the first months – after I adapted to distance education – I realised that there was not much change in my learning. I benefited a lot from efficient training platforms such as zoom meeting, google meet, MERGEN etc.

As our counselling clinic at [...] university, we carried the bibliotherapy practices that we used to do in groups face-to-face to the virtual platforms. We shared our thoughts about our [...] bibliotherapy book and we were able to reach the shared ideas instantly via Whatsapp/Telegram. My economic situation was good, but unfortunately, I observed that other friends/people had difficulties.

With regard to my talent development, I engaged in drawing. After a while, I started to draw portraits and sell them online. Selling online taught me a lot about marketing strategies and creating a billboard.

During the pandemic time, I actually wanted to spend time in nature, but I was content with flowers and some mini vegetables that I planted in pots.

My suggestion to psychological counselling students is to follow student societies, associations and clubs related to their fields on social media and establish networks as much as possible. From my current point of view, I think that psychological counselling students should develop their skills and take steps towards self-fulfillment. The Covid pandemic has taught me that time passes very quickly and that we should be in the moment.

The participant submitted the following summary words for the photo and caption:

“Innovation, adaptation, professional development, use of technology, art activities”



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

The participant submitted the following story/caption for the facilitator:

I am a senior in the Turkish Language Teaching department, and I started to double major in the Psychological Guidance and Counseling department last year. Even though the remote learning during the pandemic was compelling, it introduced me to the department I double major in. Since the professors recorded every lesson, I was able to complete all classes of both departments by watching some of them later. This wouldn't be an option for me to choose under normal circumstances.

I discovered my talents that I did not know I had before by taking up new hobbies during the pandemic. The first ones are learning how to play kalimba and read sheet music. I learned how to play kalimba by watching videos on the internet without going to a course. I couldn't attend a course before the pandemic even though I wanted it so badly because I couldn't afford the fees. Even though I wanted it so badly, I couldn't afford to go to a course before the pandemic because I couldn't afford the fees. Seeing that I can learn how to play an instrument all by myself motivated me a lot and comforted me financially.

Even though family factors and close connections challenged me during this process, I was able to get to know my family better and maintain warmer relationships.

Since I just met the Psychological Guidance and Counseling field, I attended eight online certified, education and therapy-themed training programmes in Iseven Academia to improve myself. During the programmes, I contacted different people in the field and joined online meet-ups. Thanks to these training programmes and meet-ups, I had the opportunity to get to know the field better.

I also joined Telakki Social Sciences Platform to gain competence in related fields of Psychological Guidance and Counseling such as psychology, pedagogy, education, etc. which I am interested in. We organised events in many different fields where we interview experts with the participation of people of different ages and professions. I did not only participate actively in these events but took part in the organisation stage. It was very productive.

The participant submitted the following summary words for the photo and caption: "Personal development, education, hobbies, talents".

Main barrier themes

Based on using OIPA, 22 main barrier themes emerged. We have provided some direct photos, stories and themes from our CBPR members who were also counselling students. We provided and discussed more direct quotes in the discussion section (Tables 3 and 4).

Barrier Photographs, Captions and Summary Words/Themes



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

The participant submitted the following story/caption for the barrier:

I am a senior in the Psychological Guidance and Counseling Department at Medeniyet University. My academic life continues as difficult as it was in the beginning, and I am really tired. This tiredness may be caused by stillness. Because I studied in a small room all year. I started to introduce myself like “Hi, I am [...] and I am tired”. The first reason for this was the need for human interactions. Not being able to communicate with people tired me off. The second reason was not having a computer. This was causing problems in online lectures. But even though I got one later, I was still struggling to understand them. That’s when I figured out the importance of changing places. Because it was very challenging to understand and therefore synthesise a piece of information in a close environment. My desk and my room were messy. I think they represented the messiness of my mind. I do not think people can communicate and bond virtually. I think this is the reason why I failed lectures.

Besides, staying with family brought mental exhaustion. All of a sudden you find yourself in a big pile of responsibilities. Arguments go on and on. Many frustrating reasons come up. The reason why this tiredness caused by staying home all the time became constant was not having a regular sleep schedule. I couldn’t sleep at night, so I was sleepy during lectures. I couldn’t improve myself academically. I am a musician. I play Lute and many other instruments. Since I was home all the time, I had the opportunity to spend unlimited time with my instruments which prevented me from fulfilling my responsibilities.

Nowadays, I feel peaceful. I try to help people. And this helps me fill the gap inside. I try to regain my social circle, my economic independence and I try to be a more spiritual person. First of all, “Hi, I am [...], in search”.

Table 3. Main barrier themes related to online or distance education for counselling students during the COVID 19 process.

| Main Barrier Themes | | % | N = 474 |
|---------------------|--|----|---------|
| 14. | Lack of technological tools and related knowledge: low quality of online education, dysfunctional technology, technical problems, issues with services, coldness of technological devices, issues with access to resources, internet issues, not being able to attend courses, too much negative news through technology and related psychological disturbance | 16 | 76 |
| 15. | Transition to distance education: extra homework, Turkey's education system, inflexibility, too many courses, the density, the education system not addressing life issues and too far away from life, keep forcing students to learn with same methods, too much and extra homework | 13 | 61 |
| 16. | Emotions that are difficult to cope with: sadness, boredom, inadequacy, helplessness, anxiety, regret, unhappiness, loss, death anxiety, failure, anger, suffocation, pain, heartbreak | 12 | 58 |
| 17. | Lack of psychological support: psychological problems, depression, stress, anxiety, fatigue, addiction, emotional instability, perfectionism, inability to work in groups, lack of therapeutic conditions | 12 | 57 |
| 18. | Too much exposure to electronic devices' screens and then related somatic ailments: eyestrain, sedentary life-desktop, backache, headache, pain at arm and elbow | 11 | 54 |
| 19. | Disadvantages or difficulties directly related to distance education: incomprehensible course materials, compulsory education, conflict of course hours, lack of feedback, inability to get efficiency from online courses, exams, inability to control online exams, noise of construction machinery during exams, instructors making the process difficult-incomprehension, lack of empathy, dysfunctional applications-zoom, lack of orientation, the lack of development of the online education system, system slowness, high student responsibility, frequency of online courses | 11 | 53 |
| 20. | Disruption of life flow: unfinished lives, postponed works, disruption of routine, monotonous life, restriction of freedom, social distancing, curfew for ones under age of 20, uncertainty, confusion | 11 | 51 |
| 21. | Unmet need for basic human communication: being away from friends, blurry online world | 9 | 43 |
| 22. | Being trapped within four walls: absence of supervised excursion places, isolated from nature, apartments without gardens, lack of sea-water | 8 | 40 |
| 23. | Family problems: conflicts within the family, having more than one student in the same house, different lives in the same house, violence, crowded family, difficult situations of family members, family noise, taking responsibility of the family, having children, unconsciousness of the family, unhappy family | 8 | 40 |
| 24. | Social isolation | 8 | 38 |
| 25. | Pandemic and its adverse effects: constantly wearing a mask, expensive masks, loss of relatives, illness of relatives, difficulty in travelling, decrease in job opportunities, inadequacy of precautions and penalties, physical ailments, drug side effects, library restriction, bans, smoking effect inside | 7 | 33 |
| 26. | Negative outlook on life: pessimism, unhappiness, intimidation, negative thoughts, lethargy | 6 | 30 |
| 27. | Lack of spirituality and spiritual values: emptiness, not doing conscientious responsibilities, negative affect, haste; unrest, imbalance, apathy, heartbreak; difficult to follow spiritual life; lack of motivation, lack of love | 6 | 28 |
| 28. | Loneliness: introversion, incomprehension, crying | 6 | 27 |
| 29. | lack of self-regulation: not using time effectively, not using technology correctly, time pressure, laziness, social media, not liking to study | 5 | 25 |
| 30. | Economic impossibility: lack of money, increase in inflation, low self-esteem of not being able to do anything for income financially | 5 | 24 |
| 31. | Professional lack of practice: not being able to attend and help others as a counselling student, lack of internship | 5 | 24 |
| 32. | Injustice: inequality of opportunity, selfishness, earnings-oriented lifestyle | 5 | 22 |
| 33. | Inability to focus due to street noise and social responsibilities: street noise, social roles and duties | 5 | 22 |
| 34. | Infrastructure problems: difficult living conditions in the village, difficulty in accessing facilities, power cut | 3 | 16 |
| 35. | No difficulties at all: These participants reported that they did not have any barriers for their online or distance education during the pandemic. | 2 | 8 |

Note 1: We had shared with the participants they can submit in any languages they would prefer. And one participant (#42) submitted in Kurdish and one (#66) in English. We translated them in Turkish first and then included in the analyse.

Note 2: We rounded percentages to the closest whole number.

Note 3: We constructed a main theme when at least 3% of the participants ($N = 474$) addressed it based on Tanhan (2020) suggestion. At the end of the analyses, when a main theme was not represented at least by 3%, we combined it with the most possible close main theme. However, we included the last 22nd main theme as a main theme, without combining it with another one, because we did not have any close main themes for this. And we preferred to protect their voice as well as highly stressed in OPV.

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

| EST Levels Themes | Individual/Intrapsychic | Microsystem | Exosystem | Macrosystem | All together |
|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|
| Facilitator | 57% ($n = 276$) | 56% ($n = 268$) | 30% ($n = 146$) | x% ($n = 97$) | 20% ($n = 162$) |
| Barrier | 49% ($n = 236$) | 54% ($n = 261$) | 37% ($n = 178$) | 31% ($n = 147$) | 42% ($n = 204$) |

Note: We allowed the participants to attribute the factors to more than one level; $N = 481$.

The participant submitted the following summary words for the photo and caption: “Miscommunication, social consistency, spatial activities, biological imbalance”.



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

The participant submitted the following story/caption for the barrier:

I graduated from [...] University, Department of Guidance and Psychological Counseling. I was affected by the negative aspects of distance education. I have experienced infrastructure, power cuts and access problems because I have been living in the village. Due to the lack of suitable conditions to study such as social areas and libraries, I was stuck at home. Although this situation distressed me at first, I continued this process with a sense of helplessness caused by despair. I had conflicts with my family. I had arguments with my brother as he was a student too. Relatives of my friend died from the coronavirus. This situation made me feel sad and driven to despair. In the distance education programme, I had a lot of difficulties resulting from the system in the sections reserved for written questions. Since I don't have a computer, it was very difficult to attend the exams over the phone. I had participated in the psychodrama activity during the face-to-face training process, but it was left half finished. Later, I learned that I could continue psychodrama with distance education, but the internet was not good enough. This was reflected in my activities and caused me to be unhappy and anxious. Besides, I had to study because the test, that was called Kpss, was approaching. However, I didn't have a suitable study environment and the conflicts within the family continued. In fact, it was the negative attitudes of my family that upset me. Over time, the depression caused by the uncertainty and the anxiety for the future affected my life more negatively.

My sleeping and eating habits were disrupted. Sometimes I had problems such as headaches and muscle aches. The picture above speaks volumes for me. Because I chose technology over work. For the most part, my books would sit quietly in a corner. Wall corners also tell about my stuckness. Because I use excessive technology, I have been isolated from social life and friendship relations. My productivity in my spiritual life and motivation have plummeted. I was distracted from time to time during the semester. Now that the stressors are gone, I'm better.

The participant submitted the following summary words for the photo and caption: *"Family, Miscommunication, Technology"*.

Discussion

Discussion of the main facilitator themes

We have discussed our main facilitators in light of other related studies, especially some recent COVID-19-related OPV research (Doyumğaç et al., 2021; Tanhan, 2020; Tanhan et al., 2021; Tümkaya et al., 2021).

As researchers, we reported a theme as a main theme when at least three percent of total participants reported the theme to preserve the voice and perspective of the participants as much as possible, which align with the spirit of OPV (Tanhan, 2020; Tanhan & Strack, 2020). Our first three main facilitators (in total 54%) have been related to the internet and technology, which supports the significant role of internet and technology for education of counsellors-in-training. Therefore, we have discussed the first three themes together in the following paragraph.

In total, 54% of the participants mentioned different dimensions of internet and technology which aligns with results of recent research indicating the advantages of internet and technology in relation to distance education during COVID-19 (Armiya'u et al., 2022). This result makes sense because having internet and technological devices are essential for distance education. The students stated that the distance (online) education is the most powerful facilitator. However, they emphasised that having a functioning internet infrastructure and technological devices such as computers and smart phones are among other powerful facilitators. According to some researchers (; Tanhan, 2020), distance education may be particularly effective for some participants than face-to-face training. Distance education offers students opportunities to use time efficiently and repeat lessons. In the study conducted by Doyumğaç et al. (2021), 67% of the participants stated that internet and technology are the most important facilitators in distance education. Similarly, in the study conducted by Tanhan (2020), 10% of the individuals participating in the study in the pandemic stated that the most important factors that facilitate their lives are online education and technology. In another recent study by Tümkaya and others (2021), 30% of 153 college students reported technology and related aspects (e.g. internet, computer) as the most important facilitators for their online/distance education. In addition, in our current study and some other studies (e.g. Tümkaya et al., 2021), some of the participants reported online education as a part of socialising during the pandemic process. Given recent research via an OPV methodology which found that social support as a facilitator of mental health for people living in Nigeria, the indication of this theme within the results of this study makes sense within online education (Armiya'u et al., 2022). Therefore, online education is one of the important factors that not only contribute to the quality of education during the pandemic process but also make life easier for the students. During the pandemic process, students carry out their education through online education platforms and they cope with the process because these platforms provide flexibility in both time and space. Having internet infrastructure and technological tools to access online education platforms are some other important facilitators for students. All these make sense in the context of Turkey because Turkey is one of the developing countries and most people have access to internet and technological devices. Our results align with some other studies provided above.

Being physical and psychologically comfortable is an important factor for effective studying (Tanhan, 2020); therefore, our fourth main theme makes sense. The students (14%, $n = 69$) stated the importance of having a space or room of their own as a factor that facilitates the education process during the pandemic period. Learning and studying environments are effective on students' learning qualities and achievements (Biggs, 1999; Gibbs, 1994; Savaş et al., 2010; Ulular, 1997). It is one of the prerequisites that students should have a suitable studying environment (Yiğit & Kaçire, 2015). Lack of a suitable environment for university students to study reveals the habit of studying in a superficial way (Arslan et al., 2015). It is more important for the student to have his/her own study space rather than whether the place to study is large or small (Memiş, 2007). In the context of Turkey, having one's own studying or even a quiet study space is very crucial because many students do not have such privileges (Doyumğaç et al., 2021; Tanhan et al., 2021). Therefore, the presence of a student's study environment positively affects the student's adaptation to studying. For this reason, having an environment where students "feel comfortable" and "feel their own" is an important facilitator for students in the distance education process.

The fifth facilitating main theme is reading a book. Fifty participants (10%) stated that reading books relaxed them in this process and helped them overcome the negativities of the pandemic. However, students who had difficulty in allocating time to read books before the pandemic stated that they spent time reading books and exploring the world of books with the pandemic. In the literature, it is emphasised that reading books is important for maintaining the mental health of individuals (Király et al., 2020). In addition, it is known that reading books is an important support for university students during the pandemic period, as well as benefits to mental health (Tanhan, 2020).

Spending time in nature was the sixth main facilitating theme. Some other researchers found similar results (Tümkaya et al., 2021). Tanhan (2020) also found that nature is very important for human psychology and education. In the world and Turkey in recent years in the forest and nature education schools also becoming increasingly important (Tanhan, 2020; Tanhan et al., 2020).

Similarly, each of the main themes given in Table 1 overlaps with the COVID-19 education and mental health literature at different rates. Generally, all researches conducted about the COVID-19 both in the world and Turkey focused on what's not going well (Tanhan, 2020). For this reason, it is especially noteworthy to reveal the factors that facilitate individuals during the COVID-19 pandemic process. School closures were beneficial in reducing infection or deaths during the pandemic (Viner et al., 2020). However, it is also known that students experience some academic problems during the COVID-19 process (Cao et al., 2020). The results of this study have revealed important results in terms of being aware of the resources that counselling students will use to cope with the possible negative effects of the pandemic in the educational process. Evidence indicates that facilitating factors revealed in the research have an important place in the education process of each student. Results from this study are consistent with other similar studies (Király et al., 2020; Tanhan, 2020).

Discussion of barriers

In this section, considering other COVID-19 research, we discussed the first six main barrier themes. The results make much more sense when one considers them in Turkey's context. The first main barrier theme is the students' (16%) lack of technological tools and their knowledge about the tools. Turkey is a developing country, and therefore, some students cannot afford having necessary technological devices. At many colleges in Turkey, there are no available technological labs or resources where the students can borrow, which means it is sometimes impossible to get a computer. All these mean they cannot get a good amount of knowledge about and experience with technology and related tools. This theme is similar to the first of the main facilitating themes, which was the contribution of technology in distance education (22%). In this situation, technology facilitates the education during the pandemic and yet it is also a serious issue for many others. The students

who do not have a good financial income or support are more likely to suffer during the pandemic. The students also reported how they could not borrow a computer from their friend due to the pandemic fear and restrictions.

Balaban (2012) stressed that online or distance teaching method is more flexible, low-cost and practical, but due to reasons such as insufficient technological infrastructure, not providing informative guides for education, not allocating enough time for education to learn the system and not creating or incomplete units to provide feedback and support cause some critical issues for the students. In the facilitating theme, although the students drew attention to the contribution of technology in distance education, a lack of technology, tools and knowledge in this field was also indicated as a barrier.

College education can be difficult by itself and COVID-19 adds to the challenges within this experience. Furthermore, it is more likely that most of the students in the world had not experienced distance education prior to the pandemic. Therefore, our participant reported process of transitioning to distance education as the second most important barrier. When we look at the literature, there are other similar studies (Çiçek et al., 2021; Doyumğaç et al., 2021; Subasi et al., 2023; Tanhan, 2020; Tümkaya et al., 2021) in this field that negatively affect students. These researchers stressed that many people in Turkey struggled with this transitioning. The researchers highlighted students experiencing biopsychosocial spiritual and economic issues related to this new online/distance education transitioning. Some other researchers also found COVID-19's effect on many areas (Gürsu & Bayındır, 2016) including college students' facing serious issues (Akyol et al., 2020; Gençalp, 2020; Kürtüncü & Kurt, 2020; Laher et al., 2021; Sarıtaş & Barutçu, 2020). Tiryaki and others (2020) stated that higher education students staying at their homes could not fully fulfil their physiological and psychological needs. Our results in this study overlap with the results of the larger related literature. The student emphasises that with distance education, equality in education is damaged for those who do not have these technologies.

COVID-19 process has been difficult in terms of experiencing undesired feelings (e.g. Tanhan, 2020; Tümkaya et al., 2021). As a result of our study, there are difficult emotions (12%) which are the third main barrier theme. When we look at the larger related literature, some other researchers also found similar themes that students reported as unwanted or difficult to emotions or feelings that affect mental health and subjective well-being (Tanhan, 2020; Tanhan et al., 2021). Some of these difficult emotions include having a feeling down, not being able to maintain social and romantic relationships, isolation, loneliness, worrying about the future, economic problems, being away from the school environment and anxiety. All these show the emotional and psychological states of the students.

Emotions that are difficult to cope with show the fact that they become even stronger when individuals are alone. The fact that he is hopeless, dejected and unhappy shows the fact that psychological support is needed in this area.

In Turkey, we do not have well-grounded and granted mental health services and the available services became even more scarce during the pandemic (Tanhan, 2020). Based on this, it is not a surprise that the participants reporting lack of psychological support (12%, $n = 57$) as the fourth main barrier theme. In a study conducted on college students in mental health-related areas, it was found that mental health problems of the students relatively worsened during transition times such as COVID-19 (Laher et al., 2021; Tanhan et al., 2021). Accordingly, during the Covid-19 pandemic, some of the undergraduate psychology students mentioned barriers such as not being able to understand the lessons, lack of resources, lack of interaction with lecturers and classmates, getting easily distracted and difficulty in being motivated. Being confined to home due to the pandemic elicits a trapped or claustrophobic mood in students leading to stress, anxiety, fear, loneliness, overthinking, emotional exhaustion, hopelessness and depressive symptoms. Many other recent researchers who used OPV in Turkey found similar results with students from different majors struggling with psychological issues (Subasi et al., 2023; Tanhan, 2020; Tanhan et al., 2021; Tümkaya et al., 2021). These researchers stated that college students experiencing biopsychosocial spiritual and

economic difficulties that were related to contextual pandemic factors from micro level to macrosystem level. And the authors also stressed how the factors seem to gradually cause more serious biopsychosocial spiritual and economic problems when they are not addressed well. Some researchers called for social, family, peer and professional support systems (Laher et al., 2021).

Not only students but almost all people across the globe have been exposed to electronic devices and especially screens more than any other times due to the pandemic restrictions and all many things being moved to online platforms. Therefore, it makes sense that the students expressing too much exposure to screen-electronic devices and related bodily ailments (11%, $n = 54$), as the fifth main barrier. Tanhan (2020) also reported similar results. This also shows how contextual and chronological events like the pandemic affect students from a biological perspective. Tiryaki et al. (2020) found that higher education students staying at their homes could not fully meet their physiological and psychological needs.

In the context of Turkey, some students do not have enough psychosocial, spiritual and economic support which put them in more risk compared to their peers (Tanhan, 2020). In this current study, some students shared disadvantages-difficulties of distance education (11%, $n = 53$) as the sixth main barrier. Some other researchers also found some students faced serious disadvantageous during the online or distance education process (Akyol et al., 2020; Çiçek et al., 2020; Gençalp, 2020; Gürsu & Bayındır, 2016; Kürtüncü & Kurt, 2020; Laher et al., 2021; Saritaş & Barutçu, 2020; Tanhan, 2020).

We have limited space for this manuscript and therefore we did not discuss the rest of the main barrier themes as we have provided in the table. In sum, our results align with other researchers' findings on main barriers for online and distance education. The results make sense from a contextual and EST perspective.

Limitations

Though our findings provide insight into the educational experience of counselling students in the context of the pandemic, there are limitations to this study. Given the diversity in educational systems and technological infrastructure within various nations, the focus on Turkey limits the transferability of the results to other localities. In addition, the focus on counselling students does not necessarily translate to other disciplines or experiences of those in the professional world as participants in this study were sharing experiences within an educational context. Finally, the use of an innovative methodology, OPV, required development and refinement of new protocols due to the lack of conventions around this research framework. Though these limitations are worthy of consideration, the findings of the study have applications across disciplines and localities with accommodations when appropriate for implementation of the results.

Implications

We have provided specific key implications for different areas separately so that professionals in different areas are able to easily access this information.

Research

There are several implications for research associated with the results of this study. The use of OPV for collecting perspectives offers a rich description of the experience of counselling students engaged in educational training in the context of COVID-19. This also directly involves the community being studied enabling the results to be used to the benefit those impacted by the experience in question. While objective methods allow for generalisability of results, a deeper understanding is lost. Utilising research to advocated on behalf of communities is important for real-time implementation of findings to inform practice.

Education

This study specifically focused on the educational experience of counselling students. Findings highlight the need for holistic support of students as they engage in distance education. Ensuring students have access to the necessary technology to access necessary materials while also structuring lessons in a way that allows for multiple means of engagement is important both during the pandemic and beyond. Given the indication of study space and emotions being difficult to cope with, checking in on students ability to create suitable spaces for study as well as their emotional experience of learning is essential.

Mental health services

As the subjects of this study were counselling students, there are implications for mental health practice indicated by the results. The transition to distance learning parallels shift to online mental health service delivery. Positioning the use of technology in learning as a transferable skill for providing mental health services expands the importance of effectively engaging in online methods of instruction. In addition, examining the specific emotional experience of counselling students and related it to the experience of those receiving counselling can be a means of creating empathy. Discomfort and a sense of feeling disconnected occurs both in learning environments and in the distance mental health services.

Social advocacy

At the core of OPV is a focus on advocacy on behalf of the community involved in the study. While the move to distance education was necessary, there is significant potential for marginalisation of those who do not have full access to necessary technology. Given the uncertain trajectory of the pandemic and the likelihood of permanent use of online learning, ensuring equitable access to resource needed to participate in online learning is needed. In addition, accounting for the holistic experience of learning is necessary as relationships with instructors and fellow students as well as emotional and mental well-being are impacted by distance education. Advocating on behalf of students to ensure they are provided every opportunity to be successful is essential.

Acknowledgements

We do deeply appreciate the support and voices of our participants and our following students who facilitated the study and reaching out to our participants. We owe a heartfelt thanks, first and foremost, to our participants and especially to Fatma YILMAZ, Bahar KARAKUŞ, Emine KAPLAN, İsmail Bedirhan DOĞANPINAR and Şüheda Halenur KURŞUN who constantly support our effort to reach out to more diverse participants.

Data availability statement (DAS)

The first author has all related data and institutional review board (ethical decision) papers related to the research. Based on reasonable demand, the first author will provide the data and documents. All the data is available on his personal computer and his Qualtrics account. He can provide all the raw and cleaned data based on reasonable requests because we have the consent under these conditions.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Ahmet Tanhan is an Associate Professor, Department of Psychological Counseling and Guidance at Adiyaman University (2017-) Visiting Researcher, Department of Counseling at University of North Carolina at Greensboro (2020-). I

received my PhD in counselling and counsellor education at the University of North Carolina at Greensboro (UNC Greensboro) in Greensboro, NC, USA. I gained my MS in clinical (community) mental health counselling at University of Rochester (UR), Rochester, NY, USA. And I received my BS in psychological counselling and guidance at Ege University in Izmir, Turkey. I have worked at colleges, hospitals, correctional facilities (jails), schools and community centres as a mental health provider, researcher and academician. I have been collaborating with different researchers and mental health providers from different countries and institutions focusing on both positive and psychopathology at individual, group and/or community levels. For the last a few years, I have been interested in Acceptance and Commitment Therapy (ACT), Online Photovoice (OPV) methodology, conducting experimental studies to understand effect of mental health interventions and Muslim mental health. I have been working with the following institutions as an assistant professor for mental health services and research: The University of North Carolina at Greensboro, Department of Counseling (UNC Greensboro, North Carolina, USA), Economic and Social Research Center – ESAM (Ankara, Turkey), Department of Counseling at Adiyaman University (Adiyaman, Turkey); Institute for Muslim Mental Health (Michigan, USA); Association for Contextual Behavioral Sciences, Turkey Chapter (Istanbul, Turkey). *You can see Ahmet Tanhan's academic work through <https://scholar.google.com/citations?user=N3zDgFQAAAAJ&hl=en>*

Besra Taş works as an Assistant Professor at İstanbul Sabahattin Zaim University, Department of Counseling, Turkey; she is interested in family and couple therapy, internet and game effect on youth. She has published books and manuscripts on these topics. She has recently started to focus on the use of Online Photovoice (OPV) in counselling and adapting OPV to German. She has worked in Germany and knows German well in addition to English and Turkish. *You can see her academic work through <https://scholar.google.com/citations?hl=en&user=hljBLEAAAAJ>*

Zuhâl Agilkaya-Sahin works an associate professor at İstanbul Medeniyet University, Department of Counseling, Turkey. She is interested in spirituality and religiosity in counselling. She has published books and manuscripts on this topic. She has been one of the leading person improving spirituality and religiosity in counselling in Turkey. She has been collaborating with researchers from Germany and knows German well in addition to English and Turkish. She has recently started to focus on the use of Online Photovoice (OPV). *You can see her academic work through <https://scholar.google.com/citations?hl=en&user=hljBLEAAAAJ>*

Seth C. W. Hayden works as an associate professor at Wake Forest University, North Carolina, USA; Department of Counseling. He is interested in career counselling, mental health needs of military service members, veterans and their families; connection between career and mental health issues; integrated models of clinical supervision focusing on positive growth in counsellors' ability to formulate interventions. He has recently started to focus on the use of Online Photovoice (OPV). He has been serving as the President of National Career Development Association, USA. *You can see his academic work through https://scholar.google.com/citations?hl=en&user=hHU_SWQAAAAJ*

Ozan Korkmaz has recently finished his PhD in counselling and started to work as a visiting professor at Karamanoglu Mehmet bey Üniversitesi, Department of counseling, Turkey; <https://orcid.org/0000-0002-0541-200X>, pd.ozankorkmaz@gmail.com He is interested in positive psychology, acceptance and commitment therapy, mental health of college and high school students. He has recently started to focus on the use of Online Photovoice (OPV). *You can see his academic work through <https://scholar.google.com/citations?user=iUJDTOUAAAAJ&hl=tr>*

Orhan Gürsu works as an associate professor at the Department of Philosophy and Religious Sciences, Turkey. He has a background in counselling. He is interested in spirituality and religiosity in counselling. He has published books and manuscripts on these topic. He has recently started to focus on the use of Online Photovoice (OPV). *You can see his academic work through <https://scholar.google.com/citations?hl=tr&user=KmQYyQIAAAAAJ>*

ORCID

Ahmet Tanhan  <http://orcid.org/0000-0002-4972-8591>

Besra Taş  <http://orcid.org/0000-0001-5568-724X>

Zuhâl Agilkaya-Sahin  <http://orcid.org/0000-0003-3111-0336>

Ozan Korkmaz  <http://orcid.org/0000-0002-0541-200X>

Orhan Gürsu  <http://orcid.org/0000-0002-7478-371X>

References

- Akyol, G., Başkan, A. H., & Başkan, A. H. (2020). Yeni tip koronavirüs (COVID-19) döneminde spor bilimleri fakültesi öğrencilerinin karantina zamanlarında yaptıkları etkinlikler ve sedanter bireylere önerileri. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 190–203.
- Angoletto, R., & Queiroz, V. C. (2020). COVID-19 and the challenges in education. *The Centro de Estudos Sociedade e Tecnologia (CEST)*, 5(2), 2.
- Arbaugh, J. B. (2000). Virtual classroom characteristics and student satisfaction with internet-based MBA courses. *Journal of Management Education*, 24(1), 32–54. <https://doi.org/10.1177/105256290002400104>

- Armiya'u, A. Y., Yıldırım, M., Muhammad, A., Tanhan, A., & Young, J. S. (2022). Mental health facilitators and barriers during COVID-19 in Nigeria. *Journal of Asian and African Studies*, 0(0). <https://doi.org/10.1177/00219096221111354>
- Arslan, S., Ceylan, B., & Koçoğlu, D. (2015). Nursing students approaches to learning and studying. *Journal of Hacettepe University Faculty of Nursing*, 2(2), 59–69. <https://dergipark.org.tr/tr/pub/hunhemsire/issue/7859/103409>.
- Balaban, E. (2012). *Dünyada ve Türkiye'de uzaktan öğretim ve bir proje önerisi*. Işık Üniversitesi.
- Biggs, J. (1999). *Teaching for quality learning at university*. Open University Press.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Çiçek, İ., Tanhan, A., & Tanrıverdi, S. (2020). Covid-19 ve eğitim. *Milli Eğitim Dergisi*, 49(1), 1091–1104. <https://doi.org/10.37669/milliegitim.787736>
- Cicek, I., Tanhan, A., & Bulus, M. (2021). Psychological inflexibility predicts depression and anxiety during covid-19 pandemic. *Journal on Educational Psychology*, 15(1), 11–24. <https://doi.org/10.26634/jpsy.15.1.18198>
- Demir Öztürk, E., Kuru, G., & Demir Yıldız, C. (2020). COVID-19 pandemi günlerinde anneler ne düşünür çocuklar ne ister? Anneler ve çocuklarının pandemi algısı. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 204–220. <https://dergipark.org.tr/en/pub/asead/issue/54658/733406>.
- Doyumgaç, İ., Tanhan, A., & Kıymaz, M. S. (2021). Understanding the most important facilitators and barriers for online education during COVID-19 through online photovoice methodology. *International Journal of Higher Education*, 10(1), 166–190. <https://doi.org/10.5430/ijhe.v10n1p166>
- Dziuban, C., Moskal, P., Kramer, L., & Thompson, J. (2013). Student satisfaction with online learning in the presence of ambivalence: Looking for the will-o'-the-wisp. *Internet and Higher Education*, 17, 1–8. <https://doi.org/10.1016/j.iheduc.2012.08.001>
- Galanza, M. A. M. C., Aruta, J. J. B. R., Mateo, N. J., Resurreccion, R. R., & Bernardo, A. B. (2023). Mental health of Filipino university students during the COVID-19 pandemic: The distinct associations of fear of COVID-19 and financial difficulties. *Educational and Developmental Psychologist*, 40(1), 125–130. <https://doi.org/10.1080/20590776.2021.1999168>
- Genç, E., & Arslan, G. (2021). Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. *Journal of Positive School Psychology*, 5(2), 87–96. <https://doi.org/10.47602/jpsp.v5i2.255>
- Genç, E., Tanhan, A., & Kose, O. (2021). *Exploring the facilitators and barriers to intimate relationships during covid-19 through online photovoice methodology*. Manuscript under review.
- Gençalp, D. K. (2020). COVID-19 salgını döneminde ilk ve acil yardım öğrencilerinin beslenme alışkanlıkları ve fiziksel aktivite durumlarının değerlendirilmesi. *Paramedik ve Acil Sağlık Hizmetleri Dergisi*, 1(1), 1–15.
- Gibbs, G. (1994). *Improving student learning. Through assessment and evaluation*. Oxford Centre for Staff Development.
- Goodhart, F. W., Hsu, J., Baek, J. H., Coleman, A. L., Maresca, F. M., & Miller, M. B. (2006). A view through a different lens: Photovoice as a tool for student advocacy. *Journal of American College Health*, 55(1), 53–56. <https://doi.org/10.3200/JACH.55.1.53-56>
- Gürsu, O., & Bayındır, S. (2016). COVID-19 hastalığını geçiren sağlık çalışanlarının başa çıkma sürecinde din ve maneviyat. *Turkish Academic Research Review*, 6(1), 181–220.
- Király, O., Potenza, M. N., Stein, D. J., King, D. L., Hodgins, D. C., Saunders, J. B., ... Abbott, M. W. (2020). Preventing problematic internet use during the COVID-19 pandemic: Consensus guidance. *Comprehensive Psychiatry*, 152180. <https://doi.org/10.1016/j.comppsy.2020.152180>
- Köse, U. (2021). *Evde Eğitim ve Öğretim İçin Teknoloji Kullanımı: Teori, Uygulamalar ve Geleceğe Bakış*. Pegem Akademi.
- Kurt, A. A., & Odabaşı, F. (2020). *Pandemi döneminde Sınanan Dijital Vatandaşlık*. Anı yayıncılık.
- Kürtüncü, M., & Kurt, A. (2020). COVID-19 pandemisi döneminde hemşirelik öğrencilerinin uzaktan eğitim konusunda yaşadıkları sorunlar. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 66–77.
- Laher, S., Bain, K., Bemath, N., deAndrade, V., & Hassem, T. (2021). Undergraduate psychology student experiences during COVID-19: Challenges encountered and lessons learnt. *South African Journal of Psychology*, 51(2), 0081246321995095.
- Memiş, A. (2007). The demographic factors affecting students' study orientation. *The Journal of Turkish Educational Sciences*, 5(2), 291–322. <https://dergipark.org.tr/tr/pub/tebd/issue/26116/275138>.
- Mushtaha, E., Dabous, S. A., Alsyof, I., Ahmed, A., & Abdraboh, N. R. (2022). The challenges and opportunities of online learning and teaching at engineering and theoretical colleges during the pandemic. *Ain Shams Engineering Journal*, 13(6), 101770. <https://doi.org/10.1016/j.asej.2022.101770>
- Öğülmüş, K., Acikgoz, M. H., & Tanhan, A. (2021). Evaluation of teacher candidates' perceptions about specific learning difficulties through Online Photovoice (OPV) methodology. *International Journal of Education and Literacy Studies*, 9(2), 161–169. <http://dx.doi.org/10.7575/aiac.ijels.v.9n.2p.161>
- Sarıtaş, E., & Barutçu, S. (2020). Öğretimde dijital dönüşüm ve öğrencilerin çevrimiçi öğrenmeye hazır bulunuşluğu: Pandemi döneminde Pamukkale Üniversitesi öğrencileri üzerinde bir araştırma. *İnternet Uygulamaları ve Yönetimi Dergisi*, 11(1), 5–22. <https://doi.org/10.34231/iuyd.706397>

- Savaş, E., Taş, S., & ve Duru, A. (2010). Factors affecting students achievement in mathematics. *Inonu University Journal of the Faculty of Education*, 11(1), 113–132.
- Stamatis, C. A., Broos, H. C., Hudiburgh, S. E., Dale, S. K., & Timpano, K. R. (2022). A longitudinal investigation of COVID-19 pandemic experiences and mental health among university students. *British Journal of Clinical Psychology*, 61(2), 385–404. <https://doi.org/10.1111/bjc.12351>
- Subasi, Y., Adalar, H., Tanhan, A., Arslan, G., Allen, K., Boyle, C., Lissack, K., Collett, K., & Lauchlan, F. (2023). Investigating students' experience of online/distance education with photovoice during COVID-19. *Distance Education*, 44(3), Manuscript in print.
- Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183–1202. <https://doi.org/10.1016/j.compedu.2006.11.007>
- Tanhan, A. (2019). Acceptance and commitment therapy with ecological systems theory: Addressing Muslim mental health issues and wellbeing. *Journal of Positive Psychology and Wellbeing*, 3(2), 197–219. <https://doi.org/10.47602/jpsp.v3i2.172>
- Tanhan, A. (2020). Utilizing online photovoice (OPV) methodology to address biopsychosocial spiritual economic issues and wellbeing during COVID-19: Adapting OPV to Turkish. *Journal of Turkish Studies*, 15(4), 1029–1086. <https://doi.org/10.7827/TurkishStudies.44451>
- Tanhan, A., Arslan, G., Yavuz, K. F., Young, J. S., Çiçek, İ., Akkurt, M. N., Ulus, İÇ, Görünmek, E. T., Demir, R., Kürker, F., Çelik, C., Akça, MŞ, Ünverdi, B., Ertürk, H., & Allen, K. (2021). A constructive understanding of mental health facilitators and barriers through Online Photovoice (OPV) during COVID-19. *ESAM Ekonomik ve Sosyal Araştırmalar Dergisi*, 2(2), 214–249. <https://dergipark.org.tr/en/pub/esamdergisi/issue/64932/956618>.
- Tanhan, A., & Francisco, V. T. (2019). Muslims and mental health concerns: A social ecological model perspective. *Journal of Community Psychology*, 47(4), 964–978. <https://doi.org/10.1002/jcop.22166>
- Tanhan, A., & Strack, R. W. (2020). Online photovoice to explore and advocate for Muslim biopsychosocial spiritual wellbeing and issues: Ecological systems theory and ally development. *Current Psychology*, 39(6), 2010–2025. <https://doi.org/10.1007/s12144-020-00692-6>
- Tanhan, A., Yavuz, K. F., Young, J. S., Nalbant, A., Arslan, G., Yıldırım, M., Ulusoy, S., Genç, E., Uğur, E., & Çiçek, İ. (2020). A proposed framework based on literature review of online contextual mental health services to enhance wellbeing and address psychopathology during COVID-19. *Electronic Journal of General Medicine*, 17(6), em254. <https://doi.org/10.29333/ejgm/8316>
- Tanhan, A., & Young, J. S. (2021). Muslims and mental health services: A concept map and a theoretical framework. *Journal of Religion and Health*. <https://doi.org/10.1007/s10943-021-01324-4>
- Tiryaki, K., Pehlivan, M., & Kaya, H. (2020). Koronavirüs (COVID-19) Tedbirleri Kapsamında Evde Kalan Spor Bilimleri Fakültesi Öğrencilerin Temel Psikolojik İhtiyaçlarının Belirlenmesi (Düzce Üniversitesi Örneği). *Spor Eğitim Dergisi*, 4(3), 43–53.
- Tümkaya, S., Kuşdemir Kayıran, B., Tanhan, A., & Arslan, Ü. (2021). Using Online Photovoice (OPV) to understand youths' perceptions of distance education during COVID-19. *International Journal of Education and Literacy Studies*, 9(4), 45–60. <https://doi.org/10.7575/aiac.ijels.v.9n.4p.45>
- Ulular, G. (1997). *Non-intellective factors that affect secondary school students' achievement*. Unpublished master thesis, Gazi University Social Sciences Institute, Ankara.
- Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., ... Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: A rapid systematic review. *The Lancet Child & Adolescent Health*. [https://doi.org/10.1016/S2352-4642\(20\)30095-X](https://doi.org/10.1016/S2352-4642(20)30095-X)
- Wallerstein, N. B., & Duran, B. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice*, 7(3), 312–323. <https://doi.org/10.1177/1524839906289376>
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- Yiğit, B., & Kaçire, İ. (2015). A survey about examination of secondary school students' study habits. *Mustafa Kemal University Journal of Social Sciences Institute*, 12(31), 309–319.