

Full Length Research Paper

Students' metaphoric perceptions regarding the concept of distance education during the pandemic

Ezgi Pelin YILDIZ^{1*}, Ayşe ALKAN² and Metin ÇENGEL³

¹Department of Computer Programming, Kafkas University Kazım Karabekir Vocational School of Technical Sciences, Kars, Turkey.

²Samsun Provincial Directorate of National Education, Samsun, Turkey.

³Department of Computer Programming, Hendek Vocational High School, Sakarya Applied Science University, Sakarya, Turkey.

Received 12 April, 2021; Accepted 25 May, 2021

The aim of this study is to examine the views of students at different education levels on the concept of distance education through metaphors. In this study, the phenomenological design was used in accordance with the nature of qualitative research. The participants of the study, for whom the ethical rules were taken into account, consisted of 63 gifted students in total studying at primary and secondary school levels. In the collection of data, each participant was asked to fill in the form containing an open-ended item for the concept of distance education. The data obtained from the students were later analysed using the content analysis technique. When the relevant metaphors were examined, a total of 63 different categories were revealed. Depending on these categories, it has been observed that the concept of distance education is represented through different metaphors. According to the findings, it was determined that primary and secondary school students simulated the concept of distance education to different metaphors such as speaking class, longing for friends and intelligence cube.

Key words: Metaphor, perception, phenomenology design, distance education, students.

INTRODUCTION

Technological developments have not only transformed the way people live, receive information and provide services, but have also affected the way they receive education. In this period, which is also called the information society, various Information and Communication Technologies (ICTs) are used by people to follow the latest developments (Arthur-Nyarko et al., 2020). Technological developments have facilitated

access to information across the world and made the world a global village with access to information (Buluk and Esitti, 2020). However, the coronavirus disease 2019 (COVID-19), which emerged as a negative development in late 2019, spread rapidly all over the world and has been declared a pandemic by the World Health Organisation.

It has been stated that as of 17 April, 2020, schools

*Corresponding author. E-mail: yildizezgpelin@gmail.com. Tel: +90 0474 225 11 50.

were closed in 191 countries around the world and 1,724,657,870 students were affected by this process, due to the 'COVID-19' pandemic that spread rapidly and caused various crises in a global context (UNESCO, 2020a). This process has directly affected the education system in Turkey and other countries. In order for students not to stay away from education during this period, distance education in primary, secondary and high school levels by the National Ministry of Education system has been started.

The Education Information Network which was established in 2012, for distance education was initiated due to the pandemic and started to be used actively, enabling students and teachers to be in contact. For all students to have easy access during the pandemic process, the infrastructure of the system has been developed. The Education Information Network TV, with three different channels, namely Primary School, Secondary School and High School, started broadcasting for distance education. On these channels, lesson hours from 1st grade to 12th grade are 20–25 min each and repetitions continue throughout the day. There is an 'activity zone' in between lectures to provide students with educational and entertaining activities.

When the literature is examined, it is seen that there are different definitions of distance education. In the most general sense, distance education is defined as a teaching method that operates based on the active use of information technologies in order to teach lessons and to facilitate learning, as instructors and students are located in different times and places (Valentine, 2002). According to another definition, distance education is described as a form of education in which the learner and the teacher are separated and are distant from each other in most of the teaching and learning process, and materials and documents suitable for the course content are frequently used (Usun, 2006).

With the decision to transition to distance education, online media and TV broadcasts started to be used actively in this process in many countries (Stojanovic et al., 2020). Lessons were conducted as synchronic (synchronous) and asynchronic (asynchronous) within the scope of distance education. In synchronic education, students and teachers meet at a predetermined time (usually online) and conduct live lectures (Fidalgo et al., 2020). In this process, a more active environment is created for teachers and learners and to provide an environment similar to face-to-face education, such as in-class interaction and discussion, instantly asking questions and expressing incomprehensible parts. In asynchronous education, on the other hand, it is the type of education where teachers and students cannot have the opportunity to work simultaneously and students can access the course content (presentation, video, audio recording, etc.) over the Internet whenever they want or need it. Communication between participants takes place mainly through e-mail and online forums and is often

managed by trainers (Watts, 2016).

When the literature on distance education is examined during the pandemic, it is possible to come across many studies. Accordingly, Ozdogan and Berkant (2020) examined stakeholder views on distance education during the pandemic period in their research. The data within the scope of the research were obtained from 137 stakeholders using semi-structured interview forms. The solution suggestions of the stakeholders are mostly in the form of measuring and evaluating the process, establishing equal opportunities, increasing participation and interaction in the course, strengthening the infrastructure, making lessons with their own teachers, and reducing the number of lessons.

Gencoglu and Ciftci (2020) examined the education system during the epidemic in their research. In the study, the difficulties encountered in the world and Turkey in terms of education during the COVID-19 pandemic process, the measures taken, and the solutions produced were discussed. As a result, it has been observed that the problem areas faced by countries commonly focus on 'access to distance education, determination of student achievement, compensatory education planning, psychosocial support services and (disadvantaged) students requiring special policies'.

Chatterjee and Chakraborty (2020) examined students' views on online education during the COVID-19 process in their research. They prepared a questionnaire with 20 statements related to online education during the COVID-19 pandemic. As a result, the students appreciated the software and online study materials being used to support online education. In addition, the students felt that online education is stressful and is affecting their health and social life.

Bozkurt (2020) conducted a study that determines the metaphorical perceptions of primary school students towards distance education during the pandemic process. As a result, facilitators in the positive metaphor group in the study, lifelong themes of learning, instructional presence, structured learning, sense of community, autonomy, time, space and independence, intrinsic motivation and accessibility emerged. In the negative metaphors group, themes of loneliness, artificiality, socialisation, extrinsic motivation, isolation, lack of communication, psychological distance, quality, inequality, transience and affective closeness emerged.

Purpose of the study

The aim of this research is to analyze the metaphors developed by gifted students regarding the concept of distance education. In this context, answers to the following questions were requested:

1. What are the metaphors gifted students have about the concept of distance education during the pandemic?

2. Under which conceptual categories are the specified metaphors in terms of common features?

Importance of the study

The COVID-19 (Yip and Chau, 2020), which is still increasing and effective today, is a highly contagious disease and there is no vaccine or definitive treatment against this virus that causes the disease (Guragai, 2020). This situation has brought important difficulties and changes in daily life. One of the most important areas affected by the coronavirus, which has affected the world in a short time, is the education sector. In this direction, after the first cases seen in Turkey on March 11, 2020, education was suspended for a short time at preschool, primary school, secondary school, high school and higher education levels. In this context, countries have changed to distance education instead of the traditional face-to-face education (Al Lily et al., 2020). Socio-psychological variables such as students' perspectives and attitudes towards distance education are important for the effectiveness and efficiency of this transition process. In this context, in this study, the perspective of gifted students towards distance education was presented with a metaphor study. It is clear that the findings of the study, especially the metaphors that students use to conceptualise distance education, can give certain clues to educators about this process. In addition, in this study, the positive and negative aspects of distance education will be evaluated through the eyes of the students and in this sense, future research will be enlightened. With this study, it is aimed to examine the perceptions and perspectives of students who continue their education in an institution where all education and training activities are carried out with the procedures and principles of distance education through metaphor analysis and contribute to the field.

METHODS

This study, which examines the metaphorical images and perceptions of gifted students towards distance education, was designed as a qualitative phenomenology study. Phenomenology focuses on the phenomena that we are aware of but does not have a detailed and deep understanding (Yildirim and Simsek, 2016).

The reason why metaphor analysis is preferred in this study is the thought that meaningful data cannot be collected from primary school students with traditional data collection tools. In addition, with this method, the meanings that students attribute to distance education with their experiences and perspectives during the pandemic process were revealed. Beyond being linguistic tools (Moser, 2000), metaphors also offer important opportunities to understand human unknowns and new situations, which are one of the important assumptions of the constructivist approach (Parsons et al., 2004; Saban, 2006).

Study group

In this study, Turkey's Science and Arts Centre reached 63 primary

school students in the field of education. The 63 gifted primary school students participating in the study were 10 years old. 41 of them were boys and 22 of them were girls. The classes in which the participants were educated were the 3rd grade, 4th grade and 5th grades of primary education. The ages of the students are between the ages of 9-10-11.

Data collection tool, data collection and analysis of data

Distance education students, during the COVID-19 pandemic considering their experiences, were asked to fill in the sentence, 'Distance education is like... because...' in the form using a metaphor. The collected data were analysed by the researcher through content analysis. The metaphors that emerged in this context were coded and divided into categories. Quantitative descriptive analyses using frequencies and percentages were used in reporting the data. Content analysis is first conceptualizing the collected data and then organizing them in a logical way according to the emerging concepts and determining the theme that explains the data at the end of these processes (Buyukozturk, 2018). In this study, content analysis method was used in the analysis of the data. In this context, the data collected first are conceptualized, then, the obtained concepts were themed and interpreted. Also F (female) and M (male) letters are used while coding. The reason for this coding is to observe the gender difference. Thus, while reading the comments, metaphors can be evaluated according to the gender factor.

Research reliability/validity and reliability studies

One of the ways to increase the credibility of research in qualitative studies is the researcher's experience in the relevant field (Bashir et al., 2008). In this context, the researcher completed her doctorate in the field of distance education, carried out theoretical and practical studies and took part in many national and international projects. In order to ensure the content validity of the questions used in the interview form, a faculty member who has experience in qualitative education researches opinion had been received. In order to ensure internal validity, an adequate participation strategy was adopted (Merriam and Tisdell, 2015), and data were collected from 63 students in total, and it was aimed to achieve satisfaction in the answers given in this way. In addition, in order to support the emerging themes and increase the credibility of the research findings, the sample responses of the participants were used as direct citations under the relevant categories and themes. The first author independently coded the emerging themes, and then the same procedure was repeated by the faculty member who gave an opinion for content validity.

Strengths and limitations of the study

This study is one of the preliminary studies that examine the images and perceptions of gifted primary school students towards distance education, which do not exist in national and international literature. In this context, the study will form a basis for future studies. In addition to its expressed strengths, this study has some limitations as well. The biggest limitation in this context is that the distance education experiences of students are limited to distance education content provided by the Education Information Network (EBA) and simultaneous and asynchronous activities.

FINDINGS

In the study, firstly, metaphors were coded and divided

Table 1. Frequency and percentage values of positive metaphors according to categories and themes.

Categories theme	Positive metaphor	F	%
Entertainment motivation	Talking robots	5	6.6
Entertainment motivation	Talking screen	3	4.0
Entertainment motivation	Talking head	2	2.6
Assistant facilitator	Home asistant	4	5.3
Assistant facilitator	Google assistant teaching state	1	1.3
Education sense of community	School	7	9.3
Education sense of community	Class	5	6.6
Education sense of community	Cluster	3	4.0
Education sense of community	Group	3	4.0
Education sense of community	Team	2	2.6
Technology virtual environment	Virtual classroom	6	8.0
Technology virtual environment	Virtual reality	1	1.3
Technology virtual environment	Virtual lab	1	1.3
Technology accessibility	Conference	5	6.6
Technology accessibility	Video call	5	6.6
Technology accessibility	Commander	3	4.0
Technology accessibility	E-book	1	1.3
Follow-up visuality	Sunglasses	2	2.6
Follow-up visuality	Camera	2	2.6
Follow-up visuality	Lifeless picture-image	1	1.3
Freedom independence	Colour pencil	2	2.6
Freedom independence	Break time	1	1.3
Comfort easiness	Armchair/chair	3	4.0
Flexibility planning	My room	1	1.3
Flexibility planning	Alarm clock	1	1.3
Speed time saving	Superman	1	1.3
Flexibility backing time	Time machine	1	1.3
Wideness unlimited	Ocean	2	2.6
Trip discover	Virtual museum	1	1.3
Total		75	100

into categories, and these categories' themes can be associated with the distance education literature. In this section, where positive and negative metaphors are discussed separately, the resulting categories and findings are presented. Direct quotations are included in order for the reader to add their own comments and to increase the reliability of the study. After presenting the emerging themes, the context of the relevant literature is discussed.

Positive metaphors

Positive metaphors consist of a total of 13 categories and a total of 13 themes under these categories (Table 1). A total of 30 positive metaphors were determined, as shown in Table 1.

According to Table 1, positive metaphors are separated within the answers given by the students to the relevant

question. The positive metaphors are examined in detail according to their categories in the following sections. In terms of frequency and percentage, it is seen that the most slice is on the education category and "the school metaphor", which is under the theme of sense of community.

Entertainment categories

The theme that emerges under this category and is the most dominant among all themes is the 'motivation' theme. With the closure of schools as a result of the pandemic, it can be said that the applications within the scope of emergency distance education are beneficial in this sense. For example, one of the participants used the metaphor: '*Distance education is like a talking robot because it did not deprive us of our lessons during the pandemic process*' (F7). In this context, the role of

distance education applications is attributed to the continuity of education to the metaphor of talking robot.

Assistant categories

The theme that emerges under this category and is the most dominant among all themes is the 'facilitator' theme. The metaphors that students use in the assistant category in distance education are in a facilitating direction. For example, one of the participants used the metaphor: '*Distance education is like a home assistant because allows me to watch the lessons without getting tired*' (M2). Therefore, the facilitating role of distance education applications is attributed to the metaphor of home assistant.

Education categories

The theme that emerges under this category and is the most dominant among all themes is the 'sense of community' theme. In the education category, students defined distance education as participating in a community and feeling a sense of community. For example, one of the participants used the metaphor: '*Distance education is like a team because in every lesson I feel like the footballer of that lesson*' (M51). Considering this metaphor, the student likened himself to a football player in distance education environments and thus experienced the feeling of belonging to a community.

Technology categories

The themes that emerge under this category and are the most dominant among all themes are the 'virtual environment' and 'accessibility' themes. When metaphors were examined primarily as a virtual environment theme, one of the participants used the metaphor: '*Distance education is like virtual lab because we experiment at home and show it to our teacher for science lesson*' (F26). One of the participants used the metaphor: '*Distance education is like commander because the moment you open it, you reach it*' (M30). With these metaphors, students drew attention to the virtual environment and accessibility features offered by distance education.

Follow-up categories

The theme that emerges under this category and is the most dominant among all themes is the 'visuality' themes. The metaphors that students use in the follow-up category in distance education are in a visuality direction. For example, one of the participants used the metaphor:

'Distance education is like sunglasses because allows us to see people far away at the computer' (F46). With this metaphor, students drew attention to the visuality features offered by distance education.

Freedom categories

The theme that emerges under this category and is the most dominant among all themes is the 'independence' themes. The metaphors that students use in the freedom category in distance education are in an independence direction. For example, one of the participants used the metaphor: '*Distance education is like colour pencil because I have the opportunity to study as I want in distance education*' (M19). With this metaphor, the students underlined that they are free in distance education and that they are in control of the course with distance learning.

Comfort categories

The theme that emerges under this category and is the most dominant among all themes is the 'easiness' theme. For example, one of the participants used the metaphor: '*Distance education is like armchair because I can reach everything with just one click from where I sit*' (F11). The student drew attention to the comfort of distance education with the metaphor used in this expression.

Flexibility categories

The themes that emerge under this category and are the most dominant among all themes are the 'planning' and 'backing time' themes. When metaphors were examined primarily as a planning theme, one of the participants used the metaphor: '*Distance education is like my room because I can plan as I want*' (F40). One of the participants used the metaphor: '*Distance education is like time machine because I can bring back time with the records I take*' (M10). With these metaphors, the student likened distance education to a time machine that takes one back in time.

Speed categories

The theme that emerges under this category and is the most dominant among all themes is the 'time-saving' theme. For example, one of the participants used the metaphor: '*Distance education is like Superman because when the teacher asks a question, I quickly scan the question from the search engine, I save time*' (M06). With this view, the student emphasised that they can access information with a single click through the wide Internet network and this situation saves time in the lesson.

Table 2. Frequency and percentage values of negative metaphors according to categories and themes.

Category	Theme	Negative metaphor	F	%
Captivity	Isolation	Bird in a cage	2	4.1
Captivity	Isolation	Prison	2	4.1
Captivity	Isolation	Lantern	3	6.2
Captivity	Isolation	Crime	2	4.1
Captivity	Isolation	Court	1	2.0
Distance	Communication	Astronaut	1	2.0
Distance	Communication	Cleaning robot	1	2.0
Distance	Communication	Voice assistant	2	4.1
Fault	Disconnection	Punk	1	2.0
Fault	Disconnection	Broken radio	1	2.0
Fault	Disconnection	Broken television	1	2.0
Fault	Disconnection	Heart	1	2.0
Loneliness	Friendship	Sunshade	2	4.1
Loneliness	Friendship	Curtain	1	2.0
Loneliness	Friendship	Empty room	2	4.1
Loneliness	Friendship	Black cat	1	2.0
Tasteless	Sapless	Eating less salt	1	2.0
Tasteless	Sapless	Spinach	2	4.1
Tasteless	Sapless	Unsweetened tea	1	2.0
Confusion	Fear	Trap	1	2.0
Confusion	Fear	Accident	1	2.0
Confusion	Fear	Ghost	1	2.0
Confusion	Fear	Quarantine people	2	4.1
Obligation	Necessity	Test subject	2	4.1
Obligation	Necessity	Elevator	2	4.1
Obligation	Necessity	Drug	2	4.1
Obligation	Necessity	Homework	2	4.1
Far away	Can't touch	Whistle	1	2.0
Far away	Can't touch	Drum	1	2.0
Far away	Can't touch	Pipe	1	2.0
Difficulty	Impossibility	Mask	1	2.0
Difficulty	Impossibility	Snowy weather	1	2.0
Difficulty	Impossibility	Petrol free car	1	2.0
Total			48	100

Wideness categories

The theme that emerges under this category and is the most dominant among all themes is the 'unlimited' theme. For example, one of the participants used the metaphor: '*Distance education is like ocean because I'm lost in the sea of knowledge*' (F54). With this metaphor, attention was drawn to the wideness and accessible information environment offered by distance education.

Trip categories

The theme that emerges under this category and is the most dominant among all themes is the 'discover' theme.

For example, one of the participants used the metaphor: '*Distance education is like virtual museum because by logging in to the system, you can trip and exit when the time comes*' (M62).

Negative metaphors

Negative metaphors consist of a total of nine categories and a total of nine themes under these categories (Table 2). A total of 33 positive metaphors were determined, as shown in Table 2.

According to Table 2, negative metaphors are separated within the answers given by the students to the relevant question. The negative metaphors are examined

in detail according to their categories in the following sections. In terms of frequency and percentage, it is seen that the most slice is on the captivity category and “lantern”, which is under the theme of isolation.

Captivity categories

The theme that emerges under this category and is the most dominant among all themes is the ‘isolation’ theme. For example, one of the participants used the metaphor: *‘Distance education is like bird in cage we live in an isolated environment because of the corona’* (F16). With this metaphor, the student likened distance education to a birdcage and drew attention to the captivity of people here.

Distance communication categories

The theme that emerges under this category and is the most dominant among all themes is the ‘command’ theme. For example, one of the participants used the metaphor: *‘Distance education is like cleaning robot because commands us with remote keys’* (M31). With this view, the student likened people to the metaphor of a cleaning robot set up for distance education.

Fault categories

The theme that emerges under this category and is the most dominant among all themes is the ‘disconnection’ theme. For example, one of the participants used the metaphor: *‘Distance education is like my heart because it breaks off very quickly’* (F01). With this metaphor, distant education is likened to the human heart and it is expressed that there are problems that it quickly breaks.

Loneliness categories

The theme that emerges under this category and is the most dominant among all themes is the ‘friendship longing’ theme. For example, one of the participants used the metaphor: *‘Distance education is like black cat because it prevents me from meeting face to face with my friends’* (F13).

Tasteless categories

The theme that emerges under this category and is the most dominant among all themes is the ‘sapless’ theme. For example, one of the participants used the metaphor: *‘Distance education is like unsweetened tea because very tasteless and boring’* (M29). With this metaphor, the

student compared distance education to tea without sugar and expressed its tastelessness.

Confusion categories

The theme that emerges under this category and is the most dominant among all themes is the ‘fear’ theme. For example, one of the participants used the metaphor: *‘Distance education is like ghost because I’m afraid that I won’t be able to attend the lesson if my Internet is disconnected at any moment’* (F9).

Obligation categories

The theme that emerges under this category and is the most dominant among all themes is the ‘necessity’ theme. For example, one of the participants used the metaphor: *‘Distance education is like drug because it heals me even if I don’t like to take’* (M34).

Hear from far away categories

The theme that emerges under this category and is the most dominant among all themes is the ‘can’t touch’ theme. For example, one of the participants used the metaphor: *‘Distance education is like drum I hear its voice from away but I can’t see or touch’* (F45).

Difficult categories

The theme that emerges under this category and is the most dominant among all themes is the ‘impossibility’ theme. For example, one of the participants used the metaphor: *‘Distance education is like snowy air because you miss the sunny weather and stay at home’* (M43).

DISCUSSION

In this study, which is an example of a metaphoric study, gifted students were studied and in this context, students were asked to define distance education conceptually. The participants of the study, for whom the ethical rules were taken into account, consisted of 63 gifted students in total studying at primary and secondary school levels. In the collection of data, each participant was asked to fill in the form containing an open-ended item for the concept of distance education, e.g., distance education is like / similar, because

For the method part in the research, metaphors were coded and divided into categories, and these categories and themes can be associated with the distance education literature. In this section, where positive and

negative metaphors are discussed separately, the resulting categories and findings are presented. Direct quotations are included in order for the reader to add their own comments and to increase the reliability of the study. After presenting the emerging themes, the context of the relevant literature is discussed. When we examine the results of the research, the following are noted.

When the categories of positive metaphors were examined, it was noted that they were listed as *'Entertainment, Assistant, Education, Technology, Follow-up, Freedom, Comfort, Flexibility, Speed, Wideness and Trip'*. When the themes associated with the categories were examined, *'Motivation, Facilitator, Sense of community, Virtual environment, Accessibility, Visuality, Independence, Easiness, Planning, Time-saving, Backing time, Unlimited and Discover'* rankings drew attention. When the positive metaphors in which students define the concept of distance education are examined, it has been observed that there are remarkable details among them.

A few examples of the quotations are as follows: for entertainment categories: *'Distance education is like a talking robot because it did not deprive us of our lessons during the pandemic process'* (F7). In this context, the role of distance education applications is attributed to the continuity of education to the metaphor of talking robot. For speed categories, *'Distance education is like Superman because when the teacher asks a question, I quickly scan the question from the search engine, I save time'* (M06). With this view, the student emphasised that they can access information with a single click through the wide Internet network and this situation saves time in the lesson. For comfort categories, *'Distance education is like armchair because I can reach everything with just one click from where I sit'* (F11). The student drew attention to the comfort of distance education with the metaphor used in this expression.

When similar studies in the literature are examined, Bozkurt (2020) revealed a metaphoric study that tested the perceptions of primary school students towards distance education during the coronavirus pandemic. When the positive metaphors of students for distance education are examined, the themes *'facilitator, lifelong learning, teaching presence, structured learning, sense of community, autonomy, independence of time and space, intrinsic motivation and accessibility'* emerged. When examining the metaphoric perception examples of students towards distance education, *'Distance education is like a remote control because the moment you open it, you can reach it'; 'I think distance education is like the fastest information network because we can easily access the information we want, whenever we want.'* Interaction is one of the most important factors in the success of distance education. The development of ICT in recent years offers opportunities that increase student–student interaction and student–teacher interaction. Interaction between students and teachers is facilitated

by various applications such as chat, video, discussion, application sharing and group work (Ferguson and DeFelice, 2010; Tremblay, 2006). In this research, students tried to explain the beneficial aspects of distance education with these positive metaphors. With a similar study, Ozdogan and Berkant (2020) examined stakeholder views on distance education. As a result, the advantages such as being independent from time and place, being able to watch the lessons repeatedly, meeting the educational needs during the pandemic period and being protected against the transmission of the disease have been revealed.

When the categories of negative metaphors were examined, it was noted that they were listed as *'Captivity, Distance communication, Fault, Loneliness, Tasteless, Confusion, Obligation, Hear from far away and Difficulty'*. When the themes associated with the categories are examined, *'Command, Disconnection, Friendship longing, Sapless, Fear, Necessity, Can't touch, Impossibility'* rankings drew attention. When the negative metaphors in which students define the concept of distance education are examined, it has been observed that there are remarkable details among them. A few examples of the quotation areas follow: for captivity categories, *'Distance education is like bird in cage we live in an isolated environment because of the corona'* (F16). With this metaphor, the student likened distance education to a birdcage and drew attention to the captivity of people here. For obligation categories, *'Distance education is like drug because it heals me even if I don't like to take'* (M34). For tasteless categories, *'Distance education is like unsweetened tea because very tasteless and boring'* (M29). With this metaphor, the student compared distance education to tea without sugar and expressed its tastelessness.

When similar studies in the literature are examined, Civril et al. (2018) revealed the metaphoric perceptions of distance education students towards distance education in their studies and as a result, students stated their negative opinions in the expectation category, *'Distance education is like a radio because it does not never play the track you want'*. With this negative metaphor, the student stated that distance education could never give the desired outcome like radio.

When the study is evaluated in general and positive-negative metaphors are examined, the number of positive metaphors about distance education is too much than negative metaphors. In this context, it has been revealed that although distance education has many disadvantages arising from communication barriers, it is accepted by students especially during the pandemic process.

The recommendations are as follows: in order to examine students' perceptions of distance education in more detail through metaphors, further studies can be conducted using different demographic variables of students. In addition to the point of implementation, it is recommended that distance education institutions

primarily focus on the issues involving negative metaphors and make improvements by developing new policies and practices on these issues.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

- Al Lily AE, Ismail AF, Abunasser FM, Alqahtani RHA (2020). Distance education as a response to pandemics: coronavirus and Arab culture. *Technology in Society* 63(1):101317.
- Arthur-Nyarko E, Agyei DD, Armah JK (2020). Digitizing distance learning materials: measuring students' readiness and intended challenges. *Education and Information Technologies* 25(4):2987-3002.
- Bashir M, Afzal MT, Azeem M (2008). Reliability and validity of qualitative and operational research paradigm. *Pakistan Journal of Statistics and Operation Research* 4(1):35-45.
- Bozkurt A (2020). Images and perceptions of primary school students towards distance education during coronavirus (COVID-19) pandemic: a metaphor analysis. *Usak University Journal of Educational Research* 6(2):1-23.
- Buluk B, Esitti B (2020). Koronavirus (COVID-19) surecindeuzaktanegitiminturizmlisansogrencileritarafindandegerlendirilmesi. *Journal of Awareness* 5(3):285-298.
- Buyukozturk S (2018). *Bilimsel Arastırma Yontemleri*. Pegem Akademi Publishing. Ankara.
- Chatterjee I, Chakraborty P (2020). Use of information and communication technology by medical educators amid COVID-19 pandemic and beyond. *Journal of Educational Technology Systems* 49(3):310-324.
- Civril H, Arugaslan E, Ozkara OB (2018). Uzaktan eğitim öğrencilerinin uzaktan eğitime yönelik algıları: bir metafor analizi. *Eğitim Teknolojisi Kuram ve Uygulama* 8(1):39-59.
- Ferguson JM, DeFelice AE (2010). Length of online course and student satisfaction, perceived learning, and academic performance. *International Review of Research in Open and Distance Learning* 11(2):73-84.
- Fidalgo P, Thormann J, Kulyk O, Lencastre JA (2020). Students' perceptions on distance education: a multinational study. *International Journal of Educational Technology in Higher Education* 17(18). doi:10.1186/s41239-020-00194-2
- Gencoglu C, Ciftci M (2020). COVID-19 salgınında eğitim: Türkiye üzerinden bir analiz. *Journal of the School of History* 46(46):1648-1673.
- Guragai M (2020). Nepalese medical students in the COVID-19 pandemic: ways forward. *Journal of the Nepal Medical Association* 58(225):352-354.
- Merriam SB, Tisdell EJ (2015). *Qualitative research: a guide to design and implementation*. Hoboken, NJ: John Wiley & Sons.
- Moser KS (2000). Metaphor analysis in psychology—method, theory, and fields of application. *Forum Qualitative Sozialforschung* 1(2). Retrieved from https://www.researchgate.net/publication/245032041_Taking_actors_perspectives_seriously_Whose_knowledge_and_what_is_managed_Knowledge_management_in_a_transdisciplinary_perspective
- Ozdogan A, Berkant H (2020). COVID-19 pandemisindeki uzaktan eğitim sürecinin paydaşlarının incelenmesi. *Journal of National Education, The epidemic process in Turkey and the World Education* 49(1):13-43.
- Parsons SC, Brown PU, Worley V (2004). A metaphor analysis of preservice teachers' reflective writings about diversity. *Curriculum and Teaching Dialogue* 6(1):49-58.
- Saban A (2006). Functions of metaphor in teaching and teacher education: a review essay. *Teaching Education* 17(4):299-315.
- Stojanovic M, El-Khatib Z, Rovic Brandic A, Maalouf W (2020). Lions quest skills for adolescence implementation during COVID-19 challenges in Croatia. *Psychological Trauma: Theory, Research, Practice, and Policy* 12(1):274-275.
- Tremblay E (2010). "Educating the Mobile Generation – using personal cell phones as audience response systems in post secondary science teaching. *Journal of Computers in Mathematics and Science Teaching* 29(2):217-227.
- UNESCO (2020a). COVID-19 educational disruption and response. Retrieved from <https://en.unesco.org/covid19/educationresponse>.
- Usun S (2006). *Uzaktan eğitim*. Ankara, Turkey: Nobel Publishing.
- Valentine D (2002). Distance learning: promises, problems, and possibilities. *Online Journal of Distance Learning Administration* 5(3). Retrieved from <https://www.learnlib.org/p/94887/>, March 02, 2021.
- Watts L (2016). Synchronous and asynchronous communication in distance learning: a review of the literature. *Quarterly Review of Distance Education* 17(1): 23-32.
- Yildirim A, Simsek H (2016). *Sosyal bilimlerden iletişim araştırmaları*. Ankara, Turkey: Seckin Publishing.
- Yip PSF, Chau PH (2020). Physical distancing and emotional closeness amidst COVID-19. *Crisis* 41(3):153-155.