Opinions of Faculty of Sport Sciences Faculty Members on Distance Education Process: Swot Analysis Technique

Tarik SİVRİKAYA[1], Yaşar YAŞAR[2], Tayfun KARA[3], İhsan YAĞCI[4], Cüneyt SEYDİOĞLU[1]

[1]Avrasya University, Faculty of Sport Science, Trabzon/Türkiye.

[2]Şırnak University, Şırnak Vocational School, Şırnak/Türkiye.

[3]Kahramanmaraş Sütçü İmam University, Faculty of Sport Science, Kahramanmaraş/Türkiye.

[4]Afyon High School, Afyonkarahisar/Türkiye.

Corresponding Author:
Tarik SIVRİKAYA
tarik_sivrikaya@hotmail.com

Abstract

This research was conducted to examine the opinions of the faculty members working in the Faculty of Sport Sciences about the distance education process in terms of SWOT strengths and weaknesses, opportunities, threats analysis. Case study design was used in the research. Data were collected through semi-structured interviews from 42 faculty members working at the Sports Sciences Faculties in Istanbul. After the data collection, strengths, weaknesses, threats and opportunities were identified by using SWOT analysis. In the study, it was concluded that the strengths experienced by the faculty members in the distance education process were mostly the elimination of additional expenditure items such as transport, accommodation, nutrition, which would be made by families, the weaknesses were mostly the inability to teach practical courses, the opportunities were the use of innovative technologies and the faculty member had to improve himself/herself, and the threats were the inability to carry out measurement and evaluation (exams) properly. In addition, in the results of the research, it was seen that in the strengths, benefiting from educational opportunities from different places; in the weaknesses, low participation in the lesson, lack of physical assistance; in the opportunities, the opportunity of teachers to develop new methods and materials; in the threats, low quality of education was found to be important.

Keywords: Education, Covid-19, Swot Analysis, Sport Sciences.

Spor Bilimleri Fakültesi Öğretim Üyelerinin Uzaktan Eğitim Sürecine İlişkin Görüşleri: Swot Analizi Tekniği

Öz

Bu çalışma, Spor Bilimleri Fakültesi öğretim üyelerinin uzaktan eğitim süreci hakkındaki görüşlerinin, güçlü (Strengths) ve zayıf (Weaknesses) yönler, fırsatlar (Opportunities), tehditler (Threats) analizi açısından incelenmesi amacıyla yapılmıştır. Çalışmada durum çalışması deseni kullanılmıştır. Araştırmada durum çalışması deseni benimsenmiştir. Veriler, İstanbul ilindeki Spor Bilimleri Fakültelerinde görev yapan 42 öğretim üyesinden yarı yapılandırılmış görüşmeler yoluyla toplanmıştır. Verilerin toplanmasının ardından, SWOT analizi kullanılarak güçlü ve zayıf yönler, tehditler ve fırsatlar belirlenmiştir. Araştırmanın bulgularında, öğretim üyelerinin uzaktan eğitim sürecinde yaşadıkları güçlü yönler temasında en fazla ailelerin yapacağı ulaşım, barınma, konaklama, beslenme gibi ek harcama kalemleri ortadan kalkmış olması, zayıf yönler temasında en fazla uygulama derslerinin işlenememesi, fırsatlar temasında, yenilikçi teknolojilerin kullanımı ve öğretim üyesinin kendini geliştirmek zorunda kalması, tehditler temasında, ölçme değerlendirmenin (sınavlar) sağlıklı yapılamaması sonuçlarına ulaşılmıştır. Ayrıca araştırmanın sonuçlarında, güçlü yönlerde, farklı yerlerden eğitim olanaklarından faydalanması; zayıf yönlerde, derse katılımın yeterli olamaması, fiziksel desteğin olmaması; fırsatlarda, öğretim üyelerinin yeni yöntem ve materyal geliştirme fırsatı; tehditlerde ise eğitim kalitesi düşüklüğü önemli olduğu görülmüştür.

Anahtar kelimeler: Eğitim, Covid-19, Swot Analizi, Spor Bilimleri.

Introduction

The COVID-19 pandemic, which emerged in Wuhan, China, became an epidemic in a very short time, first in other cities of China and then in all countries of the world. There are also opinions that this epidemic is among the most severe events that affected the whole world after the Second World War (Öztürk, 2021). With its spread all over the world, COVID-19 was accepted as a pandemic by the World Health Organisation (WHO) on 11 March 2020. The COVID-19 pandemic, which has greatly affected our lives, has shaken many countries around the world and caused change and transformation in many areas of Turkey. After the COVID-19 pandemic, factors such as transport, health, culture, culture, food, tourism, finance, and the economy were affected. Education is one of the most affected areas. The first measure taken worldwide in terms of education was to close schools and suspend education. Countries have implemented distance education programmes to continue their education. According to the statement made on 12 March 2020, primary, secondary and high schools were closed for 1 week as of 16 March. The Council of Higher Education (YÖK) announced that higher education courses will be suspended for three weeks starting March 16, 2020, in order to slow the spread of the virus in Turkey and reduce educational losses. Due to the uncertainty of the development of the epidemic, YÖK announced on March 26, 2020 that there would be no face-to-face teaching in the spring semester of the 2019-2020 academic year (Kurnaz and Serçemeli, 2020). In universities, it was decided to switch to distance education as synchronous or asynchronous in the spring semester of the 2019–2020 academic year. With this decision, 7.9 million students in 207 universities suspended face-to-face education. Each university has developed strategies for the continuation of education during the COVID-19 pandemic, and these methods have been examined and audited by YÖK (Council of Higher Education). Previous projects and the establishment of UZEM points in 128 universities shortened the adaptation period to distance education. Activities such as committee meetings and thesis defences were moved online, and universities that had problems with infrastructure and access were improved in cooperation with universities that had experience in this field (Özdoğan and Berkant, 2020).

Although we did not hear much about it before the pandemic, some of the higher education institutions abroad were providing global education opportunities by offering their courses online and free of charge open access. In our country, this system was mostly carried out within the scope of second university education at public and private universities. With the COVID-19 pandemic, the necessity of digital transformation in education emerged, and investments were made in education.

The origin of "distance education", which entered our lives under pandemic conditions and is among the popular words in this process, dates back three hundred years (Nasr, 2020). Although its

origins date back much earlier, the implementation of the first historically provable distance education studies started in 1728 with "Shorthand Lessons" through the Boston Newspaper (Koç, 2021).

Distance education, which is a system that eliminates the need for teachers and students to come to school, thus slowing the spread of the disease, reducing costs, accelerating the feedback period and enabling education and training activities at the global level by eliminating the concept of distance, also has handicaps such as technological inadequacies, economic problems and insufficient internet infrastructure. In such cases, the infrastructure of the system should be improved by performing periodic checks to avoid possible technical problems or minimise problems (Kazak and Karaahmetoğlu, 2023). Sports branch courses, which require physical activity in terms of the environment in which they are taught due to their structure, teacher and student, the need for course-specific clothing and the material to be used in the course, face great limitations in distance education applications in terms of both teacher and course teaching. Due to these features, many limitations will inevitably arise in the functioning of physical education and sports courses (Düzgün and Sulak, 2020).

These new methods and practices have affected the students receiving education on one side and the academicians providing education on the other side, and they have tried to keep up with the situation. Both sides, who encountered these new tools and methods for the first time, faced various difficulties. Distance education is divided into three groups according to the way the communication between the teacher and the student is established. These are synchronous, asynchronous (asynchronous) and blended education. To start distance education applications, a model suitable for the target should be determined, and this model should be supported by technological infrastructure (Romiszowski, 2004). These models can be used separately or together in distance education. It is important to choose the appropriate model for this purpose (Deniz, 2021).

Many students, teachers, parents, academicians, etc., of educational stakeholders met with distance education in this process. This situation has led to the emergence of many problems affecting all stakeholders as well as the previous disadvantages and limitations of distance education (Demir and Özdaş, 2020).

The aim of this study is to analyse the opinions of faculty members about distance education by using the SWOT analysis technique. In line with this purpose, this study aimed to determine the strengths and opportunities provided by the distance education system to students and faculty members, as well as its weaknesses and threats. Therefore, the following research questions (strengths, weaknesses, opportunities and risks) were sought in this study:

1. What are the advantages of distance learning according to the faculty of physical education?

2. What are the disadvantages of distance learning according to the faculty of physical education?

3. What are the opportunities of distance learning according to the faculty of sports science?

4. What are the dangers of distance learning according to the faculty of physical education?

Materials and Methods

Research Model

This research used a case study design, which is a qualitative research design. According to Yıldırım and Şimşek (2013), a case study is one of the important techniques used in qualitative research. As Stake (1995) and Yin (2009; 2012) state, a case study is a research design in which researchers analyse a situation, usually a programme, event, action, process or one or more individuals in depth. Likewise, in case studies, one or more situations, groups or events are analysed in depth within the framework of real life, systematically over a certain period of time, where the boundaries are not absolute and where there is more than one data situation explaining the event under study (Karagöz, 2019). Merriam (2013) defined a case study as an in-depth examination and description of a specific situation. This study was conducted with ethical approval and informed consent in accordance with the rules of the Declaration of Helsinki.

Universe and Sample

In this study, it was determined according to purposive sampling, a nonrandom sampling method. In purposive sampling, the researcher uses his/her own judgments or expressions about who will be selected by the researcher and uses the sampling methods that are most suitable for the purpose of the research (Balcı, 2005). In this method, situations that are rich in information are selected by the researcher, allowing in-depth research (Büyüköztürk et al., 2014). The research group consists of 42 faculty members working at Marmara University, Istanbul Cerrahpaşa University, Istanbul Topkapı University, Istanbul Fenerbahçe University, Istanbul Gelisim University, Istanbul Rumeli University and Istanbul Aydın University since they have a Sport Sciences. A semistructured interview technique was used to collect the data used in the study.

Data collection tools

In this study, data were collected using the "semistructured interview" form recommended by Bogdan and Biklen (2003), which allows participants to freely express their thoughts on a topic. In the semistructured interview form, questions related to SWOT analysis were asked depending on the purpose of the study.

The following questions were asked to the faculty members during the interviews:

1. What are the advantages of distance learning? What are the positive aspects of distance learning? What advantages does distance learning provide for you?

2. What are the disadvantages of distance learning? What are the negative effects of distance learning? What difficulties have you encountered in distance learning?

3. What opportunities does distance learning provide?

4. What are the dangers of distance learning?

Data collection analysis

Within the scope of this study, semistructured interviews were conducted with 42 people. In addition, each participant who voluntarily participated in the study was included in the study after providing consent. Each participant was given detailed information about the purpose of the study and how it would be conducted. The interviews with the participants lasted between 15-30 minutes and were conducted face-to-face between November and December 2023. Qualitative content analysis was used to analyse the data collected after the interviews. The aim of qualitative content analysis is to identify concepts and relationships that can describe the data obtained. Content analysis integrates similar data into a framework of specific concepts and themes, organizes and interprets them in a way that readers can understand (Yıldırım and Şimşek, 2006), and systematically, objectively, and digitally analyzes the characteristics of a message (Nuendorf, 2002). The following steps were followed in the content analysis. In the first stage, all interviews were transcribed. Codes were created as a result of reading the transcribed dataset and the literature. In the third stage, themes were determined by combining the codes with similar codes. The codes combined under themes were revised and organised. In the last stage, the research findings were revealed as codes and themes.

Ethics of Research

In this section, information about the research model, study group, data collection tools, data analysis and research ethics will be presented. Ethics committee approval for this study was obtained from İstanbul Nişantaşı University (Date: 02.05.2024, Decision No: 2024/05, Protocol No: 20240502-1). Written informed consent was obtained from participants who participated in this study.

Results

In this part of the research, the answers given to the questions in the interviews conducted with 42 people were analysed by the SWOT analysis method.

In the interviews with the faculty members, the participants were first asked questions about their demographic and professional characteristics. According to the answers obtained, 29 of the 42 faculty members are male, and 13 are female. According to their academic titles, 9 of them were professors, 14 were associate professors, and 19 were assistant professors. All 42 faculty members are actively working in universities.

Table 1

Faculty Members' Views on the Strengths of the Distance Education Process

Answers regarding the strengths of the distance education process	Frequency (n)	Percentage (%)
Additional expenditure items such as transport, accommodation, accommodation, accommodation, nutrition to be made by families are eliminated	11	26,4
Students benefit from educational opportunities from different locations around the world	8	19,1
Solving the classroom problem	7	16.6
Time flexibility	6	14.2
With the registration system in online trainings, a permanent and correct learning is provided by repeating the subjects that the student lacks.	5	11,9
Reduced educational costs for the university	3	7,1
There is nothing positive about it	2	4,7

Table 1 shows the statements of the faculty members regarding the strengths of distance education. In line with the analyses, a total of 7 categories of strengths were obtained. Among these categories, the point to which the faculty members drew the most attention was that additional expenditure items such as transport, accommodation, accommodation, and nutrition to be made by families were eliminated (f=11). In addition, faculty members also drew attention to the fact that students benefit from educational opportunities from different places around the world (f=8) and that it solves the classroom problem in schools.

Table 2

Faculty Members' Views on the Weaknesses of the Distance Education Process

Answers regarding the weaknesses of the distance education process	Frequency (n)	Percentage (%)
Failure to teach practical courses	14	33,5
Low attendance to the course	8	19,1
Technical inadequacies, failures	5	11,9
Having more than one student in the same house	4	9.5
Lack of interaction	3	7,1
Social isolation	3	7,1
The courses are limited to theory only	3	7,1
Some of the students do not have access to the necessary facilities *(e.g. computer)*	2	4,7

Table 2 shows the statements of the faculty members regarding the weaknesses of distance education. In line with the analyses, a total of 8 categories of weaknesses were obtained. Among the

answers, the point to which the faculty members drew the most attention was the inability to teach practice courses (f=14). In addition, faculty members also drew attention to low attendance (f=8).

Table 3

Faculty Members' Views on the Opportunities of the Distance Education Process

Answers related to the opportunities of the distance education process	Frequency (n)	Percentage (%)
Use of Innovative Technologies, Faculty members have to improve themselves	21	50
Opportunity for teachers to develop new methods and materials	13	30.9
Access to a wider audience, increase of students	8	19,1

Table 3 shows the statements of the faculty members regarding the opportunities for distance education. In line with the analyses, a total of 3 categories of opportunities were obtained. Among the answers, the point to which the faculty members draw the most attention is the use of innovative technologies and the faculty member having to improve himself/herself (f=21).

Table 4

Faculty Members' Views on the Threats Posed by the Distance Education Process

Answers regarding the threats posed by the distance education process	Frequency (n)	Percentage (%)
Measurement and evaluation (exams)	12	28.7
Low quality of education	9	21.4
Being widespread in terms of cost and being able to replace classical education	7	16.6
Control	5	11,9
Decreased respect for the faculty member	5	11,9
Low motivation	4	9.5

Table 4 shows the statements of the faculty members regarding the threats posed by distance education. In line with the analyses, a total of 6 categories of threats were obtained. Among the answers, the point to which faculty members have drawn the most attention is measurement and evaluation (exams) (f=12). In addition, faculty members also drew attention to the decrease in the quality of education (f=8).

Discussion and Conclusion, Suggestions

In line with the data obtained in this study, which aims to create a SWOT analysis of the distance education process;

In the first place in the strengths of distance education, "adding expenditure items such as transport, accommodation, accommodation and nutrition to be made by families are eliminated". The study conducted by Özköse et al. (2013), it was stated that the strengths of the distance education process increase technology and interaction. Kırmızıgül (2020) reported that teachers cooperate and communicate with students about the strengths of distance education. In a study conducted by Uysal-

Bayrak and Tanık-Önal (2021), SWOT analysis of distance education based on the views of preservice preschool teachers was performed, and results such as cooperation and belonging to the community were found among the strengths. Students can follow their courses and other educational materials at any time and place with distance education. This is considered to be a great advantage for students participating in training programmes or competitions, especially for sports sciences students. In addition, distance education provides cost savings by eliminating additional costs such as transport and accommodation. This is especially important for students studying for a fee at a foundation university.

The first weakness of distance education is "inability to teach practice courses". In his study, Can (2020) concluded that students experienced connection problems such as freezing, disconnection, and slowness in internet connections in the first place among the problems experienced with distance education. Fidan, (2020) Education in the uncertainty of COVID-19: Teachers' opinions on compulsory distance education in primary school concluded that the first of the negativities experienced by the instructors in the distance education process was the lack of access/infrastructure, followed by the lack of motivation. A study conducted by Fırat et al. (2018) revealed that motivation is an important determinant in online education. In addition, in a study conducted by Paydar and Doğan (2019), instructors stated that technological facilities and infrastructure problems are important disadvantages of distance education. In a study on the attitudes of higher education students towards distance education, decreased motivation was identified as an important problem (Altuntaş Yılmaz, 2020). In their study, Çardak and Güler (2022) found that in the distance education process, academicians frequently stated that they or their students experienced connection problems such as freezing, disconnection, and slowness in the internet connection. In a study conducted by Vasiliki, Charissi, and Tympa (2021), the factors affecting the perceptions and attitudes of early childhood education and care students during distance education in Greece were investigated, and in the conclusion section of the study, it was stated that the participants had problems with internet connection and access to technological tools. Our research is similar to the findings of this study.

"Use of Innovative Technologies, Faculty member is forced to improve himself/herself" comes first among the opportunities that distance education will create. Demir and Özdaş (2020) attempted to determine how teachers carried out distance education activities during the COVID-19 pandemic, and in the results section of the research, it was stated that many methods and tools that are not used in face-to-face education can be used in the distance education process. The innovations made by the instructors to improve themselves in this process bring new equipment to the instructors, which is considered an opportunity to improve.

"Measurement and evaluation (exams)" comes first in the threats posed by distance education. According to a study conducted by Özdoğan and Berkant (2020), distance education is an important opportunity to provide protection against disease transmission. As Can (2012) stated in his study, to measure and evaluate student success in open and distance education in a healthy way, first, a measurement and evaluation unit should be established, infrastructure should be established, and security measures should be provided for students' access to exam applications. Hodges et al. (2020) state that, unlike traditional assessment and evaluation techniques in distance education processes, appropriate assessment and evaluation techniques should be used in the distance education process. In this context, to carry out measurement-assessment processes in a healthier way, it is suggested that formations such as distance education measurement-evaluation units should be established in universities.

Finally, based on the results obtained from this research, the following recommendations are proposed;

●   With respect to new projects, more scholarships for students, affordable dormitories, and part-time job opportunities in places such as libraries, canteens, laboratories, etc., within the campus and course programmes suitable for these working hours, energy savings in universities can reduce the overall costs by providing energy savings in face-to-face education, which is seen as one of the strengths of distance education. These savings can be reflected in the students, and the financial burden of the students can be alleviated.

●   The inability to teach practical courses in distance education is seen as an important weakness, but to overcome this problem, various simulation software can be used to improve students' practical knowledge. By using augmented reality and virtual reality technologies, students can have experiences similar to practical experiences in the real world. For sport sciences students, movement analysis and training simulations can be utilised.

●   The greatest opportunity of the distance education process is that faculty members must improve themselves and use innovative technologies. In this context, both development courses and seminars related to their fields and training that will enable them to adapt to new technologies can be provided for faculty members.

●   The greatest threat of distance education is the security of exams. For the security of the exam, artificial intelligence-based technologies such as camera monitoring of students during the exam, face recognition, and eye movement tracking can be used. In addition, exam security can be ensured by limiting exam time, making it difficult for students to apply to external sources and randomly selected questions from a large question bank.

Ethics Committee Approval Information

Ethics Committee: İstanbul Nişantaşı University Ethics Committee

Date of Ethics Approval: 02.05.2024

Approval Number: 20240502-1

Authors' Contribution Statement

Authors' contributions All authors contributed to the design of the study and collection of data. The second author contributed to the interpretation of the results by analyzing the data. All authors contributed to the drafting of the article and its critical revision. All authors approved the final version of the manuscript.

Conflict of Interest Statement

No conflict of interest is declared by the authors.

References

Altuntaş Yılmaz, N. (2020). Investigation of students' attitudes about the distance education situation applied during the COVID-19 pandemic process in higher education institutions: Physiotherapy and rehabilitation department example. *Journal of Necmettin Erbakan University Faculty of Health Sciences, 3*(1), 15-20.

Balcı, A. (2005*). Research methods, techniques and principles in social sciences.* Ankara: Pegem Akademi Publishing.

Bogdan, R. C. & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th edition). Boston: Allyn & Bacon.

Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2014). *Scientific research methods*. Ankara: Pegem Akademi.

Can, E. (2012). *Açık ve uzaktan eğitimde akreditasyon yeterlilik düzeyinin incelenmesi*. Yayımlanmış Doktora tezi, Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Ana Bilim Dalı, İstanbul.

Can, E. (2020). Coronavirus (Covid-19) pandemic and pedagogical reflections: Open and distance education practices in Turkey. *Journal of Open Education Applications and Research*, *6*(2), 11-53.

Çardak, U., & Güler, Ç. (2022). Academician practices, opinions and suggestions in the context of distance education and distance teacher training. *Van Yüzüncü Yıl University Journal of Faculty of Education*, *19*(Special Issue), 323-353. https://doi.org/10.33711/yyuefd.1068111

Demir, F., & Özdaş, F. (2020). Examining teacher views on distance education in the Covid-19 process. *Journal of National Education*, *49*(1), 273-292. https://doi.org/10.37669/milliegitim.775620

Deniz, S. (2021). *Öğretmenlere yönelik uzaktan eğitim tutum ölçeğinin geliştirilmesi ve öğretmen tutumlarının çeşitli değişkenlere göre incelenmesi*. Yayımlanmamış Doktora tezi, Gaziantep Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Ana Bilim Dalı, Gaziantep.

Düzgün, S., & Sulak, S. E. (2020). Prospective teachers' views on distance education practices during the covid-19 pandemic process. *Journal of National Education*, *49*(1), 619-633. https://doi.org/10.37669/milliegitim.787874

Fırat, M., Kılınç, H., & Yüzer, T. V. (2018). Level of intrinsic motivation of distance education students in e-learning environments. *Journal of Computer Assisted Learning, 34*(1), 6370. https://doi.org/10.1111/jcal.12214

Fidan, M. (2020). Education in Covid-19 uncertainty: Teachers' opinions on compulsory distance education in primary school. *Uşak University Journal of Educational Research, 6*(2), 24-43. https://doi.org/10.29065/usakead.736643

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The difference between emergency remote teaching and online learning*. *Educause Review, 27*(1), 1-9.

Karagöz, Y. (2019). *Spss-Amos-Meta applied quantitative–qualitative-mix scientific research methods and publication ethics.* Ankara: Nobel Publishing.

Kazak, E., & Karaahmetoğlu, H. H. (2023). Teacher views on the problems encountered in the distance education process. *Nevşehir Hacı Bektaş Veli University SBE Journal, 13*(1), 385-401. https://doi.org/10.30783/nevsosbilen.1213000

Kırmızıgül, H. G. (2020). The COVID-19 pandemic and the education process it brings with it. *Eurasian Journal of Social and Economic Research*, 7(5), 283-289.

Koç, E. S. (2021). What kind of distance education? Evaluation of the studies at the end of 1 year. *International Anatolia Academic Online Journal Social Sciences Journal, 7*(2), 13-26

Kurnaz, E., & Serçemeli, M. (2020). A research on academicians' perspectives on distance education and distance accounting education during the covid-19 pandemic period. *International Academy of Social Sciences Journal, 3*(5), 262-288.

Merriam, S. B. (2013). *Qualitative research: A guide to design and application* (3rd edition, Translation Editor: S. Turan). Ankara: Nobel Publication Distribution.

Nasr, N. (2020). Teachers as students: Adapting to online methods of instruction and assessment in the age of COVID-19. *Electronic Journal for Research in Science & Mathematics Education*, *24*(2), 168-171.

Neuendorf, K.A. (2002). *A guide to content analysis.* Thousand Oaks, *CA: Sage Publications*.

Özdoğan, A. Ç. & Berkant, H. G. (2020). Investigation of stakeholder views on distance education in the Covid-19 pandemic period. *Milli Egitim*, *49*(1), 13-43. doi:10.37669/milliegitim.788118

Özköse, H., Arı, S., & Çakır, Ö. (2013). Swot analysis for distance education process. *Middle Eastern & African Journal of Educational Research*, *5*(7), 41-55.

Öztürk, F. (2021). *Basic concepts of distance education and measurement and evaluation.* In B. Karabulut-Coşkun, & A. Yılmaz (Eds.) Measurement and evaluation in distance education (1st ed., pp. 1-25). Pegem Akademi.

Paydar, S., & Doğan, A. (2019). Prospective teachers' views on open and distance learning environments. *Education and Technology, 1*(2), 154-162.

Romiszowski, A. J. (2004). How's the e-learning baby? factors leading to success or failure of an educational technology innovation. *Educational Technology, 44*(1), 5-27.

Stake, R.E. (1995). *The art of case study research.* Thousand Oaks, CA:Sage.

Uysal-Bayrak, H. & Tanık-Önal, N. (2021). SWOT analysis of distance education based on preschool teacher candidates. *International Journal of Eurasian Education and Culture*, *6*(12), 189-234. Doi: 10.35826/ijoecc.349.

Vasiliki, K., Charissi, A., & Tympa, E. (2021). Greek University students' attitudes about distance education due to emergency circumstances. *European Journal of Open Education and Elearning Studies*, *6*(1), 14-25. http://dx.doi.org/10.46827/ejoe.v5i2.3529

Yin, R.K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA:Sage.

Yin, R.K. (2012). *Applications of case study research* (3rd ed.). Thousand Oaks, CA:Sage.

Yıldırım, A., & Şimşek, H. (2013). *Qualitative research methods in social sciences*. Ankara: Seçkin Publishing 9, 120-145.