



## THE PSYCHOLOGY OF TEACHERS AND STUDENTS DURING THE PANDEMIC PROCESS AND THE WAYS TO COPE WITH STRESS

Gizem Öneri Uzun<sup>1\*</sup>

<sup>1</sup> Department of Psychological Counselling and Guidance, Atatürk Faculty of Education, Near East University.

[gizem.oneri.uzun@neu.edu.tr](mailto:gizem.oneri.uzun@neu.edu.tr)

\*Correspondence: [gizem.oneri.uzun@neu.edu.tr](mailto:gizem.oneri.uzun@neu.edu.tr) ; Tel.:+90-392-22-36464

### Abstract

The aim of this study is to investigate the changes, uncertainties and differences experienced at every stage of education during the current pandemic process, teacher and student psychology and ways of coping with stress within the framework of the researched literature. Although it is an important situation for teachers and students to move forward by accepting the reality of the process we are in, every person in the world has their own responsibilities. In this study, document analysis which is a qualitative research method, was used. Education and training processes have a very important place in the current pandemic conditions. It is known that doing things that can be done from home during the pandemic is a good method to save lives. At this point, it was seen as inevitable that education should continue from home. All positive and negative situations experienced in this process are important on the psychology of teachers and students in education life. By using technology, getting out of the usual situation and giving education as a teacher and trainer from home and getting education as a student are among the most important factors that create stress. It is best to minimize this stress level and to use the most appropriate methods of coping with stress and to turn this situation into a positive one with the cooperation of teachers and students. In the process, the psychological effects of distance education system on teacher and student have shown differences and similarities according to each level. Active participation of students in their lessons, providing a good learning environment and motivating teachers to their students will reduce the level of negative stress in the process in a psychological sense. At this level of stress, personal responsibility is more important in the distance education system. This study examines the teacher and student psychology related to the pandemic process and the scientific literature on coping with stress, and it is considered important in terms of contributing to the field and guiding the researchers who will work in the field.

**Keywords:** Distance education, teacher, student, psychology, stress.

### Introduction

#### Distance Education

Distance education is a teaching method based on the active use of information technologies for the realization of lessons and facilitating learning, while teachers and students are at different time intervals or at different places (Uşun, 2006).

Distance education is described as a form of education in which the teaching and learning process is mostly separate from the learner and the teacher, and where documents, visuals and videos are frequently used, which are not face-to-face. In other words, distance education can be defined as a systematic form of education that provides individuality, flexibility and independence (Tuncer and Taşpınar, 2007). In this context, it is seen that the most important point in education is the fact that the source and the receiver take place in different environments and the active use of information technologies.

Lessons in distance education can usually be conducted synchronously or asynchronously. Simultaneous lessons are defined as synchronous, while simplex lessons are defined as asynchronous. The synchronous lessons are made possible by the virtual classroom environment, where teachers and students can communicate live at the same time, while simultaneously asking questions, discussing, repetitions about incomprehensible subjects and having the opportunity to discuss with each other (Serçemeli and Kurnaz, 2020).

In lessons conducted asynchronously, students can access and easily follow the course materials, visuals and course videos they want, whenever they want, through the registered system (Serçemeli and Kurnaz, 2020).

Moore and Kearsley (2012) defined the learning and teaching process in which the teacher and the learner are in different places and designed in a planned way by a private institution by communicating with technology as distance education (Moore and Kearsley, 2012).

İşman (2011) defines the distance education process as the activities carried out by using communication technologies in educational activities where students and teachers are in different places (İşman, 2011).

The distance education process, which appears as a major digital change, is defined as the process of combining information processing, interpersonal relations, communication and technology in order to adapt to these changes and to become more positive (Vial, 2019).

## Method

In this study, document analysis which is a qualitative research method, was used. Document analysis is a qualitative research method used to rigorously and systematically analyze the content of written documents (Wach, 2013). Document analysis is a systematic method used to examine and evaluate all documents, both printed and electronic materials. Like other methods used in qualitative research, document analysis requires the examination and interpretation of data in order to make sense of it, to form an understanding of the relevant topic, and to develop empirical knowledge (Corbin & Strauss, 2008).

## Findings

### Studies on Distance Education

Many studies have been carried out regarding distance education and the pandemic process. In a study, it was concluded that in the distance education process, most of the students could not attend live classes because they did not have devices such as computers and tablets, and some of them did not have internet access. Therefore, it was stated by the teachers that students had problems with absenteeism. The teachers participating in the research also stated that the parents acted indifferently during the pandemic process, did not follow the students while they were at the computer, and therefore the students were left uncontrolled (Bayburtlu, 2020).

In another study, more than half of the participants stated that they could not participate actively in distance education courses due to the high number of siblings and this was not possible due to the inadequacy of technological tools. It is indisputable that the socio-economic situation has an important place in the distance education process applied in accordance with this information. It can be stated that the inequality of opportunity arising

from settlements has arisen. Again, in the same study, due to problems with technological tools, the teacher said that they are waiting for feedback that their students understand or do not understand when presenting and after presenting courses, but the distance education system cannot meet the expectations mentioned (Derkuş, 2020).

Another 2020 study found that 41% of distance education teacher candidates considered themselves professionally “adequate”, 39% of teacher candidates “needed development” and 21% of teacher candidates felt “inadequate”. It was concluded that 68% of teacher candidates considered themselves adequate in the field of attitudes and values, knowledge of the professional field and felt less adequate (Eti and Karaduman, 2020).

From a psychological point of view, studies show that teachers have developed strong emotional and social bonds during this time spent with their students. Another study concluded that students become fragile, weakened and difficult to communicate in the process (Çetin and Anuk, 2020).

In another study, it was tried to determine the interests and attitudes of the students towards the courses given by distance education and whether they wanted the courses they took to continue with distance education or not. As a result of the study, it was determined that both male and female students did not want to take the courses with distance education when looking at the gender (Bircan et al., 2018).

According to the results of a similar study, students' perspectives on the distance education system resulted in a negative result. Students stated that they do not find distance education courses as productive and positive as face-to-face education and they do not want to take them. Considering the results obtained in line with the answers of the students in the study, which aims to determine the follow-up, satisfaction and success levels of the students, they thought that providing education with the distance education system would be an efficient and positive practice if the students were provided with internet access in the places they stayed and therefore the courses were followed regularly (Metin et al., 2017).

In another similar study, teachers' opinions about in-service training through distance education emerged negatively due to reasons such as lack of infrastructure and interaction (Arslan and Şahin, 2013). In another study, it was concluded that the distance education process was negatively affected by technological reasons such as internet connection and various technical problems among the answers given by the participants (Birişçi, 2013).

Finally, when the results of a different study are examined, it has been determined that factors such as usability, interaction, functionality, interoperability, and easy access stand out as success factors in distance education among the answers given by the students (Tanrikulu et al., 2010).

### **The Teachers and the Psychology of the Teachers during Distance Education Process**

Education is defined as a system that shapes the future of both the individual and the society, contributes to economic, political, social and personal developments and changes, and is affected by these areas (Barlett and Burton, 2020). In this difficult process, the education system has been greatly affected by social change and development. Therefore, the Covid-19 virus epidemic, which has the power to affect the society and emerged unexpectedly, has affected the education system deeply as well as affecting all social orders (Kırmızıgül, 2020).

The concept of distance education is defined as an institutional-based education in which the learning group, that is, the students, is physically in different places, and interactive communication systems are used to bring together educational resources and educators (Schlosser and Simonson, 2009).

Teacher competencies are generally defined as “the knowledge, skills and attitudes that must be possessed in order to fulfill the teaching profession effectively and efficiently” (Ministry of Education, 2008).

A qualified teacher should have characteristics that have competence in the subject area, can share their ideas using effective communication skills, discuss all aspects and use knowledge in other areas. However, appropriate strategies need to be implemented for good teaching. Effective teachers set specific goals and make plans to achieve them, rather than leaving things to what they will be (Özkan, 2005).

The fact that teachers and students do not have the necessary motivation in the education process means that they will not be able to pass the education process in a quality way. Effective teachers turn educational tasks into creative and stimulating activities, which increase the quality of education (Yılman, 2006).

In order for a teacher to be successful, he must have important features such as he must first love his profession, he must have sufficient knowledge in his field, be aware of all developments related to his profession, have a general culture level, have effective communication skills, use time effectively, treat all students equally, constantly renew himself, adapt to technology, be open to criticism (Şahin, 2004).

Minimizing stress during the pandemic period by collaborating with students is a very difficult situation to balance for the teachers. Maintaining distance education with students under stress, not boring them with homework and activities, not distracting them from the process, trying to motivate them and supporting them in all circumstances has an important place in educational life (Bozkurt, 2020).

The qualifications of information technology teachers in online distance education are stated as having technical competence, pedagogical competence and having willingness to continue uninterrupted communication (Aydın, 2005). For this reason, it has been tried to be used efficiently by teachers and students in the same way during the pandemic process we are in.

While it is difficult to balance the discipline, development follow-up and attendance that are tried to be provided in the classroom environment, conducting these elements remotely in the same way increases the workload of teachers and causes them to experience more stress levels. (Collie and Martin, 2020).

Technological tools began to be used more in education during the pandemic process with the advancement of technology. Technological tools such as television, online platforms, internet and mobile applications were provided to support students. In this process, it has been tried to ensure that teachers support students academically and are included in the distance education process in this difficult process (Şenol and Yaşar, 2020).

Many people can face challenging situations at different periods of their life. Coping methods in these cases vary from person to person. Outstanding concepts include flexibility, resistance, robustness, psychological resilience, and perspectives on psychological well-being (Gilligan, 1997). Resilience is defined as the capacity of individuals to overcome adversities.

In other words, it is expressed as being able to cope with the negative conditions experienced by people and returning to their previous mood (Doğan, 2015).

Although there are natural conditions that people are collectively exposed to, such as earthquakes, floods and hurricanes, the pandemic process, which oppresses all humanity, has negatively affected the entire society psychologically. Therefore, the conditions that people are exposed to reveal their negative mood states. In this case, people want to save themselves and recover quickly and try to cope with psychological resilience (Başaran et al., 2020).

While teachers are trying to adapt to distance education, they also spend a busy period trying to motivate students, use effective methods to cope with stress, and use time effectively. For this reason, the situation they are in can negatively affect both teachers and students psychologically (Özkan, 2005).

There are many psychological changes experienced by teachers in the distance education process. The fact that a teacher, who has not taught even once from home until the pandemic process, gives lessons over the computer for months, can create negative psychological effects on people and therefore factors that can cause stress. These effects can reflect on students from time to time. For this reason, teachers need to make more efforts for the order and discipline of education, as well as using many different methods to ensure the participation and motivation of the students in the lessons, to follow the learning process and to support the students remotely (Papagiannidis et al., 2020).

Teachers have been away from their students and colleagues, and from their schools in terms of space, and they have changed and lost their old daily life practices. In addition, teachers tried to adapt to many experiences that they could not experience before during the pandemic process (Allen et al., 2020).

Due to personal differences, it is very difficult in the classroom environment to organize the teaching process according to the needs of each student, taking into account the individual differences; organizing the teaching process and taking responsibility with distance education makes it more difficult for teachers (Yılman, 2006).

### **The Students and the Psychology of the Students during Distance Education Process**

Starting from a very young age, people first take part in the family. Afterwards, they begin to take place in the education system as a student. Student psychology covers their positive or negative moods. Therefore, it is important to get professional support when student psychology is negatively shaped. At certain times, students can believe that everything else will continue with the same failure as a result of the slightest failure, together with the emotional changes caused by the developmental period characteristics they are in (Yalın, 2001; Kurnaz and Ağgöl, 2018).

Student-teacher and student-student interaction has a valuable place in both face-to-face education and distance education. The importance of classroom or distance learning environments is emphasized for students to collaborate and share their knowledge, ideas, thoughts and feelings in a comfortable and stress-free way (Johnson and Johnson, 2000).

One of the most basic elements in learning is that the student should be active in the process. In order for learning to take place effectively, it is not enough for students to listen to what the teacher tells, observe what they do and behave, repeat the learned information and act with the teacher's instructions. However, while listening to the teacher, students should

focus their attention, reflect on what they have listened or read, ask what they do not understand, repeat and relate new information to previously learned information. (Bekir, 2003).

In order for learning to take place, the conditions related to the sound, heat and light conditions and order of the chosen environment are effective in both face-to-face education and distance education. Students' preferences and choices regarding these show personal differences. There are many factors that must be present for effective learning on students. One of them is to focus attention on the learned subject (Bekir, 2003).

Another positive factor in learning is motivation. Motivation is defined as a source of power that activates a person to learn. The motivated student has a responsibility to learn, enjoys learning, and constantly strives to realize learning (Gelişli, 2015; Bekir, 2003).

In the distance education process, students generally follow their lessons every day on their smart phones. Problems such as the small phone screen and the full internet quota are among the negative aspects of the lessons being followed by their smart phones. These reasons put students in a difficult situation (Serçemeli and Kurnaz, 2020).

In the distance education process, students also experience the effects of almost similar psychological experiences of teachers. The fact that students who communicate face to face with their friends and teachers in the classroom environment quickly adapt to working at the computer all day and are faced with situations such as preparing a work schedule from home is a factor that creates stress. While these challenges create an atmosphere of uncertainty and a difficult process to adapt, coping with stress is also an important factor. (Öztaş and Kılıç, 2017; Hamilton et al., 2020).

During the pandemic process, it is seen that students experience anxiety and stress due to the problems in their use of technology. The fact that almost all students and families do not have equal equipment, opportunities and the ability to use technology stands out as the most important of these problems (Livari et al., 2020).

On the other hand, technological inequality can cause students to fall behind in classes and experience absenteeism problems. Therefore, it is observed that students in these negative situations experience more stress and they may need professional support to cope with stress (Başaran et al., 2020; Birişçi, 2013).

Enabling students to be motivated comes about through teachers' patience, self-sacrifice, tolerance, understanding and empathy. The concept of motivation emerges as an important issue in the distance education process as it enables the learner, that is, the students, to struggle against various difficulties and to achieve their learning goals (Uçar and Kumtepe, 2019).

From a psychological point of view, the following situations can be given as examples for students to feel positive and use positive ways to cope with stress in the distance education process: the lessons can be watched whenever they want, the education needs can be met during the pandemic process, the awareness on the importance of technology in education is increased and the environment provides ease of learning (Almaghaslah and Alsayari, 2020). During the pandemic process, students felt safe and peaceful if technological opportunities were used more effectively (Andoh et al., 2020).

From another point of view, there are aspects of the distance education process that negatively affect students. Examples of this are lack of measurement and evaluation, loss of

motivation, lack of internet and computer, lack of interaction, technical problems, lack of socialization and being unprepared for the process (Ramos-Morcillo et al., 2020).

### **Stress and Ways to Cope with Stress**

When the definitions of stress in the literature are examined, it is generally discussed that stress is a negative and harmful situation. While stress has a painful side that disrupts the harmony of people, it can also lead people with whom it can be coped forward, to happiness and success. (Levi, 1965). While the concept of stress was used in the form of disaster, trouble, trouble, grief in the 17th century, it began to be used in the form of power and pressure in the 18th and 19th centuries. (Torun, 1997).

Stress is also defined as a person's reaction to threatening environmental characteristics. Each situation that affects the physiological and psychological balance of a person can be perceived as a source of stress, that is, a stressor, and accordingly, people can give different reactions (Bingöl, 2001).

The perception of a stressful life is linked to the self-esteem one develops. The self-esteem that a person develops affects the level of stress that they experience in this perception, as well as how they perceive themselves as a talented, important, valuable and acceptable person (Esenay, 2002; Yörükoğlu, 1986).

There are many stress factors in our lives, and the pandemic process we are in has a negative stress effect on all humanity. The epidemic in the pandemic process causes physical inactivity and limitation in social activities, fear and anxiety for themselves or their loved ones, and sudden and radical lifestyle changes (Brooks et al., 2020).

There are many positive ways to reduce stress. The first thing to do is to identify situations that create tension in personal and professional life. It can be stated that adaptive coping mechanisms are used when constructive behaviors are initiated to change a stressful situation. The next step is to develop coping mechanisms that will remove these tensions and actively overcome them. Defining the problem, identifying the source of stress, planning the action process and evaluating the results are the steps to be taken, and getting professional support is an active role for coping with stress during the pandemic process (Işıkhan 2016; Cao et al., 2020).

In a study on the subject, it was found that university students felt high stress, mild general anxiety, and low satisfaction with life. It has been revealed that physical inactivity during the anxiety and pandemic process significantly affects perceived high stress. It has been stated that students' mental health is at high risk during the pandemic (Bayar et al., 2020). Stress experienced by university students negatively affects their academic performance (Garrido et al., 2020).

In a similar study conducted with nursing students during the Covid-19 pandemic in the literature, it was determined that there was no statistically significant difference between the students' stress levels and the class variable. It was understood that the gender variable resulted in significant results and the perceived stress level of female students was higher than the perceived stress level of male students (Savitsky et al., 2020).

## Conclusion and Recommendations

The distance education process is a challenging process for most teachers. It has many positive and negative effects in terms of technological tool proficiency, psychological resilience and time management. Distance education can affect students indirectly, as it affects teachers who are under these difficult conditions. In this process, it is of great importance that teachers and students take time for themselves. A teacher and student who can spare time for themselves will become more productive in terms of psychological resilience and a better teaching-learning process will be experienced. In the distance education program, scheduling time for breaks, meal breaks, exercise and sleep as if you are planning a lesson, and trying to act as if our life was normal as it used to be, will cause us to spend this process with less stress.

When the pandemic process is handled in a psychological dimension, it will be beneficial for teachers to be in contact with their colleagues in this process. It will be comforting for teachers to share their ideas, experiences, concerns and stresses with their colleagues.

In addition, teachers' strong communication with students also creates psychologically positive effects for both teachers and students. Teachers who keep in touch with students will feel more comfortable and more productive. Conditions such as radical changes in the education system and the restriction of students' social spaces may cause students to experience more stress in this process. It is of great importance that the relevant institutions implement strategies and provide support so that students and teachers can manage this stressful process. It can be beneficial to use stress coping methods for both teachers and students during the pandemic process.

Counseling services can be provided for the students in this difficult period we are in, in order to evaluate them positively in terms of their psychological well-being. With the counseling service to be provided, positive results will emerge in reducing stress in line with coping strategies for students who experience high levels of stress. Students who talk to experienced consultants who are experts in their fields on this subject will create an environment where they can experience stress at a minimum level.

## References

- Allen, J., Rowan, L., & Singh, P. (2020). Teaching and teacher education in the time of Covid-19. *Asia-Pacific Journal of Teacher Education*, 48(3), 233–236.
- Almaghaslah, D., & Alsayari, A. (2020). The effects of the 2019 novel coronavirus disease (Covid-19) outbreak on academic staff members: A case study of a pharmacy school in Saudi Arabia. *Risk Management and Healthcare Policy*, 13, 795-802.
- Andoh, R. P. K., Appiah, R., & Agyei, P. M. (2020). Postgraduate distance education in University of Cape Coast, Ghana: Students' perspectives. *International Review of Research in Open and Distributed Learning*, 21(2), 118-135.
- Arslan, H. & Şahin, I. (2013). Hizmet içi eğitimlerin video konferans sistemiyle verilmesine yönelik öğretmen görüşleri. *Journal of Instructional Technologies & Teacher Education*, 1(3), 34-41.
- Aydin, C. H. (2005). Turkish mentors' perception of roles, competencies and resources for online teaching. *Turkish Online Journal of Distance Education*, 6(3), 58-80.



- Bartlett, S., & Burton, D. (2020). *Introduction to education studies*. New York: SAGE Publications Limited.
- Başaran, M., Doğan, E., Karaoğlu, & Şahin, E. (2020). Koronavirüs pandemi sürecinin getirisi olan uzaktan eğitimin etkililiği üzerine bir çalışma; Pandemi sürecince öğretmen psikolojisi. *Academia Eğitim Araştırmaları Dergisi*, 5(2), 368-397.
- Bayar, B. D., Can, S. Y., Erten, M., & Ekmen, M. (2020). Covid-19 pandemi sürecinde üniversite öğrencilerinin depresyon ve stres düzeylerinin belirlenmesi. *Paramedik ve Acil Sağlık Hizmetleri Dergisi*, 2(1), 12-25.
- Bayburtlu, Y.S. (2020). Covid-19 pandemi dönemi uzaktan eğitim sürecinde öğretmen görüşlerine göre türkçe eğitimi. *Turkish Studies*, 15(4), 131-151.
- Bekir, Ö. (2003). Öğrenmeyi öğretme. *Anadolu Üniversitesi Açıköğretim Fakültesi*, 9, 149-164.
- Bingöl, D. (2001). *İnsan kaynakları yönetimi*. İstanbul: Beta Yayınları.
- Bircan, H., Eleroğlu, H., Arslan R. & Ersoy, M. (2018). Cumhuriyet Üniversitesi öğrencilerinin uzaktan eğitimde sunulan derslere yönelik bakış açısı. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 5(12), 91-100.
- Birişçi, S. (2013). Video konferans tabanlı uzaktan eğitime ilişkin öğrenci tutumları ve görüşleri. *Journal of Instructional Technologies and Teacher Education*, 2(1), 24-40.
- Bozkurt, A. (2020). Koronavirüs (Covid-19) pandemi süreci ve pandemi sonrası dünyada eğitime yönelik değerlendirmeler: Yeni normal ve yeni eğitim paradigması. *AUAd*, 6(3), 112-142.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912-920.
- 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*, 287(112934), 1-5.
- Collie, R. & Martin, A. (2020). Teacher well-being during Covid-19. 10 Mayıs 2021 tarihinde <https://www.teachermagazine.com.au/articles/teacher-wellbeing-during-covid-19> sayfasından erişilmiştir.
- Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks: Sage.
- Çetin, C., & Anuk, Ö. (2020). COVID-19 pandemi sürecinde yalnızlık ve psikolojik dayanıklılık: Bir kamu üniversitesi öğrencileri örnekleme. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 170-189.
- Derkuş, A. (2020). *Pandemi döneminde gündelik pratikler, algı ve eğitim ihtiyaçları araştırma raporu*. İstanbul: Öğretmen Akademisi Vakfı.
- Doğan, T. (2015). Kısa Psikolojik Sağlık Ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenilirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Esenay, F. I. (2002). *Üniversite öğrencilerinde sağlık davranışlarının sosyal destek ve benlik saygısı ile ilişkisinin incelenmesi* (Yayınlanmamış Yüksek Lisans Tezi). Dokuz Eylül Üniversitesi Sağlık Bilimleri Enstitüsü, İzmir.

- Eti, İ. & Karaduman, B. (2020). Covid-19 pandemisi sürecinin öğretmen adaylarının mesleki yeterlikleri açısından incelenmesi. *Milli Eğitim Dergisi*, 49(1), 635-656.
- Garrido, C. B., Montes-Hidalgo, J., Limonero, M., Gómez-Romero, J., & Tomás-Sábado, J. (2020). Hemşirelik öğrencilerinde akademik erteleme: Akademik Erteleme Ölçeği-Kısa Form'un İspanyolca uyarlaması. *Clinical Nursing*, 30(6), 371-376.
- Gelişli, Y. (2015). Uzaktan eğitimde öğretmen yetiştirme uygulamaları: Tarihçe ve gelişim. *Eğitim ve Öğretim Araştırmaları Dergisi*, 4(3), 313-321.
- Gilligan, R. (1997). Beyond permanence? The importance of resilience in child placement practice and planning. *Adoption & Fostering*, 21(1), 12-20.
- Hamilton, L. S., Pane, J. F. & Steiner, E. D. (2020). *Online doesn't have to mean impersonal*. 30 Nisan tarihinde <https://www.rand.org/blog/2020/04/online-doesnt-have-to-mean-impersonal.html> sayfasından erişilmiştir.
- İşman, A. (2011). *Uzaktan eğitim*. Ankara: Pegem Akademi Yayıncılık.
- İşıkhan, V. (2016). Çalışanlarda Tükenmişlik Sendromu. Ankara: Türkiye Solunum Araştırmaları Derneği. [https://www.solunum.org.tr/tusadata/book/472/176201612828-32\\_bolum\\_31\\_tukenmislik.pdf](https://www.solunum.org.tr/tusadata/book/472/176201612828-32_bolum_31_tukenmislik.pdf)
- Johnson, Roger T., & Johnson, David W. (2000). How can we put cooperative learning into practice? *The Science Teacher*, 67, 39-45.
- Kırmızıgül, H. G. (2020). Covid-19 salgını ve beraberinde getirdiği eğitim süreci. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 283-289.
- Kurnaz, E. & Ağgül, S. (2018). Ters yüz edilmiş sınıf modeline muhasebe eğitimi alan öğrencilerin bakış açıları: Bayburt Üniversitesi ve Kafkas Üniversitesi Örneği. *Business & Management Studies: An International Journal*, 6(2), 332-344.
- Levi, L. (1965). The urinary output of adrenalin and noradrenalin during pleasant and unpleasant emotional states: A preliminary report. *Psychosomatic Medicine*, 27(1), 80-85.
- Iivari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life—How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care?. *International Journal of Information Management*, 55, 102-183.
- MEB. (2008). *Öğretmen yeterlikleri: Öğretmenlik mesleği genel ve özel alan yeterlikleri*. Ankara: Devlet Kitapları Müdürlüğü.
- Metin, A. E., Karaman A. & Aksoy Şaştım, Y. (2017). Öğrencilerin uzaktan eğitim sistemine bakış açısı ve uzaktan eğitim İngilizce dersinin verimliliğinin değerlendirilmesi. *Banaz Meslek Yüksekokulu, Karabük Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(2), 640-652.
- Moore, M., & Kearsley, G. (2012). *Distance education: A system view of online learning*. Canada: Wadsworth.
- Özkan, R. (2005). Birey ve toplum gelişiminde öğretmenlik mesleğinin önemi. *Milli Eğitim Dergisi*, 166, 1-140.
- Öztaş, S., & Kılıç, B. (2017). Atatürk İlkeleri ve İnkılap Tarihi dersinin uzaktan eğitim şeklinde verilmesinin öğrenci görüşleri açısından değerlendirilmesi. *Turkish History*

*Education Journal*, 6(2), 268-293.

- Papagiannidis, S., Harris, J., & Morton, D. (2020). WHO led the digital transformation of your company? A reflection of IT related challenges during the pandemic. *International Journal of Information Management*, 55, 102-166.
- Ramos-Morcillo A. J, Leal-Costa, C., Moral-García J. E., & Ruzafa-Martínez, M. (2020). Experiences of nursing students during the abrupt change from face-to-face to e-learning education during the first month of confinement due to COVID-19 in Spain. *International Journal of Environmental Research and Public Health*, 17(15), 5519.
- Savitsky, B., Findling, Y., Ereli, A., & Hendel, T. (2020). Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Education in Practice*, 46, 102-109.
- Schlosser, L. A., & Simonson, M. (2009). *Distance education: Definition and glossary of terms* (3rd ed.). Charlotte, NC: Information Age.
- Serçemeli, M., & Kurnaz, E. (2020). COVID-19 pandemi döneminde öğrencilerin uzaktan eğitim ve uzaktan muhasebe eğitimine yönelik bakış açıları üzerine bir araştırma. *Uluslararası Sosyal Bilimler Akademik Araştırmalar Dergisi*, 4(1), 40-53.
- Şahin, A. E. (2004). Öğretmen yeterliklerinin belirlenmesi. *Bilim ve Aklın Aydınlığında Eğitim Dergisi*, 58, 58-62.
- Şenol, F. B., & Yaşar, M. C. (2020). Covid-19 pandemisi sürecinde öğretmen ve ebeveyn gözünden “özel eğitim”. *Milli Eğitim Dergisi*, 49(1), 439-458.
- Tanrikulu Z., Tugcu C. & Yilmaz, S. (2010). E-University: Critical success factors. *Procedia Social and Behavioral Sciences*, 2, 1253–1259.
- Torun, A. (1997). *Stres ve tükenmişlik*. Ankara: Türk Psikologlar ve Kal-der Yayınları.
- Tuncer, M. & Taşpınar, M. (2007). Sanal eğitim, öğretim ve geleceği. *Elektronik Sosyal Bilimler Dergisi*, 6(20), 112-133.
- Uçar, H. & Kumtepe, A. T. (2019). ‘Be Motivated and Motivate’: Interview with John M. Keller. *E-Learn Magazine*. Manuscript in press.
- Uşun, S. (2006). *Uzaktan Eğitim*. Ankara: Nobel Yayın Dağıtım.
- Wach, E. (2013). Learning about qualitative document analysis. <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/2989/PP%20InBrief%201%093%20QDA%20FINAL2.pdf?sequence=4>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.
- Yalın, H. İ. (2001). *Öğretim teknolojileri ve materyal geliştirme*. Ankara: Nobel Yayın Dağıtım.
- Yılman, M. (2006). *Türkiye’de öğretmen eğitiminin temelleri*. Ankara: Nobel Yayın Dağıtım.
- Yörükoğlu, A. (1986). *Gençlik çağı*. Ankara: Türkiye İş Bankası Kültür Yayınları Sosyal ve Felsefi Eserler Dizisi.