



## A Literature Review on COVID-19 Studies in the Turkish Educational Context

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### Review Article

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### ABSTRACT

COVID 19 has diverted the scholars' and academicians' focus and interest to the impact of the pandemic on the stakeholders of education which led to a great number of scientific productions in a variety of fields and levels to investigate the threats and opportunities created by COVID-19 crisis. In this sense, the present study aimed to provide a systematic overview of the research studies in education during the COVID-19 crisis in ERIC database and reveal the research interests during emergency distance teaching in the selected papers and expose the impact of rapid transition from face-to-face teaching to online distance education in Turkish educational context. Qualitative research approach was chosen as the methodological foundation for the study, and descriptive and narrative literature review was employed as design. The data was analyzed through inductive coding process in which crucial themes, topics, or models are extracted from the raw data through first-order or open coding that includes a close review of the data by the researchers. The findings revealed that the studies generally discussed distance education during COVID-19 negatively concerning the teaching and learning process, contextual factors, and personal factors, namely.

**Keywords:** COVID-19, ERIC index, Turkish educational context, literature review, qualitative analysis

## Türk Eğitim Sisteminde COVID-19 Araştırmaları Üzerine Bir Literatür Taraması

#### Bilgi

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### Öz

COVID-19, dünya genelinde kısa süre içerisinde ciddi ekonomik, sosyal krizlere yol açarak sosyal hayatta kritik ve önemli bozulmalara neden oldu. Hastalığın yayılmasını önlemek için alınan önlemler neticesinde okullar, kolejler ve üniversitelerin kapanması ve gerekli altyapı olmadan çevrimiçi öğretime geçmek zorunda kaldığı için dünya genelinde eğitim sektörü son derece etkilendi. Bu doğrultuda COVID 19, bilim insanlarının ve akademisyenlerin ilgi ve odağını pandeminin eğitim paydaşları üzerindeki etkisine yöneltmiş, COVID-19 un eğitimde ortaya çıkardığı tehdit ve fırsatları araştırmak için çeşitli alan ve düzeylerde çok sayıda bilimsel üretime yol açmıştır. Bu anlamda, bu çalışma, ERIC veri tabanında COVID-19 krizi sırasında Türk eğitim sisteminde yapılan araştırma çalışmalarına sistematik bir genel bakış sunmayı, seçilen makalelerde araştırma ilgi alanlarını ortaya çıkarmayı ve eğitim sisteminde yüz yüze eğitimden uzaktan eğitime hızlı geçişin etkisini ortaya çıkarmayı amaçlamıştır. Çalışmanın metodolojik temeli olarak nitel araştırma yaklaşımı seçilmiş ve tasarım olarak betimleyici ve açıklayıcı literatür taraması kullanılmıştır. Veriler, ham verilerden önemli temaların, konuların veya modellerin çıkarıldığı tümevarımsal kodlama süreci ile birinci dereceden veya araştırmacılar tarafından verilerin yakından incelenmesini içeren açık kodlama yoluyla analiz edilmiştir. Bulgular, çalışmaların COVID-19 sırasında uzaktan eğitimi genel olarak öğretme-öğrenme süreci, bağlamsal faktörler ve kişisel faktörler açısından olumsuz olarak ele aldığını ortaya koymuştur.

**Anahtar Kelimeler:** COVID-19, ERIC indeksi, Türk eğitim sistemi, literatür taraması, nitel analiz

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## Giriş

On December 31, 2019, an unprecedented phenomenon, the identification of a novel coronavirus, created a new world order. On March 11, 2020, when the World Health Organization (WHO) declared Covid-19 a pandemic, no one would foresee such a paralyzing effect it would have on the social life of the people. Covid-19 outbreak with its strongest impact on healthcare services caused serious disruptions in all areas of society, especially in education affecting approximately 1,6 billion learners in more than 200 countries (Pokhrel & Chhetri, 2021) in a short period which obliged governments and institutions to take strict precautions to sustain daily life. Social distancing precautions and restrictive procedures such as full and partial lockdowns taken by the authorities to prevent the spread of the disease pushed educational institutions to apply radical transformation away from available traditional educational practices. Most of the schools and colleges had to shut down after a break for a while and shift to emergency distance teaching and assessment without sufficient infrastructure which posed major challenges for the stakeholders, authorities, and active agents of the learning-teaching process.

Correspondingly, educational authorities faced challenges concerning the preparation of necessary infrastructure to follow the courses within a short period despite the differences in readiness and adoption from one country to another in terms of technical, technological, cultural, and contextual constraints. Especially the developing countries were the ones that were constrained most by this unprecedented process because of technological, situational, and financial lacks (Tadesse & Muluye, 2020).

Probably, the greatest challenges were experienced in the teaching-learning process by the teachers and learners, namely. The rapid transition from face-to-face teaching to distance teaching considerably affected both teachers and learners who have little or no previous digital learning experiences. The learners faced with lack of learning because of the concerns about the appropriacy of offering theoretical and practical courses digitally. Additional challenges were related to the readiness and adaptability of learners for digitally distance teaching in terms of instability in social status, capability of using existing technology, and ability for self-directed learning which created inequality of opportunity in reaching knowledge. The literature also portrays several research referencing psychological and emotional distress experienced by the learners during COVID-19 emergency distance teaching (Pokhrel & Chhetri, 2021; Livia Quintiliani & Tambone, 2021).

Similarly, the sudden shift to distance teaching confronted teachers to conduct the lessons on digital platforms which they were not trained (Khlaif, Salha, Affouneh, Rashed, & Elkimishy, 2020). Consequently, the teachers faced obstacles concerning appropriate pedagogy including online classroom management, student-teacher interaction in the classroom, motivational issues, material development, assessment,

and so on. Additionally, the teachers were left unguarded in terms of professional support to bridge the gap and had to struggle with the process unaided (Ramola, 2021).

Similar disruptions were experienced in the Turkish educational context as well. Right after the announcement of the first reported cases, the authorities held an emergency meeting and decided to shift to online education as in the other parts of the world. In a short period two networks, Educational Informatics Network TV in which the teachers offered courses at primary, secondary, and high school levels broadcasted through three TV channels and Educational Informatics Networks which allows communication, assignments, and synchronized lessons were established (Akbulut, Sahin, & Esen, 2020). However, such a rapid transition from face-to-face teaching to digitally distance teaching brought along several disruptions and obstacles such as technical and technological constraints (Akbulut, Sahin, & Esen, 2020; Aydin & Erol, 2021), psychological obstacles (Karademir, Yaman, & Saatçioğlu, 2020), pedagogical problems (Aslan, Turgut, & Aslan, 2021; Aytac, 2021), socio-economic issues (Baran & Baran, 2021) as well as certain gains such as boosting autonomous and self-directed learning on the part of students (Başar & Cangal, 2021), and increasing technological knowledge and use among teachers and students (Karakaya, Adıgüzel, Üçüncü, Çimen, & Yılmaz, 2021) as reported in the relevant literature.

One more serious impact of COVID-19 has been on academic studies and scientific research in education. A great number of studies in a variety of fields have been conducted to investigate the impact at all levels of education. The researchers questioned the unprecedented threats and opportunities resulted from the COVID-19 crisis from the perspectives of the students, teachers, parents, authorities, stakeholders, policymakers in order to reveal the impact and provide suggestions.

Within this perspective, the present study aimed to provide a systematic overview of the research studies in education during the COVID-19 crisis in ERIC database and reveal the research interests during emergency distance teaching in the selected papers and expose the impact of rapid transition from face-to-face teaching to online distance education in Turkish educational context. In this respect, the following research questions guided the scope of the study:

- What is the distribution of research methods, design, and sampling?
- What are the themes?  
What are the results?

## Method

The research employed qualitative research methodology and literature review design. A descriptive and narrative literature review was performed to answer the research questions given above. A descriptive review is beneficial when the aim is to find out interpretable patterns or trends (Paré, Trudel, Jaana, & Kitsiou, 2015) of

a body of research through quantification, and it matches with the research questions 1 and 2. The research question 3, on the other hand, required a narrative review which provides verbal accounts of previous studies by concentrating on theories and frameworks, basic variables and their functions, and/or their findings and may be used to explore significant and/or contentious themes (Januário, Narciso, Vieira-Santos, Fonseca, & Relvas, 2018).

### **Search Strategy and Data Source**

The search was carried out in ERIC index. The ERIC index was preferred since it is among the field indices for career development of academicians in the educational sciences in Türkiye. The searching process took place from the 15<sup>th</sup> of December 2021 to the 10<sup>th</sup> of January 2022. The key term used in the search was "Covid-19" and the search results were limited to the time frame of 2020 to January 2022.

### **Study Selection**

The first stage search for the articles was based on the key term "Covid-19". The initial research yielded 154 articles. Then, the abstracts were read to apply the last selection criteria: the article is about educational practices. The articles that were irrelevant to education in Covid-19 pandemic but included the term in the title or abstract, literature reviews, devoted to scale development, about psychology and not carried out in Türkiye were excluded. The final list of the articles included 123 articles.

The researchers then carried out a coding process that led each article to be categorized according to the year of publication (2020 or 2021), research methodology (quantitative, qualitative, mixed), research design (survey, correlational survey, case study, phenomenology, etc.), the main theme (attitude, experience, perception, belief), and sample (students, teachers, academicians, etc.). An agreement was sought between the two researchers in the coding process to ensure the highest objectivity in the article selection and data analysis processes.

### **Data Analysis**

When the agreement was reached between the researchers about the inclusion of 123 articles, the data analysis process began. Descriptive statistics (frequencies and percentages) were used to represent the findings related to the first and second research questions. The researchers carried out a detailed coding process to reach the findings of the third research question. The coding was performed in an inductive process in which crucial themes, topics or models are extracted from the raw data through first-order or open coding that includes a close review of the data by the researchers (Chandra & Shang, 2019). The data analysis was done between the 15<sup>th</sup> of January and the 28<sup>th</sup> of February 2022.

### **Reliability**

The researchers carried out a collaborative qualitative analysis (CQA) procedure to provide reliability. In this procedure in which consistency and agreement in coding of

qualitative data is sought without quantifying intercoder reliability (Patton, 2015), two or more researchers analyze the data together or independently which is considered to improve the quality (Díaz, Pérez, Gallardo, & González-Prieto, 2021) and results in strong consensus over the data from different perspectives (Sweeney, Greenwood, Williams, Wykes, & Rose, 2012). The CQA is based on thematic analysis in which patterns within the qualitative data are identified, analyzed, and reported. The themes can be identified through inductive or deductive approach or a combination of the two (Richards & Hemphill, 2017).

### **Findings**

#### **1- What is the distribution of research methods, design, and sampling?**

As can be seen in Figure-1, the most frequently used design in the examined articles was qualitative (f=69; 56%). It was followed by the quantitative method (f=37; 30%) and the least used method was mixed method (f=17; 14%).

As seen in Figure-2, 27 articles (39.13%) followed case study approach which makes it the most common in qualitative design. The second most common approach was phenomenology (f=25; 36.23%). Nine (13.04%) articles followed survey approach and the approach preferred was not given in five articles (7.25%). The narrative inquiry approach was used in two (2.90%) articles. The metaphor analysis was stated as the approach in one (1.45%) article.

As Figure-3 shows, 24 of the articles with quantitative method (64.86%) used survey approach, so it was the most common approach in quantitative design. The correlational survey used in nine articles (24.32%) was the second most common approach. The experimental was used in two articles (5.41%). There were two other approaches preferred, namely causal comparison and relational screening model each of which used in one article (2.70%).

According to Figure-4, there were 17 articles carried out through mixed method design, and the approach used was not stated in five (29.41%) of them. The survey approach was used in five (29.41%) articles. The convergent parallel design was followed in two (11.76%) articles. There were five other approaches each of which was used once (5.88%), namely a partially mixed sequential dominant status, experimental, explanatory, explanatory sequential, phenomenology & survey.

The examined articles included a total of 50.058 participants as sample and the sample was categorized into 7 groups (see Figure-5). The sample with the highest number of participants was university students (n=22.751; 45.45%). The second group of the sample with highest number was named as mixed group since it included at least two of the following groups of participants: teachers, students, parents, school administrators, officials from the Ministry of Education, academicians, and university students. The sample in this group included 18.769 participants and it is 37.49% of the total. The third group was teachers and it included 4.491 participants which equals to 8.97%.

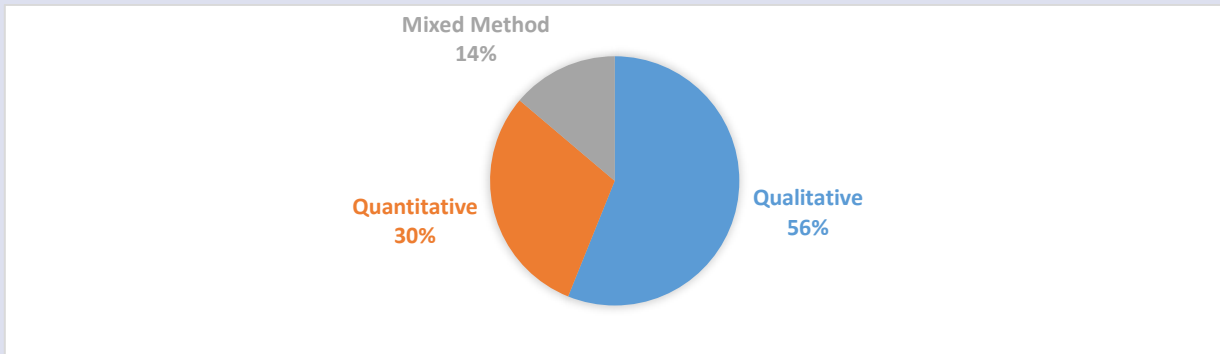


Figure 1. Distribution of Methods

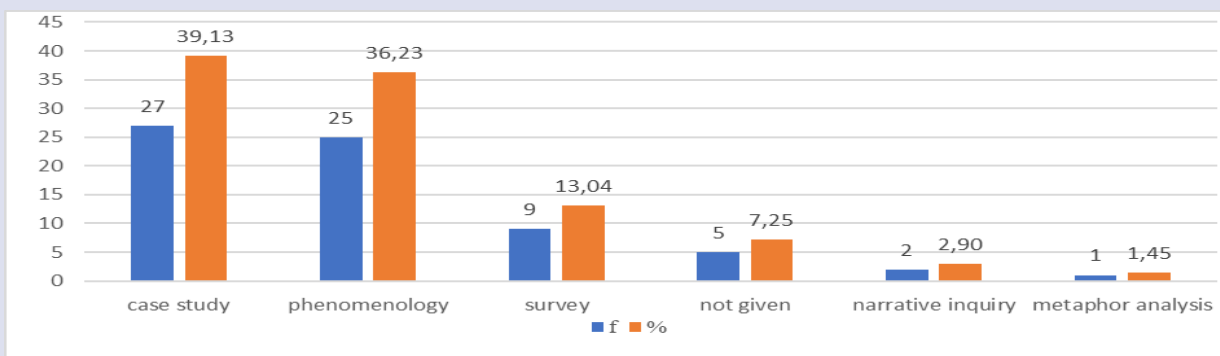


Figure 2. Design used in Qualitative Method

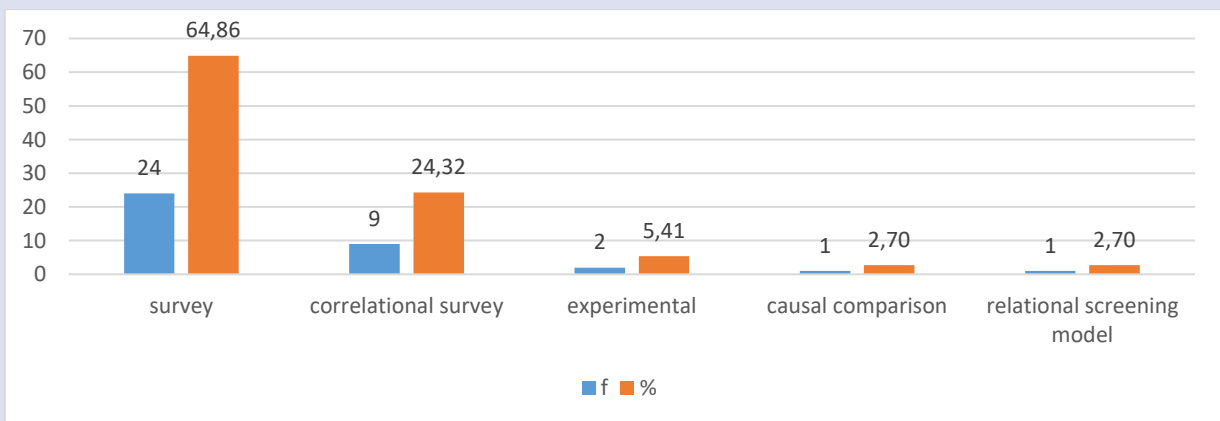


Figure 3. Design used in Quantitative Method

Academicians were the fourth mostly included sample with 3.263 participants (6.52%). The category of students included K-12 students and the total number was 653 (1.30%). Parent sampling included 70 participants (0.14%) and school managers were the last group with a total of 61 participants (0.12%).

### 2- What are the themes?

The research over distant or emergency distance education period in Turkish educational context during the

Covid-19 pandemic revealed three main themes (see Figure-6). As can be seen in Figure-6, the research context is coded as “DE DURING COV 19” in the semantic map. There are three themes in the map, namely contextual factors, personal factors, and teaching-learning process. The “contextual factors” theme includes three categories as technical problems, socio-economic issues and policy-oriented issues that also have two sub-categories as positive and negative.

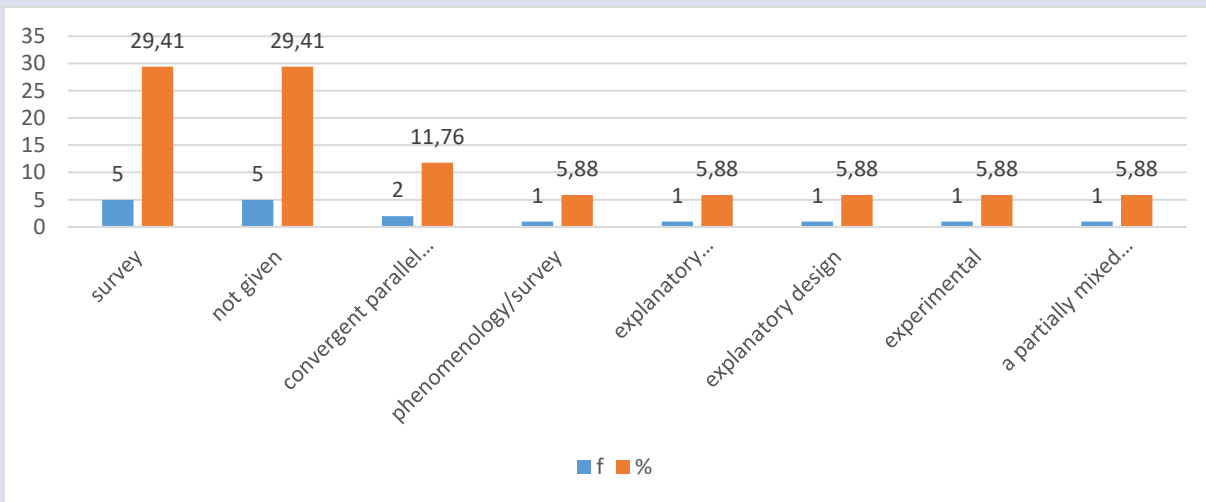


Figure 4. Design Used in Mixed Method

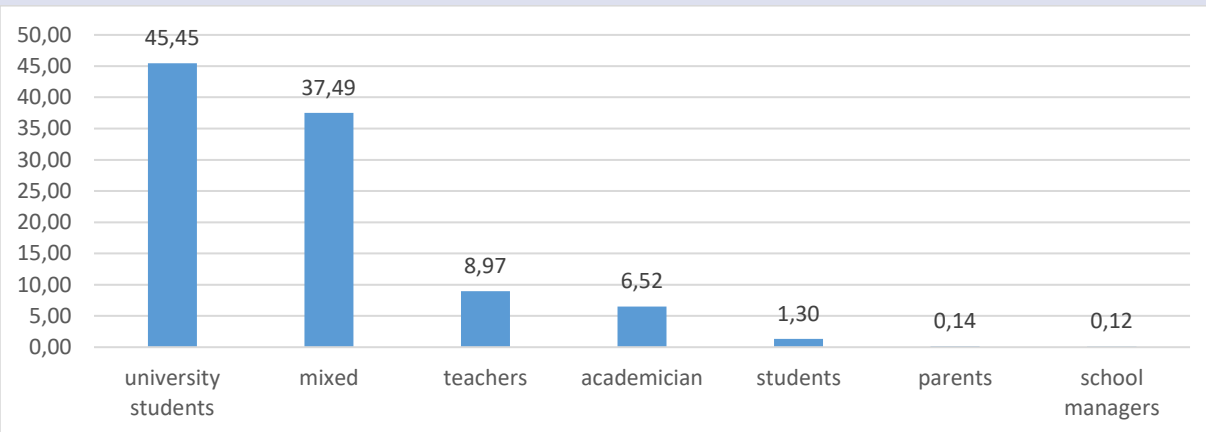


Figure 5. Distribution of Sampling (%)

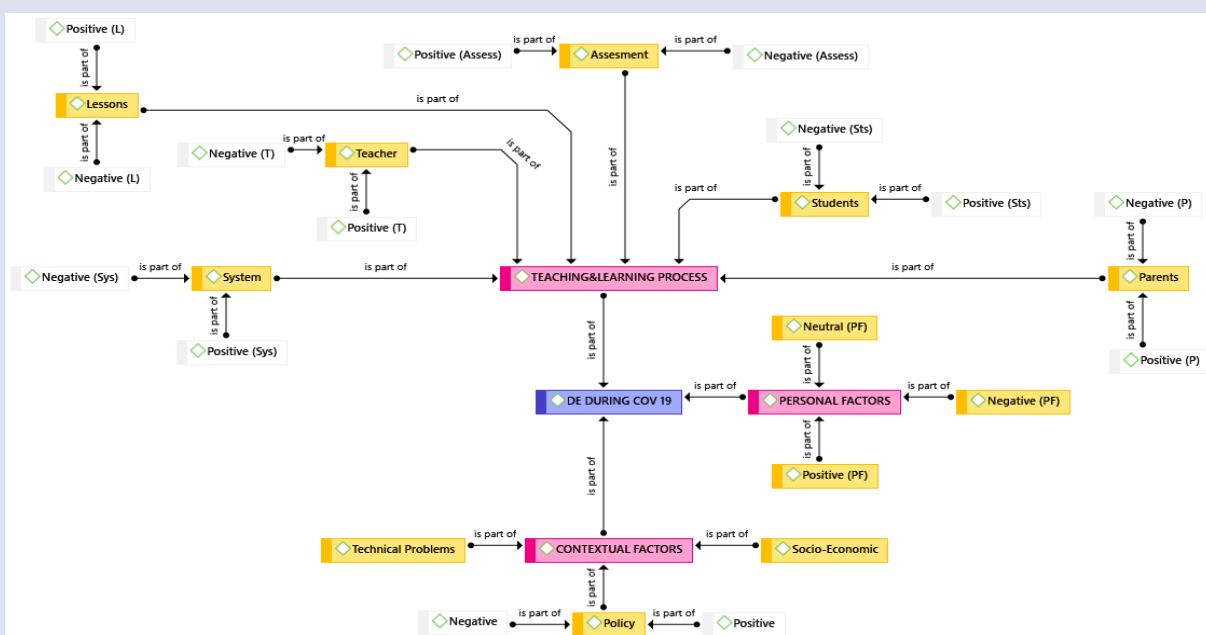


Figure 6. Semantic Map

The “personal factors” theme has three categories named as positive, negative, and neutral. The last theme, “teaching-learning process”, includes 5 categories: system, lessons, parents, students, and assessment each of which has the sub-categories of positive and negative.

### 3-What are the results?

As can be seen in Table-1, the total number of codes is 157 and the number of quotations attached to them is 451. Within the three themes, teaching & learning process includes the highest number of quotations (n=243; 53.89%) and codes (n=95; 60.51%). This theme, as its name refers, covers the codes related to factors (sub-categories) such as the teacher, student, parent etc. that directly affect the distant education process. The theme with second-highest number of quotations (n=116; 25.72%) and codes (n=44; 28.03%) is personal factors which represent the personal positive, negative, or neutral approach of research participants towards distant education process. The contextual factors theme includes 92 quotations (20.39%) and 18 codes (11.46%) and ranks the third among the themes in terms of amount of quotations and codes. This theme, with its three sub-categories (policy-oriented issues, socio-economic issues, and technical problems),

consists of the codes related to the elements that affect the distant education process positively or negatively.

As represented in Table-2, the policy-oriented issues category that holds the coding related to deficiencies and problems resulting from corporate and institutional policies includes the highest number of codes (n=11) and quotations (f=47; 46.53%). This category is divided into two sub-categories: negative and positive. The number of codes (n=9) and percent of the quotations (93.62%) in the negative sub-category is much higher than the codes (n=2) and quotations (6.38%) in the positive one. The code with the highest frequency (f=14; 32%/sub-category) in the negative sub-category is “lack of infrastructure” in which quotations indicated that the required infrastructure for distant education didn’t exist. The code with the second highest frequency is “lack of training” (f=8; 18% / sub-category) and these quotations explained the lack of pre- or in-service training on carrying out distant education for teachers. In the positive sub-category, the code-named as “school administrators’ support” (f=2; 67%) included quotations about administrative support received by teachers and the only other code here is “sufficient informing” (f=1; 33%) that indicated institutional support about how the distant education process was going to be carried out.

Table 1. Distribution of Codes and Quotations within the Themes

Themes	Codes		Quotations	
	n	%	n	%
Contextual Factors	18	11.46	92	20.39
Personal Factors	44	28.03	116	25.72
Teaching & Learning Process	95	60.51	243	53.89
Totals	157	100	451	100

Table 2. Distribution of Codes in Contextual Factors Theme

Category	Sub-category	Code	f	%/sub-category	%/category	% / Totals
Policy-oriented Issues	Negative	lack of infrastructure	14	32	93.62	46,53
		lack of training	8	18		
		limited time	7	16		
		lack of experience	5	11		
		inappropriate content	4	9		
		lack of psychological support	2	5		
		lack of guidance	2	5		
		lack of institutional support	1	2		
		content and achievement mismatch	1	2		
	Totals	44	100			
	Positive	school administrators' support	2	67	6.38	
sufficient informing		1	33			
Totals		3	100			
Socio-economic Issues		lack of internet	13	36	36.64	
		lack of hardware	11	31		
		inequality of opportunity	7	19		
		study environment low quality	5	14		
		Total	36	100		
Technical Problems		internet connection problems	12	67	17.83	
		hardware problems	4	22		
		accessibility problem	2	11		
		Totals	18	100		

Table 3. Distribution of Codes in Personal Factors Theme

Category	Positive				Negative				Totals			
	n	%	f	%	n	%	f	%	n	%	f	%
Assessment	4	30.77	12	33.33	9	69.23	24	66.67	13	13.68	36	12.46
Lessons	4	50.00	8	26.67	4	50.00	22	73.33	8	8.42	30	10.38
Parents	2	50.00	5	55.56	2	50.00	4	44.44	4	4.21	9	3.11
Students	8	47.06	14	20.29	9	52.94	55	79.71	17	17.89	69	23.88
System	16	53.33	51	54.26	14	46.67	43	45.74	30	31.58	94	32.53
Teacher	9	39.13	10	19.61	14	60.87	41	80.39	23	24.21	51	17.65
Totals	43	45.26	100	34.60	52	54.74	189	65.40	95	100	289	100.00

\*Codes with 1 groundedness not given due to space concern

Table 4. Distribution of Codes and Quotations in Teaching &amp; Learning Theme

Category	Code	f*	%	%/Totals
Positive	beneficial	8	22.22	28.35
	best solution	6	16.67	
	professional development	5	13.89	
	positive attitude	4	11.11	
	positive perception	3	8.33	
	satisfaction	2	5.56	
	comfort	2	5.56	
	Totals	36	100.00	
Negative	preference of face-to-face education	12	15.38	61.42
	anxiety	10	12.82	
	ineffective	9	11.54	
	negative attitude	8	10.26	
	affective inadequacy	4	5.13	
	dissatisfaction	4	5.13	
	inadaptability	4	5.13	
	fear	3	3.85	
	incompetency	3	3.85	
	uncertainty	3	3.85	
	difficult process	2	2.56	
	loneliness	2	2.56	
	longing	2	2.56	
Totals	78	100.00		
Neutral	preference of synchronous mode	6	46.15	10.24
	intensive use of asynchronous courses	2	15.38	
	moderate level of readiness	2	15.38	
	Totals	13	100.00	

The category that is second in rank in terms of both number of codes (n=4) and quotations (f=36; 36.64%) is socio-economic issues that includes different standards and opportunities based on income and other background issues like policies. Within this category, the code with the highest number of frequency (f=13; 36%) is "lack of internet" which might result from either financial issues or the policy of service providers that resulted in lack of internet infrastructure in suburbs, towns, or villages. The code with the second-highest frequency (f=11; 31%) is "lack of hardware" that intends to explain the lack of devices such as computers, tablet computers or smartphones required to participate the distant education process. The category that is third and last in rank in terms of both

number of codes (n=3) and quotations (f=18; 17.83%) is technical problems that include hardware, software, and internet connection issues. The code with the highest frequency (f=12; 67%) in this category is "internet connection problems" which was either because of internet speed or consistency.

As shown in Table-3, within personal factors theme, the category with the highest number of codes (n=13) and quotations (f=78; 61.42% / totals) is negative. In this category, the code with highest frequency (f=12; 15.38%) is "preference of face-to-face education" and the second one is "anxiety" (f=10; 12.82%). Nine quotations are linked with the code "ineffective" (11.54%) and eight are linked with "negative attitude" (10.26%). The category with

second highest number of codes (n=7) and quotations (f=36; 28.35 % / totals) is positive and in this category code with the highest frequency (f=8; 22.22%) is “beneficial”. The code second in rank in terms of frequency (f=6; 16.67%) is “best solution”. The category with the lowest number of codes (n=3) and quotations (f=13; 10.24%) is neutral. Codes in this category explains the status quo in distant education process rather than providing positive or negative personal attitudes towards it. The code with highest frequency (f=6; 46.15%) is “preference of synchronous mode” by users.

As summarized in Table-4, the category with the highest number of codes (n=30; 31.58%) and quotations (f=94; 32.53%) is named as system since the codes in here represent the advantages and disadvantages of distant education system in terms of teaching and learning. In this category, the sub-category of positive includes a higher number of codes (n=16; 53.33%) and quotations (f=51; 54.26%) than the negative in which 14 codes (46.67%) are linked with 43 quotations (45.74%). The codes with highest frequency in positive sub-category in system are “flexibility of time” and “rewatching advantage” (f=8; 15.69%). They are followed by “flexibility of place” and “ongoing education” (f=7; 13.73%). On the other hand, the code with the highest frequency in negative subcategory is “limited interaction” (f=16; 37.21%) and the code with the second highest frequency is “communicational problems” (f=7; 16.28%). The assessment category that holds the codes related to assessment process in distant education process has 13 codes (13.68%) linked with 36 quotations (12.46%) and four of these codes are within the positive subcategory. Of these four codes, the one with the highest frequency is “alternative assessment advantage” (f=8; 66.67%). There are nine codes in the negative subcategory of assessment and the codes with highest frequencies are “reliability concern” (f=10; 41.67%) and “validity concern” (f=4; 16.67%). Another category is named as lessons since the codes here are linked with how lessons were carried out and experienced by participants. There are eight codes (8.42%) and 30 quotations (10.38%) in this category. While the number of codes is the same (n=4) in the two subcategories, the number of quotations in negative subcategory (f=22; 73.33%) outnumbers the quotations in the positive one (f=8; 26.67%). The codes with the highest frequency in positive subcategory are “achieving course objectives” and “appropriate content” each of which linked with 3 quotations (37.50%). The code with highest frequency in negative subcategory of lessons category is “attendance problems” (f=9; 40.91%), and it was followed by “materials problems” (f=7; 31.82%). Another important code in here is “inappropriacy for practical courses” (f=5; 22.73%). The codes related to parental manners in distant education process are brought together in the category called parent, and the four codes (4.21%) with nine quotations (3.11%) in this category divided equally in positive and negative subcategories. Within positive subcategory, the code “support” is attached to three quotations (60%) and “monitoring” is linked with two

(40%). In the negative subcategory, the code “lack of support” has a frequency of three (75%) and “irresponsibility” has one (25%). The category that includes codes related to the roles in, responsibilities and perceptions of students in distant education is named as students. There are 17 codes (17.89%) in this category and 69 quotations linked with these codes equal to 23.88% of total coding in the theme. In the positive subcategory of it, there are 8 codes (47.06%) and they are attached to 14 quotations (20.29%). The codes with the highest frequency in here are “regulating own learning process”, “satisfaction” and “time management ability” (f=2; 18.18%). On the other hand, there are nine codes in negative subcategory while their frequency (f=55; 79.71%) outnumbers the positive one. There are three codes in here that equal to more than ¾ of all quotations, namely “motivational problems” (f=20; 36.36%), “lack of technological knowledge” (f=12; 21.82%) and “participation problem” (f=10; 18.18%). The last category in this theme is named as teacher as it includes codes related to teacher roles, responsibilities, and perceptions. There are 23 codes (24.21%) and 51 quotations (17.65%) linked with them. In the positive subcategory of it, the number of codes is 9 (39.13%) and they are attached to 10 quotations (19.61%). The code with highest frequency in here is “student-teacher interaction” (f=2; 20%) and all the other codes have a frequency of one (10%). In the negative subcategory, there are 14 codes (60.87%) and they are attached to 41 quotations (80.39%). In this subcategory, the codes “additional workload” and “traditional teaching methods” are each linked with 7 quotations (17.07%). The other two codes with high frequencies are “insufficient feedback” (f=6; 14.63%) and “lack of experience” (f=5; 12.20%).

## Results and Discussion

The findings reveal that most of the studies analyzed in this study employed qualitative research methodology, which could be attributed to the context specific nature of it as it is reported in the literature that it is not possible to think research phenomenon independent of its natural context. Besides, qualitative research methodology allows for deep and comprehensive analysis of a case (Creswell & Poth, 2018). In this respect, it could be argued that researchers preferred qualitative research methodology since they investigated a specific case, the impact of COVID-19 on education, in its real-life context in order to reach comprehensive understanding. Also, socio-economic disparities among the agents of education became much more apparent during COVID-19 pandemic which might be the reason for limited number of quantitative research aiming to reach generalizable results.

The study further displayed findings concerning the overuse of survey design in both quantitative and mixed research methodologies which could be credited to convenience of preparation, data collection, and cost-effective nature (Fraenkel, Wallen, & Hyun, 2011, p. 396)



especially in challenging pandemic conditions during which people were locked down in their homes. It is important to note here is that a valid and grounded research design was not reported in the studies conducted through mixed methodology at a considerable number and in few of the studies conducted qualitatively. It is suggested for researchers to pay necessary attention to explain research methodology in detail for a stronger scientific basis.

Another important finding of the study is that the sampling centered around university students, which could be an expected situation because of the ease of reaching university students by the academicians. However, it has been portrayed in the relevant literature that the subjects that have been affected most by this constraining crisis are K-12 students (Goldberg, 2021; Middleton, 2020), but when we look at the studies conducted with K-12 students, we see that the number is almost scarcely any. The reason could be attributed to the gap between the academia and schools. This gap must be bridged through constructive educational policy development which might contribute to the development of more inclusive studies.

As discussed in the findings section, the studies mostly focused on the effect of COVID-19 on teaching and learning process as expected. Within teaching and learning theme, the studies examined address to system-oriented concepts more when compared with the other categories including student, teacher, assessment, lesson, and parent-oriented codes. Among the system-oriented codes, "flexibility of time" under positive subcategory has been quoted the most which is a consistent finding with the existing literature (Arkorful & Abaidoo, 2015; Çamlıbel-Acar & Eveyik-Aydın, 2022). It is also not surprising that "rewatching advantage" is the other most grounded code within the positive subcategory of the theme as the distance education was carried out through both live and recorded lessons in Turkish educational context. "Flexibility of place" and "ongoing education" are the second most grounded codes in the studies. The distance education carried out in the pandemic is considered to be advantageous in terms of allowing flexibility in place and a good alternative in critical conditions just like COVID-19. However, when it comes to the negative aspects of the system, the studies emphasized "communicational problems" and "limited interaction" which might originate from the distance education portals used allowing only or mostly one-way communication.

With respect to student entitled subcategory within teaching and learning theme, it was observed that distance education during COVID-19 provided chances for the students to regulate their own learning process, although relevant literature provides contradictory findings (Calamlam, Ferran, & Macabali, 2022). Also, it was observed that distance education promoted students' time management abilities and enabled satisfaction as revealed in the studies investigated. Despite the time management concerns in distance education from the

perspectives of students as claimed by Fidalgo, Joan Thormann, & Lencastre (2020), the present study provided a finding of a positive relationship between distance education and time management ability of the students on the basis of the analyzed studies as suggested by Haslina and Hilmi (2019). However, the codes under negative subcategory have stronger density as they were attached to more quotations. Three codes, "motivational problems", "lack of technological knowledge", "participation problem", explain a big majority of the total. It is crystal clear that motivational process is a critical issue in distance education as revealed in the studies investigated, and the relevant literature provides similar findings in various educational context (Chiu, Lin, & Lonka, 2021; Muslimin & Harintama, 2020) which requires further research on the relation between motivation and distance education. Similarly, lack of technological knowledge is the other most recurring code which emphasizes limited ability in using latest technology in the adaptation to distance education. In this sense, it is necessary to foster digital skills of students to ease their adaptation to a digitalized world and increase their self-efficacy. As suggested by Song, Marilyn, and Oh (2019), limited or low participation of students to online classes is a critical issue and the reasons were attributed to a variety of factors including the design of the online education system, tasks and activities employed, methodology etc. In Turkish education context, the most possible reason might be the use of systems and platforms which allows partial or no interaction and communication.

As in the student theme, negative aspects in the teacher theme are far more dominant when compared with the positive aspects. Additional workload, traditional teaching methods, insufficient feedback and lack of experience are common concerns of and about teachers that could be attributed to limited technological pedagogical and content knowledge and inability to adapt to distance education because of the rapid transition from face-to-face education. Within this perspective, it is suggested to update teacher training courses curriculum in terms of technology integrated teaching and distance education in order to avoid inadaptability and provide flexibility.

The assessment is a critical and complex component in education, and it has been more challenging in the distance education process (Almeida & Monteiro, 2021; Guangul, Suhail, Khalit, & Khidhir, 2020). This can be clearly seen in the findings of this research in which assessment as an important category in teaching and learning theme mostly linked with reliability and validity concerns. On the other hand, the findings revealed that distance education enabled alternative assessment advantage for the teachers and students as an alternative to summative assessment that is widely employed in face-to-face education. In this respect, it is suggested to increase the number of experimental studies on the assessment in distance education addressing reliability and validity concerns.

As in the previous categories, negative elements are more apparent in lesson-oriented codes. Attendance problems is the most quoted code in the analyzed studies which represents students' limited or no attendance to synchronous or asynchronous courses offered by the teachers. Several studies underline the attendance problem as a hindrance for learning and academic success (Ancheta, Daniel, & Ahmad, 2021; Weijers, Ganushchak, Kim, & Björn, 2022). Then, necessary precautions should be taken to increase students' attendance and thus increase the efficiency of distance education. Despite the availability of rich digital teaching and learning resources, it is strange to come across material oriented problems in the studies. This could be attributed to teachers' tendency to use traditional face-to-face teaching and learning materials, lack of technological content knowledge and restricted guidance. Besides, it might also be caused by limited self-directed learning abilities of students' that resulted in unwillingness for searching and using supplementary digital resources and materials. Although the literature provides conflicting results concerning the appropriacy of distance education for practical courses (Adeyeye, et al., 2022; Bahanshal & Khan, 2021), the present study provides findings highlighting inappropriacy of distance education for certain practical courses such as music, science, and English language teaching. It is surprising to find out achieving course objectives and appropriate content codes among the positive aspects of lesson-oriented category while rapid transition to distance education did not allow for any updates for course content and objectives.

The partial or complete lockdown during COVID-19 pandemic attached further importance on family and parents, which brought about studies investigating parental support in distance education. As a result, in the studies analyzed, parent category came out with its positive and negative subcategories including contradictory findings. While some of the studies emphasize the existence of family support and monitoring in helping student learning, some others complain of the lack. In this sense, it could be argued that this is a context specific issue and further research is needed to obtain more valid and reliable findings.

The second theme that has been most frequently quoted is personal factors including positive, negative, and neutral subcategories. As in the previous theme, negative aspects are quite common compared to other subcategories as they explain more than half of the quotation number. It is revealed that distance education was not preferred when compared with face-to-face education which could be attributed to spontaneous transition to emergency distance teaching leading to anxiety, negative attitude and perception of ineffectiveness that is relevant with the existing literature (Bali & Liu, 2018; Kemp & Grieve, 2014; Sticklen & Amato-Henderson, 2021). On the other hand, the findings also reveal that if distance education has no alternative as in the COVID-19 lockdown process, students prefer synchronous mode rather than asynchronous. However,

when the positive aspects are examined, the findings are contradictory as in the negative subcategory, but the frequency of the relevant codes is quite low. The codes labeled as beneficial, best solution, and positive attitude might be associated with unprecedented COVID-19 crisis and unpredicted emergency transition to distance education that did not disrupt ongoing education. Also, the process might be perceived as it contributed to the professional development of teachers since it stimulated the need for increasing technological knowledge and technological pedagogical content knowledge.

Concerning the contextual factors theme, the study provides consistent results with the existing studies (Baran & Baran, 2021; Das, Behera, & Paital, 2022; Tadesse & Muluye, 2020) as it reports lack of infrastructure, lack of internet, and hardware, internet connection problems are the major obstacles for distance education. The policymakers, authorities, and all other shareholders are advised to focus on these issues and take necessary precautions as such an unprecedented event may reoccur in the future.

## Genişletilmiş Özet

### Giriş

2019 yılının sonlarında yeni bir koronavirüsün tanımlanması yeni bir dünya düzeni yaratmıştır. Sağlık hizmetleri üzerinde en güçlü etkisi olan Covid-19 salgını, kısa sürede 200'den fazla ülkede yaklaşık 1,6 milyar öğrenciyi etkileyen eğitim alanı başta olmak üzere toplumun tüm alanlarında ciddi aksamalara neden oldu (Pokhrel & Chhetri, 2021). Buna bağlı olarak, eğitim yetkilileri, teknik, teknolojik, kültürel ve bağlamsal kısıtlamalar açısından bir ülkeden diğerine hazırlık ve benimseme farklılıklarına rağmen, kısa bir süre içinde dersleri takip etmek için gerekli altyapının hazırlanmasına ilişkin zorluklarla karşı karşıya kaldı. Bu bakış açısıyla, bu çalışma, COVID-19 krizi sırasında Türk eğitim sisteminde yürütülen uzaktan eğitime ilişkin yapılan ve ERIC veri tabanında yayınlanmış olan araştırma çalışmalarına sistematik bir bakış sunmayı, seçilen makalelerde acil uzaktan öğretim sırasında araştırma ilgi alanlarını ve hızlı geçişin etkisini ortaya çıkarmayı amaçlamıştır. Bu doğrultuda şu araştırma soruları çalışmanın kapsamına yön vermiştir: 1- Araştırma yöntemlerinin, tasarımının ve örneklemin dağılımı nedir? 2- Temalar nelerdir? 3- Sonuçlar nelerdir?

### Method/Yöntem

Nitel araştırma deseniyle yürütülen bu çalışmada betimsel ve açıklayıcı literatür taraması yöntemleri kullanılmıştır. Betimsel literatür taraması yöntemi, bir grup araştırmanın sonuçlarını sayısallaştırarak yorumlanabilir kalıplar ve eğilimler elde edilmesi amaçlandığında oldukça faydalıdır (Paré, Trudel, Jaana, & Kitsiou, 2015) ve bu yönüyle bu araştırmanın birinci ve ikinci araştırma sorularının cevaplandırılması açısından uygundur. Diğer taraftan, üçüncü araştırma probleminin cevaplanabilmesi için açıklayıcı literatür taraması yöntemi tercih edilmiştir ki bu yöntem daha önce yapılmış çalışmalarda yer alan teoriler ve çerçeveler, temel

değişkenler ve bunların işlevleri ve/veya bu çalışmaların bulgularına odaklanarak önemli ve/veya tartışmalı temaları keşfetmek için kullanılan bir yöntemdir (Januário, Narciso, Vieira-Santos, Fonseca, & Relvas, 2018).

Araştırma kapsamına alınacak çalışmalar için ERIC dizininde 15 Aralık 2021 ile 10 Ocak 2022 tarihleri arasında tarama yapılmıştır. Aramada kullanılan anahtar terim "Covid-19" olarak belirlenmiş ve arama sonuçları 2020 ile Aralık 2021 arasındaki zaman dilimiyle sınırlandırılmıştır. İlk araştırma sonucu 154 makaleye ulaşılmış; ardından, son seçim kriterlerini uygulamak için bu makalelerin özet kısımları okunmuştur. Eğitimle ilgili olmayan ancak başlıkta veya özetinde COVID-19 terimi bulunan, ölçek geliştirmeye yönelik, psikoloji ile ilgili yapılmış, literatür taraması içeren ve Türkiye'de yapılmamış makaleler hariç tutulmuştur. Buna göre araştırma kapsamına 123 çalışma dahil edilmiştir.

Birinci ve ikinci araştırma sorularına ilişkin bulguları temsil etmek için tanımlayıcı istatistikler (frekanslar ve yüzdeler) kullanılmıştır. Üçüncü araştırma sorusunun bulgularına ulaşmak için araştırmacılar ayrıntılı bir kodlama işlemi gerçekleştirmiştir. Kodlama, verilerin araştırmacılar tarafından yakından incelenmesini içeren birinci dereceden veya açık kodlama yoluyla ham verilerden önemli temaların, konuların veya modellerin çıkarıldığı tümevarımsal bir süreçte gerçekleştirilmiştir (Chandra ve Shang, 2019). Araştırmacılar, güvenilirliği sağlamak için işbirlikçi bir nitel analiz prosedürü uygulamıştır.

### **Bulgular**

Birinci araştırma sorusunun sonuçlarına göre, incelenen makalelerde en çok kullanılan desen nitelidir (f=69; %56). Bunu nicel yöntem (f=37; %30) izlemiş ve en az kullanılan yöntem karma yöntem (f=17; %14) olmuştur. İncelenen makaleler örneklem olarak toplam 50.058 katılımcıyı içermiş ve örneklem 7 gruba ayrılmıştır. Örneklem sayısının büyüklüğüne göre sıralanmış olarak bu gruplar şu şekildedir: üniversite öğrencileri (n=22,751; %45,45), karma (öğretmen, öğrenci, veli, okul yöneticisi, Milli Eğitim Bakanlığı yetkilileri, akademisyenler ve üniversite öğrencileri olmak üzere en az iki farklı gruptan katılımcılar) (n=18.769; %37,49), öğretmenler (n=4.491; %8,97), akademisyenler (n=3.263; %6,52), okul öncesi-12. sınıf öğrencileri (n=653; %1,30), ebeveynler (n=70; %0,14) ve okul müdürleri (n= 61; %0,12).

İkinci araştırma sorusu kapsamında elde edilen bulgulara göre, incelenen çalışmalarda bağlamsal faktörler, kişisel faktörler ve öğretme-öğrenme süreci olmak üzere üç tema bulunmaktadır. "Bağlamsal faktörler" teması, teknik sorunlar, sosyo-ekonomik sorunlar ve politika odaklı sorunlar olmak üzere üç kategoriyi içermektedir ve ayrıca politika odaklı sorunların olumlu ve olumsuz olmak üzere iki alt kategorisi vardır. "Kişisel faktörler" teması olumlu, olumsuz ve nötr olmak üzere üç kategoriye sahiptir. Son tema olan "öğretme-öğrenme süreci" ise sistem, dersler, veliler, öğrenciler ve değerlendirme olmak üzere her biri olumlu ve olumsuz alt kategorilerine sahip 5 kategori içermektedir.

Üçüncü araştırma sorusunu cevaplamak üzere yapılan kodlama süreci bulgularına göre, en fazla alıntı (n=243; %53,89) ve kodlar (n=95; %60,51) öğretme-öğrenme süreci ile ilgilidir. Bu tema adından da anlaşılacağı gibi uzaktan eğitim sürecini doğrudan etkileyen öğretmen, öğrenci, veli vb. faktörlere (alt kategoriler) ilişkin kodları kapsar. İkinci en fazla alıntı yapılan tema (n=116; %25,72) ve kodlar (n=44; %28,03) araştırma katılımcılarının uzaktan eğitime yönelik kişisel olumlu, olumsuz veya tarafsız yaklaşımını temsil eden kişisel faktörlerdir. Bağlamsal faktörler teması 92 alıntı (%20,39) ve 18 kod (%11,46) içermektedir ve alıntı ve kod miktarı açısından temalar arasında üçüncü sırada yer almaktadır. Bu tema, üç alt kategorisi (politika odaklı konular, sosyo-ekonomik konular ve teknik sorunlar) ile uzaktan eğitim sürecini olumlu veya olumsuz etkileyen unsurlara ilişkin kodlardan oluşmaktadır.

### **Sonuç ve Tartışma**

Bulgular, bu çalışmada incelenen çalışmaların çoğunun nitel araştırma metodolojisini kullandığını ortaya koymaktadır. Araştırmacıların, belirli bir vakayı, COVID-19'un eğitim üzerindeki etkisini gerçek yaşam bağlamında araştırdıkları ve kapsamlı bir anlayışa ulaşmayı amaçladıkları için nitel araştırma metodolojisini tercih ettikleri söylenebilir. Araştırmanın bir diğer önemli bulgusu da muhtemelen akademisyenlerin üniversite öğrencilerine ulaşma kolaylığı nedeniyle örneklemenin üniversite öğrencileri merkezli olması; ancak doğrudan okul öncesi-12. sınıf düzey öğrencileri ile yapılan çalışmalara oldukça sınırlı olduğudur. Bunun nedeni, akademi ve okullar arasındaki bağlantının zayıflığı olabilir. Bu boşluk, daha kapsayıcı çalışmaların geliştirilmesine katkıda bulunabilecek yapıcı eğitim politikası geliştirme yoluyla kapatılmalıdır.

"Zaman esnekliği", "mekan esnekliği" ve "kesintisiz eğitim" çalışmalarda en temel alınan kodlardır. Pandemi sürecinde gerçekleştirilen uzaktan eğitim, bu konularda avantajlı ve tıpkı COVID gibi kritik koşullarda iyi bir alternatif olarak değerlendirilmiştir. Ancak sistemin olumsuz yönleri söz konusu olduğunda, yapılan çalışmalarda sadece veya çoğunlukla tek yönlü iletişime izin veren uzaktan eğitim portallarından kaynaklanabilecek "iletişim sorunları" ve "sınırlı etkileşim" vurgusu yapılmıştır. Ayrıca, uzaktan eğitimin yüz yüze eğitimle kıyaslandığında tercih edilmediği ortaya çıkmıştır. Bu durum acil uzaktan eğitime ani geçişin beraberinde getirdiği kaygı, olumsuz tutum ve etkisizlik algısına bağlanabilir.

### **Araştırmanın Etik Taahhüt Metni**

Yapılan bu çalışmada bilimsel, etik ve alıntı kurallarına uyulduğu; toplanan veriler üzerinde herhangi bir tahrifatın yapılmadığı, karşılaşılabilecek tüm etik ihlallerde "Cumhuriyet Uluslararası Eğitim Dergisi ve Editörünün" hiçbir sorumluluğunun olmadığı, tüm sorumluluğun Sorumlu Yazara ait olduğu ve bu çalışmanın herhangi başka bir akademik yayın ortamına değerlendirme için gönderilmemiş olduğu sorumlu yazar tarafından taahhüt edilmiştir.

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