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Trends of Studies on Education in the Covid 19 Pandemic: A **Descriptive Content Analysis**

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Abstract

This paper aims to examine the trends of studies on education in the course of the Covid 19 pandemic with a holistic approach. The sample of this study consists of 360 studies published in journals within the scope of SSCI, SCI-Expanded, ESCI, SCOPUS, and ERIC. The publication classification form was used in the analysis of the studies. In this research, the descriptive-content analysis, one of the qualitative research designs, was used. According to the results, the studies were published in the Education Sciences Journal and published in journals with SSCI and SSCIexp index the most. The studies were mostly the subjects that involved the distance education process and remote learning. In addition, it is found that the most used research method was the qualitative method. Document review, interview, and survey were used as data collection tools. Also, the sample of the studies consisted of mostly undergraduate students, and the sample size was between 31-100. Descriptive analysis and content analysis were mostly used to analyse the data. It is revealed that t-test and non-parametric tests were mostly applied in the results obtained regarding the inferential statistics calculations. The following can be suggested on the result of the research; During the covid 19 pandemic, studies were mostly gathered under the umbrella of distance education. Studies have guided the education field on how the field can better use and develop the remote learning process in case of an epidemic or a global threat.

Keywords: Covid 19, Content Analysis, Distance Education, Holistic Approach, Remote Learning.

Introduction

The novel Coronavirus (SARS-CoV-2), which emerged in the Hubei Province of the People's Republic of China, has spread very quickly to many countries around the World (Velevan & Meyer, 2020). Based on the increasing number of cases and death rates, on January 30, 2020, the WHO Emergency Committee declared a state of emergency in a global epidemic (WHO, 2020). Due to the very rapid transmission of the virus from person to person and the increase in the number of cases and death rates, quarantine decisions have been implemented in many countries on a global scale. All countries supported the "stay at home" calls and implemented the isolation process to minimise the contagiousness of the disease. With the quarantine decisions, social mobility has been reduced, and work, education, and social activities have been suspended. One of the areas most affected globally by the quarantine practices has been the education and training fields. According to UNESCO (2020) data, more than 188 countries have suspended face-to-face education during the pandemic. It has been determined that this rate corresponds to 91% of the world's student population in total.

The disease, which forced the whole world to change psychologically, socially, and economically, profoundly affected the education world. The countries' education systems faced a situation where they were unprepared. The education world has implemented distance education, which it has used as an option until now, as an alternative to face-to-face education. 1.6 billion students in 200 countries (Yang, 2020) worldwide had to adapt

About the Article

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to a new system from their traditional education system with the closing of schools during the Covid 19. In this process, it has occurred many problems such as teachers' lack of technological and pedagogical knowledge and experience, inequality in students' access to distance education, issues experienced by teachers and students during distance education, the psychological effects of the transition from face-to-face education to distance education, the capacity of countries to provide distance education services, the level of academic achievement in the process, the uncertainty about the future of the schools, and the anxiety caused by parents, students, and teachers. In this process, the states have worked on alternative digital teaching applications, training sets, and programs to enable the future of education and online applications to function smoothly.

There were international studies on the reflections of the difficulties, disruptions, deficiencies, and mandatory changes in education in the Covid 19 period (Alameny-Arrebola et al. 2020; Bai, 2021; Cavus et al. 2020; Darras et al. 2020; Dhanalakshmi et al. 2020; Grauman, 2020; Hadar, 2020; Kay et al. 2020; Kuhweld et al. 2020; Kidd & Murray, 2020; Iglesias Pradas et al. 2021; Sahlberg, 2020; Torrau, 2020; Wonk & Moorhouse, 2020). The need has arisen to examine all the studies that reveal the situations in the education process during the pandemic period. This study investigates education trends in the Covid-19 pandemic by making content analysis with a holistic perspective. We hope this research will be shown the trends in the Covid-19 education period and provide a perspective for future studies in the new education process. In addition, the results of this study due to sample saturation are thought to be important for the literature. This research examines the studies on the Covid-19 pandemic education in SSCI, SCI-Expanded, ESCI, SCOPUS, and ERIC indexed international journals in terms of various variables. For this purpose, the research questions are as follows:

- According to the published journals, what is the distribution of the studies on education during the Covid-19 pandemic?
- What is the index distribution of the journals in which the studies are published?
- Which topics were preferred in the studies on education during the Covid-19 pandemic?
- Which research methods were used in the studies on education during the Covid-19 pandemic?
- Which data collection tools were used in the studies on education during the Covid-19 pandemic?
- How were the sampling characteristics of the studies on education during the Covid-19 pandemic?
- Which data analysis methods were used in the studies on education during the Covid-19 pandemic?

Theoretical Framework

Regarding the Covid-19 pandemic in various countries, academic studies on education have been carried out in the international arena. These studies aimed to reveal the pandemic's challenging and urgent situations. In this sense, examining these studies with a holistic approach is critical in determining the trends of this new process in education.

A holistic approach is based on the belief that the individual's social-emotional, psychological, ethical, and academic developments are interconnected. The primary goal is to meet the individual's needs considering all the development areas (Miller, 1992). It is an approach that delicately examines the relationship among individuals, society, and culture. It is possible to say that the basic principle of the holistic approach is integrity, a link between almost everything in the universe. Also, this approach is an educational journey for students to realise themselves and interact with others in the world. Many learning theories adopt a holistic approach in education. One of the most important is the Gestalt approach, called holistic theory. There have been many studies on the Gestalt approach. According to Wertheimer (1938), the individual perceives a behaviour as a whole, not by spreading it into its parts. The whole is more meaningful and different from its constituent parts. According to Koffka (1922), a human is not a mechanical being, therefore, it does not solely make sense to examine its details. Individuals are not just beings that react to the stimuli coming from their environment; rather, they are entities that interact with their circumstances and create a reaction as a result.

According to the Gestalt approach, each individual is special and has a phenomenological perception. Moreover, learning refers to how individuals understand and make sense of the physical and psychological environment (Arnheim, 1961).

As stated by holistic theorists, two environments are important, the physical environment (physical and objective reality) and the psychological environment (psychological or subjective reality). As stated by them, the behavioural environment (subjective reality) determines behaviour. In addition to Pragnanz law, individuals' needs, values, beliefs, and attitudes also contribute to the physical environment's meaning and organisation of sensory stimuli. Therefore, the interpretation of the environment is important, as people's reactions in the same physical environment may be different. Individuals are not separate from the problems around their physical environment; the psychological environments' effects have more impact than the physical environment on the individuals' behaviour (Humprey, 1924).

The belief that the psychological environment that is, the behavioural reality, is more influential than the physical environment as a determinant of behaviour might be translated into the students and their teaching-learning process as follows: students' beliefs, values, needs, attitudes have an important effect on making sense of physical stimuli in the teaching-learning environment. In other words, the effects of external conditions depend on the student's internal states. Therefore, the mission of teachers is to create a learning context in line with the needs and wishes of the students. In addition, throughout this process, a learning environment should be arranged in which students can develop a positive attitude towards learning and coincide with their values.

The holistic theory focused primarily on the perception and problem-solving processes. Their views on learning and their work on perception are similar. According to them, perception is an organisation. The Gestalt gathered the auxiliary laws of the organisation into a more general common law. This law, called Pragnanz, believes that every psychological phenomenon tends to be meaningful, simple, and complete. Individuals try to make sense of the stimuli coming from their environment and reach a balance. Therefore, they perceive similar stimuli, arrange stimuli close to each other, and complete the missing stimuli, thus trying to reach the balance (Aydın, 2007; Ellis, 2013; Latner, 2011).



One of the most important reflections of Holistic Theory on education is the practices of insightful problem solving and productive thinking. In order to have insightful problemsolving behaviour, students must be evaluated with all aspects of the problem. Put another way; students should have the necessary items for the problem and its solution. In addition, students need a long preliminary solution process to solve the problems intuitively. Consequently, teachers should give students sufficient time so they can explore new information about the problem, rearrange and develop the problem, and cognitively try out possible solutions. Through the teacher's repetition, students will be more successful in solving a problem, permanent learning will be ensured, and the learning-teaching process will become more meaningful. Plus, for students to transfer what they have learned to other situations, teachers should bring real situation problems to the classroom environment and allow students to come up with solutions to these real problems (Aydın, 2007).

According to Gestalt theorists, since individuals interact with society, they could develop anxiety and stress when their needs are not met. Thus, dissonance appears regarding behaviours and learning (Weisberg & Alba, 1982). The pandemic is the most recent example of this situation. During the pandemic, there were some changes, innovations, and challenges regarding the cognitive, social, and psychological aspects of students' learning processes. According to United Nations Educational, Scientific and Cultural Organization UNESCO (2020), nearly 1 million students from more than 100 countries worldwide have been affected socially, economically, psychologically, and academically during the pandemic.

The first one of these effects is "deficiencies in learning" undoubtedly. For students, schools are fundamental learning places. Besides schools' physical aspect, they are essential learning organisations. As students were away from schools as physical learning contexts during the pandemic, it negatively affected them physically, socially and academically. The second effect is "social isolation". For the first time, students experienced such a deep experience with the concept of "social isolation" during the pandemic. Schools are places for students to "socialise". Students were deprived of their socialisation processes, could not interact with their peers, and their communication was also negatively affected. The third major impact is that the "online learning" system has been a compulsory part of basic education. Even though this brought innovation in education, it also brought inequality and deprivation of education for students who do not have internet access. The other effect is the difficulty and pressure experienced by the schools that continue their educational activities. Another uneasiness and fear experienced by families are "the deficiencies experienced by students in terms of academic and health". As can be seen, the education process has been exposed to many external effects during the pandemic.

Method

Research Design

Since the main purpose of this research is to determine the trends of studies related to education during the Covid-19 pandemic, the research was carried out with descriptive content analysis, which is one of the most suitable qualitative research models for this purpose study. Descriptive content analysis is a systematic study that includes all published or unpublished studies within a specific subject and evaluates their trends and research results in a descriptive dimension (Lin, Lin & Tsai, 2014). It is the examination of all qualitative and quantitative studies, published or unpublished, carried

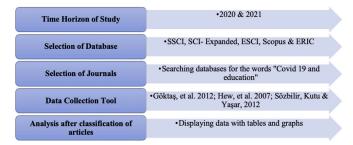
out independently of each other within a determined subject, and determining the general trends in the field. Descriptive content analysis shows the general trend of researchers who work or want to work in the relevant field and subject and guides future studies (Miles & Huberman, 1994). Study Group

The research population consists of open and full access articles about education during the Covid 19 process, scanned in international indexes. The sample of the study consists of 360 full-access articles published in 202 different journals within the scope of "SSCI, SCI-Expanded, ESCI, Scopus and ERIC between the years of 2020 and 2021. In the sample selection of the article to be included in the research, the criteria for "full access and the words Covid 19 and education" in the title of the article were determined. A total of 400 articles were reached during the study. However, full access to 40 articles could not be achieved. The summary sections of these articles were read, but these articles were not included in the study due to the lack of information suitable for the sub-purposes of the study. In this context, purposive sampling was used in the research sample selection. The 360 articles included in the study by carefully scanning the journal issues and volumes are presented in Appendix 1.

Data Collection Tools

In this study, data were collected by document review. The data collection process was planned within the scope of the criteria determined in the study. The steps followed for this process are given in Figure 1.

Figure 1. Data Collection Process



According to Figure 1, it is seen that the studies were conducted between the years 2020 and 2021 as an emerging time of Covid 19. Then, it was determined in which database to search; international databases "SSCI, SCI-Expanded, ESCI, Scopus and ERIC" were searched. In line with the studies made with the determined keywords, the articles in the journals were listed and analysed with the Publication Classification Form. The Publication Classification Form, which was used as a data collection tool in the study, was created and inspired by similar studies in the literature (Göktaş et al. 2012; Hew et al. 2007; Sözbilir, Kutu &Yaşar, 2012). The classifications made are presented in tables and graphs together with the frequencies.

Data Analysis

A total of 360 articles within the scope of this study, according to the categories (name and author of the study, the journal in which the study was published, the index of the journal, the subject of the study, the research method of the study, the sample of the study, the data collection tool of the study, the data analysis of the study) in the "Publication classification form" analysed. The data obtained as a result of the examination of each article were transferred to an Excel file. In the data obtained in this study, frequencies



and percentages were calculated, and descriptive analysis was used. Regarding the data recorded in the created Excel database, the frequencies and the percentages related to these frequencies were calculated to correspond to the answer to each research question.

Validity and Reliability

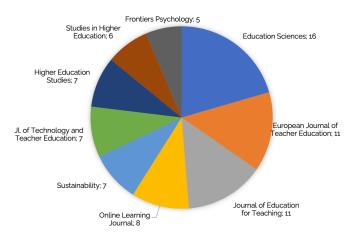
Taking the necessary precautions for validity and reliability requires the correct steps of the study and the accuracy of the research results. In this context, all stages of the process followed in data collection and analysis for internal validity are explained in detail. To ensure the reliability of the research, the articles examined within the scope of the study were shared by the researchers. In the first stage, each researcher entered the data of the articles they examined in the form published on the web. In the second stage, the accuracy of the data entered was checked by another researcher by re-examining the articles. The final decision was made by discussing the differences of opinion that emerged during these controls. For reliability, (Reliability = Agreement / (Agreement + Disagreement) x 100) was used to calculate the percentage of agreement between encoders; the percentage of agreement was calculated as 0.94 (Miles & Huberman, 1994).

Results

Distribution of the Studies According to the Published Journals

According to the content analysis, the names and numbers of the journals in which the studies are published are mentioned in Figure 2.

Figure 2. Distribution of the Studies According to the Published Journals

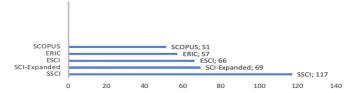


This study included 360 studies were published in a total of 202 journals. As seen in Figure 2, the studies are mostly published in the Education Sciences journal (f=16), followed by the European Journal of Teacher Education and Journal of Education for Teaching with 11 articles, in the Online Learning Journal with 8 articles, in Sustainability, Higher Education Studies, Jl with 7 articles respectively. There are 6 articles in the Journal of Studies in Higher Education and 5 articles in the journal Frontiers Psychology. In addition, there are journals with one or two articles not included in the figure (Appendix 1).

Index Distribution of the Published Journals in the Studies

According to the content analysis, the indexes of the journals in studies are published given in Figure 3.

Figure 3. Distribution of the Journals Index

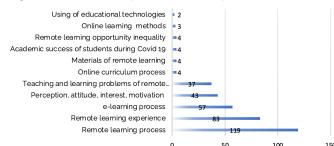


According to Figure 3, the SSCI index (f=117) comes first in the indexes of the published journals. This is followed by 69 SCI-Expanded, 66 ESCI, 57 ERIC, and 51 Scopus indexed journals, respectively.

Distribution of Preferred Topics in Studies

According to the content analysis, the preferred topics in the articles are given in Figure 4.

Figure 4. Distribution of the Research Topics

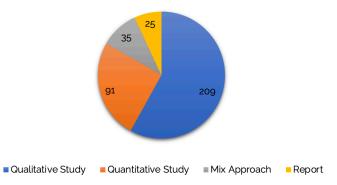


According to Figure 4, when the distribution of the studies examined in the research is analysed, it is seen that the greatest number of studies involving remote learning process (f = 119) in the Covid 19 period. There are 83 studies describing remote learning experience; 57 studies including the e-learning process; The number of studies evaluating the interests, attitudes, perceptions, and motivations of students and teachers is 43; 37 studies including e-learning and problems experienced in the education process; Online curriculum applications, materials of remote learning, studies that evaluate student academic success, and talk about the inequality of opportunity in online education 4; 3 studies on online learning methods; 2 studies using of educational technologies, online learning measurement, and evaluation, the physical and mental health of students during Covid 19.

Distribution of Research Methods in Studies

When the research methods in the articles are examined, a table like Figure 5 is faced.

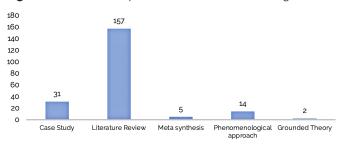
Figure 5. Distribution of the Research Topics





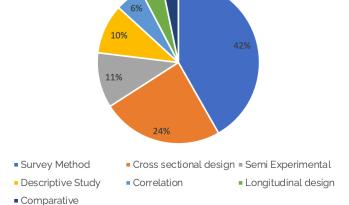
According to Figure 5, 209 (58.06%) of a total of 360 studies within the scope of the research are studies prepared with the qualitative method. 91 of the studies (25.28%) are quantitative studies; 35 of them (9.72%) are conducted with mixed methods. In addition, 25 (6.94%) studies are prepared in the form of reports on education status during the Covid 19 process. Research designs used in all research methods are given in Figures 6-8.

Figure 6. Distribution of the Qualitative Method Designs



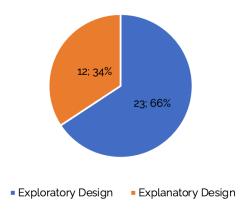
According to Figure 6, it seems that 157 of the 209 qualitative studies within the scope of the research are literature review; 31 of them are in case study design; 14 phenomenological models; 5 of them are meta-synthesis; 2 studies are grounded theory.

Figure 7. Distribution of the Quantitative Method Designs



According to Figure 7, 38 (42%) of the 91 quantitative studies are survey method, 22 (24%) are cross-sectional studies; 10 studies (11%) are in semi-experimental method; 9 (10%) studies are descriptive; 5 studies (6%) are correlational, 4 (4%) studies are longitudinal, and 3 (3%) studies are in comparison design.

Figure 8. Distribution of the Mix Method Designs



According to Figure 8, it is seen that out of 35 mixed methods in the exploratory research design of 23 (66%), 12 of them (34%) are in explanatory design.

Distribution of Data Collection Tools in the Studies

The data on the data collection tools in the studies are given in Table 1-3.

Table 1. Distribution of Data Collection Tools in Qualitative Research

Data Collection Tool	Types	Number of articles (f)
Document review	=	130
Interview	Structured	30
	Semi-structured	26
Survey	Open ended	14
Observation	Non-participant	8
	Participant	2

As seen in Table 1, the most used data collection tool in qualitative studies is document analysis (f = 130). It is followed by 56 interviews, 14 open-ended surveys, and 10 observations. In addition, more than one data collection tool is used in one study.

Table 2. Distribution of Data Collection Tools in Quantitative Research

Data collection tools	Types	Number of articles (f)
Survey	Likert	53
	Mix	9
Alternative tools (rubric,	Open ended	16
Interest-Attitude- Perception tests	Open ended	11
Achievement test	Multiple choice	4

According to Table 2, the most preferred data collection tool in studies using quantitative methods is the questionnaire (*f* = 64). Out of 59 surveys, 53 are Likert type, and 9 are mixed form. After the survey, the most preferred data collection tool is alternative tools.

Table 3. Distribution of Data Collection Tools in Mix Method Research

Data collection tool	Types	Number of articles (f)
	Likert	15
Survey	Mix	12
	Open ended	2
Interest-Attitude- Perception Tests	Open ended	9
Focus group discussion	Semi-structured	6
Interview	Semi-structured	5
Achievement test	Open ended	4

According to Table 3, the most preferred data collection tool in mixed studies within the scope of the research is the questionnaire. A total of 29 questionnaires, 25 are in Likert type, 2 are open-ended, and 12 are mixed. After the survey, the preferred data collection tools are interest, attitude,



perception tests 9, focus group discussion 6, interviews 5, achievement tests 4 open-ended forms.

Distribution of Sample Characteristics of the Studies

Table 4. Frequency of Sample Levels

Table 4.1 requeries of Sample Levels		
Sample Level	f	%
Undergraduate students	46	29.87%
Teachers	38	24,68%
Parents	21	14,29%
Academics	16	10,39%
Primary school students	10	7.79%
Middle school students	12	6,49%
School administrators	8	5,19%
Preschool students	2	1,30%
Total	154	100

According to Table 4, the most preferred sample level in studies is undergraduate students, with a ratio of 29.87%. Teachers followed it with 24.68%, respectively; 14.29% parents, 10.39% academicians, 7.79% primary school students, 6.49% middle school students, 5.19% school administrators, 1.30% pre-school.

Table 5. Distribution of Sample Size

Sample size	Qualitative Research	Quantitative Research	Mix Research
Between 1-10	14	-	-
Between 11-30	22	3	3
Between 31-100	15	37	6
Between 101-300	9	13	16
Between 301-1000	2	18	6
More than 1000	_	19	4
Total	62	72	35
More than 1000	-	19	4
Total	62	72	35

According to Table 5, it is seen that the sample range between 11-30 in qualitative studies was highest in number. 15 studies were followed by between 31-100, 14 studies between 1-10, 9 studies between 101-300, and 2 studies between 301-1000. In quantitative studies, the highest sample range in number was found to be the sample size between 31-100. 19 studies were followed by more than 1000 sample size, 14 studies between 301 and 1000, 13 studies between 101-300, and 3 studies between 11-30, respectively. In mixed studies, the sample size was between 101-300. 16 studies were followed by between 31-100, 6 studies between 301-1000, 4 studies in the range of more than 1000, and 3 studies between 11-30, respectively.

Distribution of Data Analysis Methods in the Studies

The distribution of data analysis methods used in the articles is examined as qualitative and quantitative methods, and the data obtained are given in Tables 6 and 7.

Table 6. Qualitative Data Analysis Distribution

Sample Level	Analysis types	f
Qualitative Data Analysis	Content Analysis	52
	Thematic Analysis	40
	Descriptive Analysis	16
Total		108

According to Table 6, it is seen that content analysis is the most preferred among qualitative data analysis, followed by thematic analysis and descriptive analysis, correspondingly.

Table 7. Quantitative Data Analysis Distribution

Quantitative Data Analysis			
Descriptive		Inferential	
	f		f
Frequency/ Percentage/ Chart	81	t- test	49
Median and standard deviation	51	Nonparametric tests	35
Graph Representation	25	Regression	28
		Correlational	21
		ANOVA/ANCOVA	17
		Factor Analysis	7
		Other	4
Total	157		161

As seen in Table 7, the frequency/percentage/chart is used the most, 81 times, in the descriptive statistics calculations in quantitative data analysis. And it is followed by the mean/standard deviation as 51 times and the graphic representation as 25 times. It is seen that t-tests are used 49 times, non-parametric tests 35 times, regression 28 times, correlational analysis 21 times, ANOVA 17 times, factor analysis 7 times, and other analyses are 4 times in inferential statistics calculation.

Discussion, Conclusion and Suggestions

In this study, which aims to examine the international articles about education in the Covid-19 pandemic according to various variables, 360 studies were analyzed by content analysis. According to the first findings of the research, the studies related to the Covid 19 process in the international area were mostly published in Education Sciences, Journal of Education for Teaching, Online Learning Journal, and Sustainability. Yavuz, Kayalı and Tutal (2021) concluded that the articles were mostly published in the Sustainability journal in their study. Education Sciences, which ranked first in this study, ranked third in the related study. These different results in the studies may be related to the different number of articles examined in both studies.

According to the second sub-objective results of the analysis of the studies on education on the course of the Covid-19 pandemic, the journals within the scope of SSCI are in the first place in the ranking of the articles in accordance with the indexes of the published journals. SCI-Exp and ESCI index followed it. In the third sub-objective of the research, the remote learning process took first place regarding the distribution of the preferred topics in the studies. Aristovrik et al. (2020), Kay et al. (2020), Yaman (2021) had similar findings in their studies. Aristovrik et al. (2020) surveyed 30.383 students in 62 countries to evaluate the Covid-19 pandemic and



found that students had the most difficulty in adapting to the remote learning process; while Kay et al. (2020) found that the disruptions in the online learning process of the students affected the efficiency of the practical training; in a study by Yaman (2021), in which online learning processes were compared, it was stated that the online learning process should be able to continue without reducing the efficiency of students and teachers.

According to the results obtained in the fourth sub-objective of the research, the most widely used research method was the qualitative research method, followed by quantitative and mixed studies, and the least preferred was reports. This finding supports the study has been reported by Daşdemir & Cengiz (2020), Homolak et al. (2020) and the study of Yavuz, Kayalı and Tutal (2021), however, contradicts the study of Maulana (2020), in which it was found that the number of quantitative studies was more than the number of qualitative studies. This difference in studies may be due to the large number of qualitative studies related to distance education at the beginning of the pandemic.

According to the findings of the fifth sub-objective of the present study, the most used data collection tool among the qualitative studies was the document review, followed by the interview, survey, and observation. In quantitative studies, the survey was the first, then alternative tools, interest, attitude, perception tests and achievement tests followed. In mixed studies, the survey took the first place, and it was followed by interest, attitude, perception tests, group interviews, interview and achievement tests. In general, document review, interview, and survey data collection were preferred the most in the studies. In the study of Maulana (2020), document analysis as a data collection tool was the most preferred one in qualitative studies; Yavuz, Kayalı, and Tutal (2021) concluded in their studies that survey was the most used data collection tool in quantitative studies. These findings are similar to the results of the present research. In addition, the presence of mobile data and alternative data collection tools in data collection tools may also indicate that new mobile application studies have been developed during the Covid-19. If we interpret it in general, we can say that data collection tools were chosen accordingly since studies that could produce short-term solutions to the problem were carried out based on a limited understanding of time and space during the Covid-19 pandemic. This result of the research is compatible with the studies in the literature (Dikmen & Demirer, 2016; Türkoğlu & Oner, 2020; Sarıkaş & Bilican-Demir, 2020).

According to the sub-objective results, the sample characteristics of the study was observed; undergraduate students appeared first in the sample levels. It is followed by parents, academicians, primary school students, secondary school students, and pre-school students. The reason why undergraduate students are in the first place in the sample levels may be the difficulties, disruptions, and future status of the process experienced by the university department that requires practical education; and the students who must practice during the Covid-19 pandemic. Iyer et al. (2020); Gamage et al. (2020); Yu & Jee (2021); Maulana (2020); the studies by Yavuz, Kayalı and Tutal (2021) supported this finding. The sample sizes were mostly 11-30 in qualitative studies, 31-100 in quantitative studies, more than 1000 was the second and 101-300 in mixed studies.

The content analysis took first place among the qualitative analysis methods used in the research. It was followed by thematic analysis and descriptive analysis. In quantitative data analysis methods, frequency/percentage calculation is the most preferred; mean and standard deviation descriptive

statistics calculations took second place. The third, t-test, was followed by non-parametric tests, regression, correlational, Anova, factor analysis, and other predictive statistical analyses.

However, these findings are similar to the study results by Doğan and Tok (2018), in which content analysis took the first place in qualitative data analysis. In the study by Göktaş et al. (2012), frequency and percentage calculation analyzes were mostly used in quantitative method studies.

The limitation of this research is the results of a total of 360 studies published in the SSCI, SCI-Expanded, ESCI, SCOPUS, and ERIC databases. If we look at it from this perspective, the following general findings can be pointed out about the research results. The world of education, such as the fields of economy, politics and health, was caught unprepared for the pandemic. Distance education, which has been an alternative teaching method for education until this time, has been used as a compulsory teaching method all over the world during the pandemic. It is also usual for qualitative research and document analysis techniques to come to the fore in studies. Because in these studies, information has been transferred to provide education stakeholders with the information on the pandemic to make the distance education process better serve students.

The most frequently preferred subject in studies is the distance education process has also created the idea that this change can be a part of the education world. Based on the distribution of the subjects in the studies, it is seen that apart from the online learning practices in the Covid-19, this new situation is carried out in studies that evaluate academically, psychologically and physically. If we evaluate this situation within the framework of holistic theory, the pandemic, which is a global and external factor, has negatively affected education and training practices. As a matter of fact, Onyema et al. (2020) claimed that as a result of their study, the Covid-19 had devastating effects, and the studies focused on student, school and infrastructure problems of the online learning system. It can be said that the studies mostly focus on the academic and learning-teacher process, while the number of studies emphasizing the psychological aspects of students in the pandemic was less. This finding aligned with the systematic study by Cachon- Zagalaz et al. (2020), where the number of studies examining the effects of the Covid-19 on students' psychological and motor skills is low. We can say that the state of chaos has increased the number of studies on the distance education method. In parallel, we can say that the most used data collection tools in studies are interviews and surveys, and this new process is preferred to reveal the current situation. As it is known, survey studies are studies that reveal the current situation and do not go deep into the problem. It is an expected result that the sample group includes students at the undergraduate level because the practical training of many undergraduate students (health and education degree) was interrupted during the Covid-19. At this point, it can be said that there are many studies in which the ideas and opinions of undergraduate students, including how the distance education process is reflected in practical education. Of course, we see the difficulties and shortcomings of the Covid-19 in primary, secondary and pre-school education levels. However, within the limitations of this study, it concluded that the studies were conducted mostly for undergraduate students. Also, it can be said that the sample numbers are in the range of 31-100, which is at a reasonable level during the Covid-19. In general, the results of this study show that online learning and the distance education process are shaped within the framework of integrating education. This study examined studies on education during the Covid 19 period from a



holistic perspective. It is clear that the Covid 19 process has started a new era in education.

- In the new education process where distance education and digital platforms are integrated into education, there is a need for new studies on the future of online learning, how it will provide a more qualified education process to students, teachers' techno-pedagogical knowledge and skills, and students' online learning adaptation process.
- In future studies, necessary measures should be taken so that education and training can progress in a hybrid structure with students and other stakeholders such as teachers, parents and administrators in schools.
- It is unknown how the next process will be, whether a new virus will cover the world, and what will change the education system. It is necessary to be prepared for all kinds of problems.

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