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MIDDLE SCHOOL TEACHER PERCEPTIONS OF THE IMPACT OF THE
COVID-19 PANDEMIC

By
Sherria La Vonne Grubbs

A Dissertation Submitted to the
Gardner-Webb University College of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Gardner-Webb University
2023

Approval Page

This dissertation was submitted by Sherria La Vonne Grubbs under the direction of the persons listed below. It was submitted to the Gardner-Webb University College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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I started this journey during the height of COVID-19 and honestly, I was not sure if or how I would make it through, but here I am, and I have to admit that the journey has been interesting. However, I know it is not a journey I could have taken alone, and therefore want to acknowledge some of the people who helped to turn this dream into a reality. I would like to acknowledge and thank my dissertation team for their time and dedication to be willing to help me through this process. Dr. Williams, I thank you for all the time you put in to help me get through this process. I remember our start was not so great and I do not think either of us knew if we would be a good fit for each other. I remember that something in my gut told me to keep you as my chairperson and I am so glad I listened and stayed the course with you. I am sure, Dr. Williams, that you are what I needed to get through this process. I appreciate you responding to my random texts, helping me when I reached out for help even if it was not initially scheduled, and your consistent guidance. Your dedication as my chairperson was beyond my expectations and I truly thank you for all your help and support. Dr. Stone, my first coach, it was you who set the bar so high for all the other professors my cohort and I encountered afterward. I remember you speaking life into us getting our doctorate and giving us hope that we could finish and that we could do it in a reasonable amount of time. Thank you for being there for me from the beginning until the end. Dr. Whitaker. I appreciate you being a part of my committee and always being a listening ear and someone I could talk to. Your guidance helped me be able to get through the stresses that come with being an administrator and helped me to stay the course; for that, I say thank you. I want to give a huge thank you to my classmate Chavon for going through this journey with me. We

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Abstract

MIDDLE SCHOOL TEACHER PERCEPTIONS OF THE IMPACT OF THE COVID-19 PANDEMIC. Grubbs, Sherria La Vonne, 2023: Dissertation, Gardner-Webb University.

This paper examines the perceptions of middle school teachers on the impact of the Covid-19 pandemic on student achievement, attendance and enrollment, mental health, and social and economic factors. Allowing the voices of the middle school teachers to be heard was important to this study because it helped to identify some key themes of the impact of the Covid-19 pandemic on education. For this qualitative research study, a survey was created with Google Forms and a focus group discussion was implemented using the zoom platform to gather and collect data for this study. 67 middle school teachers were invited to participate in the survey. However, only twenty-six middle school teachers (39%) participated in the survey. Five middle school teachers (50%) participated in the focus group discussion. Responses from this study helped to reveal emerging themes, which included limited access to Wi-Fi, lack of student engagement, anxiety, and community support. According to the responses of the participants, some students were not able to participate due to a lack of access to the internet which also affected student attendance and enrollment. Students' mental health became a huge issue as some students developed anxiety about having to go back to school in-person. Implications of this study suggested that further research should be conducted to gain a better understanding of teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors across all grade levels. It was suggested that school district leaders implement

action research to address the effects of the COVID-19 pandemic on social and economic factors, enrollment, attendance, mental health, and student achievement, as well as how to be prepared to address these areas in the event we are faced with such a crisis again.

Keywords: teacher perceptions, COVID-19, impact, student achievement

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Chapter 1: Introduction

In March 2020, the world came to a screeching halt. Schools across the United States closed immediately because of what had now become a national pandemic due to the COVID-19 virus. Thousands of people were losing their lives daily, and this affected students and families everywhere. School as we knew it was no longer in existence. School systems had to find an immediate remedy to finish the school year by implementing an all-virtual platform. This meant that parents were now responsible for making sure students logged into their computers for virtual Zoom and Google Meet sessions. This led to a whole new set of issues relating to the academic achievement of students. Did everyone have a computer to log into? Did school systems have enough computers to serve all their students? Did students have the Wi-Fi access they needed to participate in Zoom and Google Meet sessions? The big question was, how was this going to affect students academically?

Upon realizing that not all students had equal access to technology, Governor Roy Cooper and the North Carolina Department of Public Instruction announced that students would not be graded for the remainder of the school year. This announcement created another set of unexpected issues in the midst of the pandemic concerning attendance. Virtual attendance became a huge problem. Once the announcement was made that students would not be held accountable academically for the 2019–2020 school year, they disappeared. Very few students attended their virtual Zoom and Google Meet sessions. Teachers were often left teaching virtual classes of sometimes one or two students, and again, people were left wondering how this was going to affect the students academically.

Many swift decisions were necessary during this unforeseen event when it came

to students across the United States. Aside from all the issues surrounding academics, school systems had to deal with the issue of feeding children, because many students receive meals such as breakfast and lunch only at school. Long-term school closures disrupted access to these meals. As a good breakfast and lunch are crucial to how students perform academically, this disruption became an issue. The number of school lunches and breakfasts missing weekly peaked at the start of the pandemic at 169.6 million (Kinsley et al., 2020). Through the end of April, that weekly projection stayed the same. To address this issue, The Families First Coronavirus Response Act permitted the USDA to disregard the national requirements for school meals. In order to give states flexibility in deciding where, when, and how school meals may be supplied during the shutdown of schools, the USDA approved 18 waivers worldwide. The intentions of the waivers were to simplify program operations and more importantly to protect the health of students and program staff. The waivers allowed for many meals to be served at once, feeding the guardian or parent without the child present, and modifying the rules for receiving federal financial reimbursement.

Little did the world know that the pandemic of 2020 would get worse and continue to linger and affect how school took place. The 2020–2021 school year started with most public school systems in North Carolina being completely virtual. However, while grace was being provided, online learning was no longer an option, but a requirement; grading was back in place, but students were still missing, technology access for learning was still inequitable, and the mental and physical health of students was now a major concern. With no previous data available, student achievement became a huge concern. End-of-grade (EOG) assessment results have raised some huge red flags

about the pandemic's implications on student academics.

Student Enrollment and Attendance

As I investigated the COVID-19 pandemic's effects on student academic performance through research, I also had to look at other factors that may have affected student achievement during this time. One of the contributing factors to student achievement is clearly attendance or the fact that during the shutdown of schools, many students were not actively present and engaged in the online instruction that was available at the time.

The North Carolina Department of Public Instruction's most recent figures showed more than 70,000 fewer students were attending public schools across North Carolina at the start of the pandemic (Sorrells, 2020). Data from the 2020–2021 fiscal year's first month of the school year showed an average daily decline in the average daily membership (ADM) of students in public school districts from the previous school year (Sorrells, 2020) .

North Carolina calculates the ADM as the number of days students are in attendance over the course of each month. It also uses the ADM to determine funding for school districts. A decrease in attendance leads to significant budget cuts for school districts; however, lawmakers approved a bill that would protect school districts against attendance drops caused by the COVID-19 pandemic in the 2020–2021 academic year (ABC11 Raleigh-Durham, 2020).

Even though the average decline in student attendance in North Carolina was 5%, the first month of the 2020–2021 academic year saw a 16% drop in student attendance, according to Weldon City Schools and Guildford County Schools. The biggest drop in

kindergarten ADM was recorded by Weldon City Schools, at -73.93%. With a 43.68% rise, Mount Airy City Schools saw the greatest increase in kindergarten ADM. North Carolina's largest school district, Wake County Public Schools, reported a 2% decline in attendance in the first month of the 2020–2021 academic year and a 3% decrease in attendance based on preliminary data in the second month of the 2020–2021 academic year. The first month of the 2020–2021 academic year showed a 13% decrease in kindergarten enrollment across the state over the previous school year. Enrollment in public schools was declining even before the pandemic. According to state data, between 2007 and 2019, the number of children attending charter schools quadrupled, while the number of pupils who were homeschooled doubled. Within that same time period, the number of K–12 students in public schools declined by 8.2%. A lot of the decline in ADM among these public schools came from kindergarten students who technically were not required to come to school during the kindergarten year since enrollment in kindergarten in North Carolina is not a state requirement (ABC11 Raleigh-Durham, 2020).

For each grade level in North Carolina, Table 1 displays the changes in ADM at the beginning of the COVID-19 pandemic in the 2019–2020 school year and during the pandemic's peak in the 2020–2021 academic year. As Table 1 demonstrates, most grade levels in North Carolina saw a decrease in ADM during the 2020–2021 school year, with the exception of 10th grade, which saw an increase.

Table 1*Changes in ADM for Each Grade in North Carolina During the Pandemic*

	2019–2020 ADM	2020–2021 ADM	Change
Kindergarten	103,367	87,646	–15.21%
Grade 5	111,106	102,193	–8.02%
Grade 11	107,563	99,167	–7.81%
Grade 4	106,905	100,120	–6.35%
Grade 6	112,043	105,010	–6.28%
Grade 2	104,384	98,311	–5.82%
Grade 1	104,350	98,393	–5.71%
Grade 3	104,763	99,183	–5.33%
Grade 7	112,922	107,732	–4.60%
Grade 9	121,872	117,849	–3.30%
Grade 12	100,357	98,611	–1.74%
Grade 8	110,436	109,736	–0.63%
Grade 10	106,752	111,724	4.66%

Mental Health

While academics were definitely a prime factor and major concern, mental health became an even bigger concern. Students were forced to be home helping take care of sick parents or younger siblings. Some students also had to stay home by themselves or with parents who were abusive or neglectful. For many students, school is considered their safe place; with the closing of schools due to the COVID-19 pandemic, that safe place was taken away, which definitely left many concerns for educators about student well-being. The COVID-19 pandemic caused schools to pay closer attention to the social and emotional learning of students.

Social and Economic Factors

One of the biggest economic factors of the COVID-19 pandemic was learning who did and did not have access to technology. While some public schools provided computers to every student, it was not until the COVID-19 pandemic that it was

discovered that not every student had access to WiFi. Some students could not afford it or lived in an area where WiFi was not available. Not only did we learn that some students did not have access to WiFi, but school districts also learned that students did not have access to technology altogether, making it difficult for them to participate in remote learning.

Another major factor that had to be considered were meals. School districts had to figure out innovative ways to provide meals to students and their families in the midst of the COVID-19 outbreak. With many students receiving breakfast and lunch at school, there was a growing concern about how meals would be provided to students so they would not go without during the pandemic.

The pandemic also caused other concerns because students could no longer interact with their peers face-to-face, they could not participate in any extra-curricular activities, and many were left alone or with younger or older siblings due to parents having to continue to work to provide for their households.

Statement of the Problem

In a tiny rural school district, concerning the present pandemic problem, teacher perceptions were gained to evaluate how the COVID-19 pandemic has impacted student performance, mental health, enrollment, attendance, and social and economic factors. The focus was specifically on the three middle schools. Student academic performance became a huge issue in the 2019–2020 academic year, while the implementation of normal district benchmark assessments and state-mandated assessments somewhat altered to meet the changes within the school districts throughout the COVID-19 pandemic.

While student achievement is of high priority in public schools, there are also

other factors that exist and are of importance when it comes to the COVID-19 pandemic's effects. The focus of this study was strictly on how the quick adjustments to the operation of public schools as a result of the unforeseen circumstances of the COVID-19 virus outbreak impacted student achievement, enrollment, attendance, mental health, and social and economic factors based on teacher perceptions.

Final EOG testing results have proven that there is a problem with student achievement, but the question is how much of this is due to the COVID-19 pandemic. While EOG reading results did not come back until later, the EOG math results yielded alarming results, causing the federal government to pass a bill requiring school systems to implement summer school for all K–12 students to try to combat the learning loss during the COVID-19 pandemic's peak.

As there have been no major pandemics in the United States since the Spanish Flu of 1918, there is no historical data relating to the COVID-19 pandemic. All data are recent and based on current events; however, a comparison of current COVID-19 data and historic data on the Spanish Flu and their effects on academic achievement offers some insight into how the pandemic has affected student achievement.

Purpose of the Study

The purpose of this study was to gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and emotional factors. As the researcher, I collected data based on teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and emotional factors. I also compared how the Spanish Flu and COVID-19 affected student achievement. I looked at the

perceptions of teachers in a small rural school district across three middle schools and looked for common themes in the research collected on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Research Questions

The following research questions were crucial to this study because they helped to determine how the COVID-19 pandemic has affected student achievement, enrollment, attendance, mental health, and social and economic factors based on teacher perceptions. These questions helped to establish differences and similarities in how global health crises have affected student achievement in the past and the present.

1. What are middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement in middle schools?
2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

Assumptions

There are numerous grounds to suspect that the COVID-19 pandemic has had a detrimental impact on student achievement, enrollment, attendance, mental health, and social and economic factors. One assumption is that many students were not engaged or attending school virtually and therefore missed pertinent information to help them progress throughout the school year. Also, not all students had equal access to the

technology they needed to attend, which also could result in negative results for student achievement. Mental health became a significant issue due to many students losing family members and in some cases parents due to COVID-19, causing them to disengage from their academics. Another assumption is that academically gifted or high-achieving students could handle virtual instruction, while pupils with special education plans or who were enrolled in the exceptional children's program struggled with virtual instruction. It is likely that the pandemic resulted in a decrease in student academic achievement; however, the data provides a better understanding of teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors in a small rural school district in North Carolina.

Scope of Study

The point of this research was to gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. As the researcher, I analyzed teacher perception data to find common themes as it related to the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. This research covered three middle schools to gain the perceptions of teachers on the impact of the COVID-19 pandemic. I looked at data from all three middle schools and found common themes to determine the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors based on teacher perceptions.

This research took place in North Carolina in a rural school district. The

reason for choosing a rural school district was the many challenges school districts have had to face during the pandemic, and the small number of schools made it easier to access specific data for this research study. Some of the challenges rural school districts had to face during the pandemic played a significant role in the COVID-19 pandemic's effects on student achievement, enrollment, attendance, mental health, and social and economic factors.

The study included existing data as well as teacher perception data on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. A focus group was also conducted to gain further data on teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and emotional factors.

Overview of Methodology

This study used a qualitative methods approach to gather information and analyze teacher perception data on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. While the main focus of the survey was based on teacher perceptions, existing data were also looked at to see how the COVID-19 pandemic impacted student achievement, enrollment, attendance, mental health, and social and economic factors. I obtained teacher perception data on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic through a survey and a focus group.

Setting

This research study involved three middle schools in a public school district located in a rural area of North Carolina. The public school system in this rural county spans multiple towns and cities. Eight elementary schools, three middle schools, four high schools, one virtual and blended school covering grades K–12, and one alternative school serving Grades K–12 make up the school district. The public school district serves approximately 6,701 students.

Role of the Researcher

Currently, I work for the North Carolina Public School System as an assistant principal. Education has been my choice for a professional career, and I have served as an educator for more than 30 years. I initially began my career in education as an early childhood educator working for private childcare centers as a preschool teacher and then moving to the Head Start program. I eventually joined the public school sector, and since then, I have served as an educator in elementary and middle schools. I served as an elementary school teacher for 10 years before joining the Principal Fellows Program in North Carolina. Upon completing the North Carolina Principal Fellows Program, I served as an assistant principal in an elementary school for 2 years; for the last 4 years, I served as an assistant principal in a middle school.

I graduated from the Borough of Manhattan Community College in New York City with an associate degree in early childhood education. Upon relocating to North Carolina, I felt it would be beneficial to my career and financially to further my education. I graduated from Shaw University with a bachelor's degree in elementary education. I also hold two master's degrees. One is in educational management from

Strayer University, and the other is in school administration from North Carolina Central University.

My passion for curriculum and instruction led me to conduct research on teacher perceptions of what the COVID-19 pandemic has done to student achievement, enrollment, attendance, mental health, and social and economic factors. As a believer that all students are capable of learning with the right guidance and effective instruction, it was important for me to research the impact of the COVID-19 pandemic on middle schools, especially with so many quick adjustments being necessary during the pandemic. While I was aware that a loss of learning occurred during the pandemic, this research provided a broader picture of how teachers perceived the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Overview of the Theoretical Framework

I looked at the constructivist theory and the cognitive theory for the theoretical framework for this study. The constructivist theory states that a student develops understanding through trial, error, and logic. During the COVID-19 pandemic, students as well as educators had to learn quickly how to navigate remote learning quickly through trial and error.

Educators also had to find ways to educate students who did not have access to the Internet and therefore provided paper packets for students to work on educational content. Unfortunately, due to learning being done remotely, students who received packets had to navigate through the packets on their own with no instruction being provided by a teacher or educator. Constructivism is a school of thought that holds that

people actively generate their own knowledge and that reality is shaped by what they encounter as they learn (Elliott, 2000). The COVID-19 pandemic embraced both the constructivist theory and constructivism.

Definition of Terms

Assessment

The evaluation or estimation of the nature, quality, or ability of someone or something.

ADM

The total number of part-time and full-time students, less withdrawals, registered each school day for the first 100 or 200 days of the semester, as appropriate.

Coronavirus

Any of a group of RNA viruses that can affect both people and animals and cause a variety of digestive, respiratory, and neurological disorders.

Data

Facts and statistics collected for references or analysis.

Equity

The quality of being fair and impartial.

Learning Loss

Any specific loss of knowledge and skills.

Pandemic

An epidemic or outbreak that becomes widespread and affects a whole region.

Perceptions

The ability to see, hear, or become aware of something through the senses.

Student Achievement

The extent to which learners attain their short- or long-term educational goals.

Virtual/Remote Learning

The distribution of education via cutting-edge technology like satellite, streaming video, or the Internet. Virtual learning means that registered students can take classes using either their own computers or school-issued computers over the Internet.

Summary

The COVID-19 pandemic of 2020 took the world by surprise and caused shifts in the educational world. The pandemic caused quite a few shifts in education and its implementation in public schools. In every aspect, there was a change from in-person attendance to online learning and paper packets, from in-person district and benchmark assessments to online assessments, and from direct instruction to remote instruction. Teachers, students, and parents have had to adjust to the immediate and constant changes that took place because of the onset of the pandemic.

The realization of the digital divide in our public school systems, along with students missing from school remotely, caused a major concern over academics and how the pandemic was affecting them. Therefore, this qualitative study gained teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, particularly focusing on three middle schools in a rural school district. In summary, the goal was to gain middle school teacher perceptions of the impact of the COVID-19 pandemic on

student achievement, enrollment, attendance, mental health, and social and economic conditions as well as to determine ways to address the situation if an event of this nature occurs again.

Chapter 2 addresses the theoretical framework while also exploring how the Spanish Flu of 1918 affected student achievement in comparison with the COVID-19 pandemic of 2020. Chapter 2 also addresses student achievement, remote learning, school closures, and the history of pandemics. Chapter 3 describes the methodology for this study. It addresses the processes to gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Chapter 4 addresses the research and provides findings and common themes of middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Chapter 5 addresses the research questions, provides an interpretation of the findings, provides final conclusions, and makes recommendations.

Chapter 2: Literature Review

Introduction

The COVID-19 pandemic is unlike anything most of the world has ever experienced, and therefore any research relating to the recent pandemic is current and truly relevant to what is happening today. While schools have had to adapt how they normally do things quickly due to the pandemic, research shows the various ways these adaptations have affected student achievement. However, to explore how the pandemic has affected student achievement, this chapter examines the research from the Spanish Flu pandemic of 1918 and the effects it had on schools and student achievement.

While the world has clearly changed significantly since the Spanish Flu pandemic with the advancement of technology, the implementation of social media, Zoom, Google Meets, and others, there is little information on how much or little the Spanish Flu pandemic affected student achievement in the 20th century. Research can reveal similarities and differences between the effects of the Spanish Flu pandemic and the impact of COVID-19 on academic performance.

In addition, this chapter examines how constructivist theory relates to this topic. It also looks at cognitive theory and how it relates to student achievement and constructivist theory. Constructivist theory states that students develop understanding through trial, error, and logic. This chapter examines constructivist theorists such as Jean Piaget and Lev Vygotsky, along with elements of constructivist theory. Cognitive theory also states that learning happens through experience and trial and error. This chapter shows how these theories are connected to the effects of pandemics on student achievement.

Theoretical Framework

Constructivist theory serves as the study's theoretical foundation and cognitive theory. Constructivist theory states that a student develops understanding through trial, error, and logic. Constructivism is an approach to learning that holds that people actively construct or make their own knowledge and that reality is determined by the experiences of the learner (Elliott, 2000). This study addresses two types of the constructivist theory: social constructivism and cognitive constructivism.

Cognitive Constructivism

Jean Piaget is responsible for the development of cognitive constructivism (Ansorge, 2020). According to his theory, people acquire knowledge through their ideas and experiences. Piaget studied child development. According to his theory, there are four distinct phases of development: sensorimotor (occurs between birth and 18–24 months), preoperational (occurs between 18–24 months and early childhood [7 years]), concrete operational (occurs between 7–11 years), and formal operational (occurs between adolescence and adulthood). His philosophy also covered the concepts of assimilation and accommodation. These two procedures concentrate on the process of learning rather than the factors that affect it (Brau, 2018).

Social Constructivism

Social constructivism was developed by Lev Vygotsky in 1978. According to Vygotsky, social interaction is the key to learning (Mcleod, 2023c). Students build a community of shared meaning with their peers through cooperating with others. In addition, Vygotsky thought that culture has a significant impact on cognitive development. The zone of proximal development was created by Vygotsky, who defined

it as "the distance between the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers, and the level of actual development as determined by independent problem solving" (McLeod, 2023c, p. 86). He held that giving a pupil the right help while they are in the area of proximal development for a particular activity will give them enough of a boost to complete the assignment (Brau, 2018).

The presence and abilities of someone with knowledge and abilities beyond those of the learner, social interactions with a skilled tutor or teacher who allow the learner to observe and practice the skills, and supportive activities or scaffolding from an educator or more competent person, such as a peer, to support the student as they move through the zone of proximal development, are three important elements that aid in the learning process.

Pandemic Effects on Education

The COVID-19 outbreak forced many governments to stop schools for many months in the spring of 2020. It has only just become apparent how the COVID-19-related school closings have affected student academic progress. Although closing schools was one of the most effective measures to stop the virus's spread, many educators expressed worries about how such actions might affect academic inequality and student progress. Natural disasters, summer vacations, and absenteeism-related school closings all have detrimental effects that have been well-documented. The impact of student accomplishment is less understood, though, as a result of the COVID-19-related school closings.

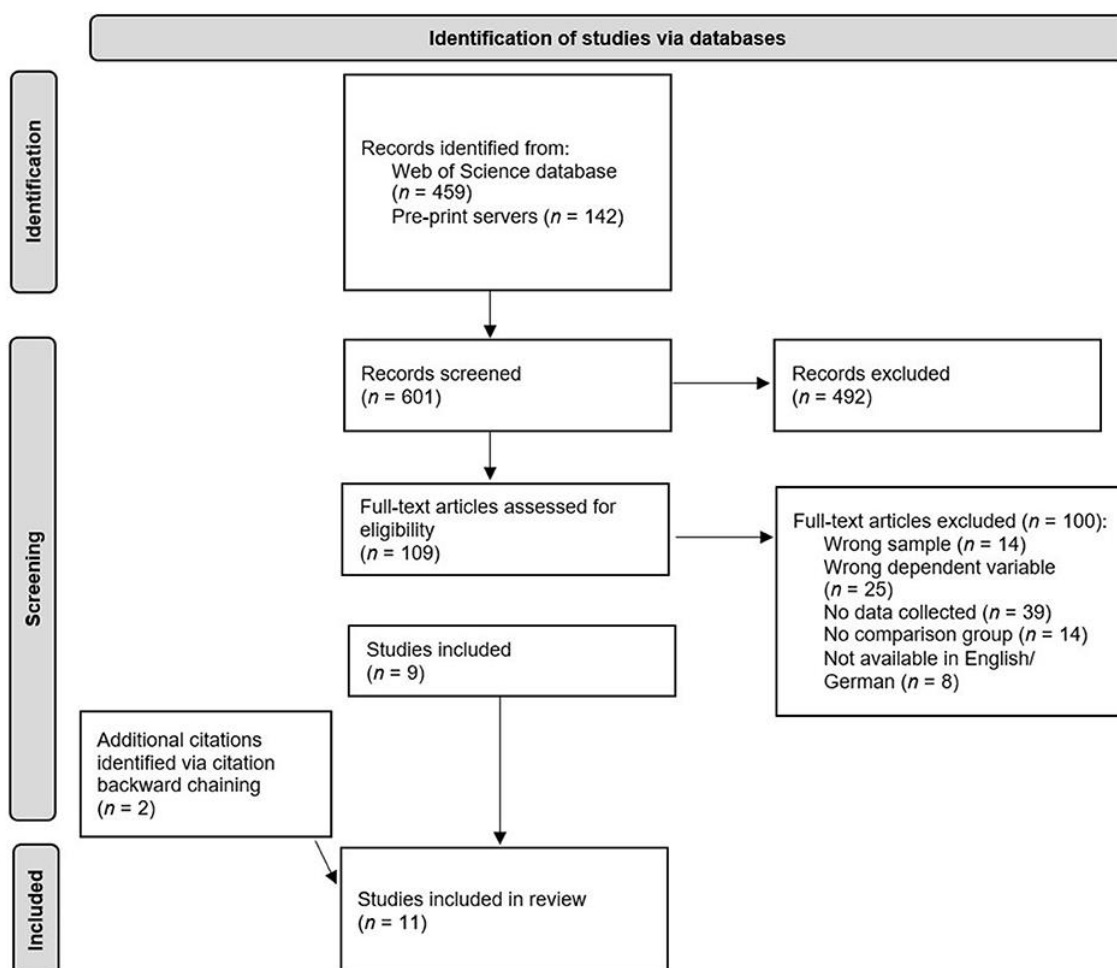
The majority of the research on school closures brought on by COVID-19 focuses

on remote learning and the application of digital learning technologies, the psychological impact and problems with school closures related to COVID-19, student motivation, and COVID-19-related counseling in schools. At the time, focusing on student achievement was not a top priority. On the other hand, a dismal image of COVID-19's consequences on student academic progress was starting to take shape. This study examined how COVID-19 has affected student academic performance. There are three research questions covered:

1. What are middle school teacher perceptions of the impact of the COVID-19 Pandemic on student achievement in middle schools?
2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

Selection of Studies

The effect of COVID-19 school closures on student success was looked at in a search of articles published between March 2020 and April 2021 in the Web of Science database. The COVID-19 school closures were still in force during this time, therefore they were constantly changing. I found 601 studies during the preliminary literature review that might be pertinent. To find any new studies that might be potentially pertinent, I then used the backward reference searching technique. A PRISMA flowchart of the literature search is shown in Figure 1 (Hammerstein et al., 2021).

Figure 1*PRISMA Flowchart of the Literature Search***Synthesis**

By taking information from 11 studies that were pertinent to the research topics, I synthesized the data. The data included the following: the nation; the length of the school closures; the sample description, which included the school's location and size; the subjects examined for student achievement; the statistical methodology; the effects of COVID-19-related school closures on student achievement; and differential effects as a result of a subgroup analysis.

The stated general and differential impacts were the information's primary focus. For both the overall general effect and the effects on reading and mathematics, I estimated the median of the reported effects. Even mixed effect and random effect meta-analytic models could not be used because of the study sample size.

General Effects of COVID-19-Related School Closures on Student Achievement

There were conflicting results from these 11 research studies on the impact of school closures due to COVID-19 on student attainment. The majority concluded that the COVID-19 school closures had a negative effect on student academic progress. There were detrimental repercussions on student mathematical achievement, according to seven research studies (Clark et al., 2020; Depping et al., 2021; Engzell et al., 2021; Kuhfeld et al., 2020; Maldonado & de Witte, 2021; Schult, 2021; Tomasik et al., 2020). There were detrimental repercussions on student reading achievement, according to five research studies (Clark et al., 2020; Engzell et al., 2021; Maldonado & de Witte, 2021; Schult, 2021, 2020; Tomasik et al., 2020). According to two studies, there was a detrimental impact on student performance in other areas including science and social studies (Engzell et al., 2021; Maldonado & de Witte, 2021). This is consistent with the learning losses associated with COVID-19-related school closures. The presumption is that there was not much time for teachers, parents, and students to adjust to and get ready for remote learning before the COVID-19 pandemic-related introduction of online education in March 2020.

Student accomplishment had a favorable impact, according to three studies. Meeter's (2021) and Spitzer and Musslick's (2020) investigations demonstrated that pupil mathematics achievement increased when using online learning software during the

COVID-19-related school closures. Additionally, there were more accurate answers to open-ended questions in a French program (van der Velde et al., 2021). The three research studies that produced encouraging findings concentrated on the usage of online learning tools. The fact that students were accustomed to using online learning software before the COVID-19-related school closings may have contributed to the positive findings of these research studies. If so, when the COVID-19 pandemic stopped in-person learning, they did not have to adjust to a new learning environment. Online learners who also used learning software at home used it more frequently. In comparison to classroom instruction, individuals were less distracted and under less time pressure at home. Additionally, they might have received personalized assignments from the online learning program.

In two more investigations, either reading-only or math-reading results were found to be favorable (Gore et al., 2021). This can be the outcome of accomplishment tests being administered some months after the closure of the schools. It might also be because summer learning groups are an excellent way for local policymakers, educators, and schools to make up for lost academic time (Depping et al., 2021).

Differential Effects on Particular Student Groups

The median effects for math and reading are comparable when all studies are averaged; however, several research studies discovered that different people had various effects. For instance, since arithmetic is simpler to teach remotely, the learning loss may have been bigger in reading than in math. Additionally, some students might not be able to communicate in the testing language; therefore, their language development would not be greatly aided or advanced during the COVID-19-related school closings. Another

reason why math may have suffered greater learning losses than reading is that during the COVID-19-related school closures, pupils spent more time reading than doing arithmetic, and parents may have found it simpler to assist their children with reading than math.

History of Pandemics

Throughout history, infectious diseases with the potential to become pandemics have frequently spread. The plague, cholera, the flu, SARS-CoV, and MERS-CoV are among the major pandemics and epidemics that have already devastated humanity (Piret & Boivin, 2021). The COVID-19 pandemic is currently affecting the entire world, much like the zoonotic pathogens that cause many infectious diseases that spread to become pandemics. Due to increased animal contact brought on by hunting, breeding, and international commerce activities, these infections are spread from animals to humans. Implementing public health measures like isolation, quarantine, and border control has served to keep contagious diseases in check and preserve social order for many centuries. These same techniques are still used today to aid in the control of infectious diseases. For effective responses in the event of a pandemic, new technologies for quick testing, contact tracing, medicine repurposing, and new platforms for the development and production of vaccines are required.

Prior to the COVID-19 pandemic, the Influenza Virus pandemic of 1918, sometimes known as the Spanish Flu, was the deadliest pandemic in recent memory. The Spanish Flu had an effect on 500 million individuals. Fifty million deaths were also brought on by its worldwide effect. In just the United States, the Spanish Flu claimed the lives of approximately 675,000 people. The authorities advised people to separate themselves or quarantine, exercise good hygiene habits, and minimize their social

engagement with one another because there was no vaccination to protect people from the illness (National Archives, 2020).

Students had to become used to learning online when the COVID-19 virus forced lockdowns at schools and was declared a pandemic. Due to the accessibility of technology, there are many tools and applications that let students study at home; however, there was no technology available during the Spanish Flu pandemic of 1918–1919. Flu quickly swept over the world, killing an estimated 50 million people, as decision makers in schools across the nation debated whether or not to keep their doors open. Since the 1830s, influenza cases have been documented, and worldwide outbreaks have happened at various times. Since the virus had already been studied and was widely recognized, many people underestimated the Spanish Flu and simply dismissed it when it first appeared. Schools could stay open because influenza did not have a high mortality rate among children and young adults. However, because of the terrible poverty and unhygienic living conditions, schools were frequently thought to be safer than certain residences, thus they wanted to remain open to keep children away from the virus-infected people and dirty streets (Barrolaza, 2020).

Medical inspector school corps were founded in cities like Boston and New York. These inspectors conducted daily inspections of public schools to assess both the general and individual health of children. The administration gave doctors and nurses orders to keep an eye on the well-being of students in the still-open schools. During their spare time, students were required to keep their distance and wear surgical masks. If a student displayed symptoms, they were either sent home or taken to the hospital (Barrolaza, 2020).

School Closings During the Spanish Flu Pandemic

It was up to the individual schools to decide whether to close during the 1918 Spanish Flu pandemic. There were not any statewide school closings. As a result, many schools in rural locations had to close for several weeks or months at a time without any communication. Depending on how many instances of influenza were present in the area, certain schools might open and close often (Barrolaza, 2020).

Masks

Masking protests began to appear all over the United States, not unlike what we see now. They were extremely obvious in San Francisco near the close of World War I, as many individuals disregarded the safety precautions that were in place. Many of the protests attracted little attention, while the war's end received more media attention. The Spanish Flu was not taken seriously by many people, which led to a monthly increase in the number of cases. By October 1918, conditions were so severe that people began donning masks, and schools were halted. They believed it had passed by November of that year and started acting normally once more; however, the flu was far from ended and continued to affect a large number of individuals. Schools resumed operations permanently in February 1919, but there was a lot of wasted time to make up for. Teachers in San Mateo and Burlingame, California, gave their time uncompensated to extend the number of school days so students could catch up. The instructors took care to prevent academic setbacks for the students.

North Carolina School Closings

When the pandemic first started in March 2020, Governor Roy Cooper declared that all schools would be closed for 2 weeks. For all North Carolina students and

teachers, this marked the start of remote learning; however, the governor declared in April that schools would be closed for the remainder of the school year.

Every component of K–12 schools has been tested since North Carolina schools were closed due to the pandemic. Significant trends have evolved that may have a long-term impact on schooling. Participation and attendance, literacy, broadband and technology, standardized testing, social and emotional support, nutrition, infrastructure, tutoring, and discipline were only a few of the effects of the pandemic on education.

Remote Learning

Reactions to remote learning were uneven. In July 2020, Governor Cooper declared that schools would run on Plan B, which involved lower capacity and a mixed approach to online and in-person instruction. He also offered schools the chance to work under Plan C, which meant that they would continue to offer remote instruction and that attending classes in person would not be an option. Governor Cooper provided districts the choice to have primary students return full-time in the autumn of 2020 if the districts desired it. Then, in March 2021, Governor Cooper and lawmakers came to an agreement allowing all pupils to attend classes in person full-time. Less attendance and less enrollment are the effects of these ongoing developments. To prevent budget cuts, educational leaders and school districts requested the legislature for a hold harmless on their ADM. This hold harmless was approved by the legislature in September. According to Rebecca Tippet, director of Carolina Demography at the Carolina Population Center at UNC-Chapel Hill, the state's public schools had roughly 63,000 fewer students enrolled in the second month of the academic year, a 4.4% decrease from the previous year (Granados et al., 2021). It is also noteworthy that, primarily as a result of an increase

in charter school enrollment, public school enrollment has been declining since the 2015–2016 school year.

Benefits of Remote Learning

Sometimes the pandemic can feel like a distant memory now that schools have resumed. The return of students to the classroom has provided some relief to many teachers and families. Significant academic setbacks happened as a result of stress, a lack of technology, a lack of school resources, and other factors.

Although remote learning had a lot of drawbacks, parents, psychologists, and teachers have also noticed certain advantages. Some student groups discovered novel and unusual ways to learn more actively while avoiding the challenges or distractions they typically experienced in the classroom. The difficulties associated with the pandemic and distant learning made mental health a focal point of the learning environment. According to Peter Faustino (Mental Therapy, 2021), a school psychologist in Scarsdale, New York, the pandemic also inspired educators and school psychologists to produce innovative strategies to guarantee the emotional and academic well-being of children (Abramson, n.d.). School psychologists and educators have noted several advantages of remote learning, including the importance of mental health, autonomy, a better knowledge of children's needs, a decrease in bullying, and more chances for students with special needs (Abramson, n.d.).

Faustino claimed that throughout the pandemic, discussions on mental health among families, students, and teachers grew (Abramson, n.d.). Since the pandemic affected everyone, there are now more frequent discussions about mental health issues with school administrators. This fresh emphasis has the potential to enhance student well-

being in a variety of ways, but it must first assist them in recovering from the pandemic's consequences. More than 600 clinicians are being employed by schools in New York City to conduct mental health screenings on pupils and assist them with processing stress related to the outbreak. Additionally, they are assisting them with adjusting to the new routine of going to school in person once more.

Teachers and parents are becoming more and more aware of how crucial it is to safeguard the mental health of children, not only for their physical well-being and security but also for their academic success. Eric Rossen, director of professional development and standards, said, "We've been seeing a wider respect for the idea that mental [health] is a necessity for learning rather than an extracurricular activity" (Abramson, n.d., p. 46). Rossen hoped that teachers would incorporate social and emotional learning into their regular lessons. Greater accessibility to resources for mental health is another advantageous result. School administrators had to devise strategies for providing mental health treatment to pupils remotely due to social distancing rules that were in place throughout the pandemic. This included teletherapy sessions with counselors and school psychologists as well as online referrals.

Some students had the option to learn at their own pace while participating in remote learning. According to educators, this benefited certain children and enhanced learning results, especially for older students. According to recent research, the largest advantage of remote learning was increased flexibility in a child's schedule or method of instruction, which was cited by 18% of parents (Roy et al., 2022).

Students who receive individualized instruction have more time for their interests and can complete their coursework when they are most likely to succeed. During the

pandemic, many educators had to reconsider how to keep pupils interested. Many school districts shared virtual curricula during remote learning, according to Rossen (Abramson, n.d.), giving older students the chance to enroll in more difficult or fascinating courses than they could in person. Younger students share the same situation.

Parental involvement in their children's education is one of the most crucial indicators of their academic performance. During the pandemic, parents had fresh opportunities to get to know their children and assist them in learning. Many parents claimed that the survey helped them better understand the requirements, learning styles, and curricula of their children, according to Breaux et al. (2021). The pandemic encouraged parents to participate more actively in their children's education while also helping them better understand the requirements of their children.

The bulk of bullying, based on the U.S. Department of Education, occurs face-to-face in unattended locations (Abramson, n.d.). Children with neurodevelopmental disabilities faced less bullying during remote learning and while they had to stay at home than they did prior to the pandemic. Asian American families claimed that online education protected their children from any racism they could have encountered in person at school. According to Breaux et al. (2021), fewer incidents of bullying at school lead to reduced stress, which can help the mood and self-esteem of children. Both have an effect on how well pupils can learn. Numerous schools are already attempting to think of new methods to support pupils who are in danger of bullying. They are also thinking about changing the atmosphere at the school.

According to Becker et al. (2020) findings, parents of students with ADHD—particularly those with a 504 plan or an IEP—reported increased difficulty with remote

learning. Some special needs students who had 504s or IEPs, however, did well in an at-home learning setting. Some special needs students have benefited from remote learning and shown an improvement in their academic performance. The ability for certain pupils to frequently watch tapes of their teachers' lessons has been beneficial. Students who struggle with anxiety also valued the option of skipping class because doing well in school can be challenging when faced with peer pressure. Students who struggle with shyness or social anxiety found it simpler to participate when learning remotely. School psychologists are now more equipped to engage pupils because of technology. The ability to type their thoughts allowed students to express humor or sophisticated ideas they might not have been able to express in person.

Districts have had a chance to reevaluate the previous routines they put in place prior to the pandemic and an opportunity to put new routines in place after the outbreak. While there was an acute need for remote learning during the start of the pandemic, some students also benefited immensely from it and received assistance that they might not have otherwise. Remote education also aided parents in knowing more about their children's learning styles. Bullying and other common behavioral difficulties were reduced throughout the pandemic, particularly through remote learning. While some students with severe learning challenges continued to struggle, some benefited from distance learning. There were advantages to remote learning during the pandemic, despite the fact that some aspects of it may not have benefited teachers and pupils.

Attendance

The North Carolina Department of Public Instruction provided detailed attendance data to lawmakers in September 2021 (Granados et al., 2021). An average of 36% of students were distant during that time. Nineteen percent of students were not consistently attending virtual learning, either entirely or in part; regular denoted 4 days per week. A total of 59% of pupils showed up in person, and 11% were not present very often (Granados et al., 2021). Approximately 15,000 of the state's students were missing, according to the North Carolina Department of Public Instruction (Granados et al., 2021). Data indicated that low-income areas or areas where schools already lacked enough resources were where enrolment was declining the most.

Learning Loss

Numerous parents, particularly those whose children had reading difficulties, found remote learning to be extremely aggravating (Granados et al., 2021). Some pupils' reading difficulties may have gotten worse as a result of remote learning. The majority of third-grade pupils who took the reading assessment at the start of the year performed poorly. On the test, approximately 75% of third-grade students did not perform at a competency level. The results in arithmetic and literacy point to an issue that was present before COVID. Sadly, the pandemic has made this issue worse.

The Excellent Public Schools Act of 2021 was passed by the state. The Read to Achieve Act was updated by this legislation, which mandated that all kindergarten through fifth-grade instructors and teacher candidates must complete training in the field of reading science. Over the following 3 years, such training will take place (Granados et

al., 2021). The state is hoping that the summer program plan will assist pupils who need it most in the interim.

Each North Carolina school district is required by law to provide students in kindergarten through fifth grade who were struggling with learning loss brought on by the pandemic with access to a summer program that lasts either 30 days or 150 hours. Students with the greatest needs are given priority, while all students are welcome to participate. The summer program is optional for all students, though.

Mental Health

Students develop connections, healthy lives, and emotional development mostly in schools; that is until the pandemic forced the closure of schools and prohibited pupils from returning to their regular lives. In retrospect, what schools were advising students to do was wholly incompatible with what the majority of people would consider a healthy lifestyle (Granados et al., 2021). Wake Forest High School's Student Assistance Coordinator Jodi Deskus said,

We were saying you need to isolate. We were saying you need to be on a device all the time. We were saying that you need to not be socializing regularly. We were saying that you do not need to come to school or participate in any activities, sports or otherwise. (Granados et al., 2021, p. 13)

During the transition to remote and hybrid learning, concerns about student mental health began to rise. While others were logging on for remote schooling, some students were tending to sick parents or aiding younger siblings. Normal school achievers were failing their classes. The hardest thing, in Deskus's opinion, was when you had no idea what had happened to the pupils (Granados et al., 2021).

Studies on how the pandemic and distant learning affect student academic performance and mental and emotional well-being do not always concur. Studies are not necessary for teachers to be able to recognize issues. Statewide, educators have noted poor and erratic attendance, high failure rates, and numerous difficulties in providing mental health assistance.

Testing and Accountability

The perennially contentious framework of testing and accountability was also thrown for a loop by the pandemic. End-of-course exams, EOG exams, and other high-stakes tests are administered in schools all around the state to create the school report cards. The state was granted exemptions from the federal testing and accountability standards in the spring of 2020. Additionally, lawmakers included a waiver in the state's statute. As a result, there would be no standardized tests, no school performance evaluations, no third-grade retention, and no summer reading programs. Additionally, this implied that students would not receive grades. The U.S. Department of Education under the Trump administration made it plain that states could not opt out of standardized testing once the 2020–2021 school year got underway, though it did provide some latitude over when the tests may be administered. People believed that this requirement may change under the Biden administration, but it did not, despite the fact that the government did grant accountability measure waivers.

The Digital Divide

The digital gap served as another obstacle to education. The state's decision to force school districts to close brought North Carolina's digital gap to the fore. While every school has high-speed internet access, things were different at home (Granados et

al., 2021). Early on in the pandemic, educational systems sought out rapid fixes to guarantee students could take part in online learning. Parents had to accompany their children to access points for some of those options. While some school districts provided students with hot spots to use at home, they needed cellular service and frequently had data caps. When it comes to long-term options for connecting homes to broadband internet, North Carolina is implementing a variety of technologies.

Student Achievement

The COVID-19 pandemic is a key component in current student success. Public education systems, some of which were already under considerable stress, have been severely impacted by the current pandemic in terms of operation and results. Children and schools throughout the world were impacted by the pandemic, though to varying degrees. The nation or area where they resided, their ages, their families, and whether or not they had access to some substitute educational activities throughout the pandemic were a few of those factors. Over 55 million American children under the age of 18 were forced to stay at home in early spring 2020 as the pandemic reached its first peak, while 1.4 billion people were forced to miss daycare or school nationwide as a result of the infection (Cluver, 2020). These pupils lacked regular access to the educational setting and the fundamental support it offered to many students. Students also missed social activities, team sports, and leisure activities like playground play or swimming during the height of the pandemic.

Many people formerly believed that the most significant result of a student's formal education was their academic performance. While academic success continues to be important in a student's life, social and emotional elements are becoming increasingly

important to researchers and decision makers as indications of student well-being and psychological growth. In the investigations of Colmar and Martínez, academic achievement is a factor (Moore, 2019). According to Colmar, the abilities of elementary school students to bounce back from academic buoyancy or academic setbacks were not accurate predictors of academic achievement (Moore, 2019). Australian students showed academic buoyancy effects that were mediated by self-concepts for both reading and mathematics achievement. The results demonstrated that motivated learners are more likely to employ psychological resources and, as a result, attain greater academic goals.

The major themes of Closson and Bond's study of Canadian university students were procrastination, academic participation, and the use of various social networking sites (such as Facebook, Twitter, and Instagram; Moore, 2019). In a very timely analysis, they found that while other, less complicated social networking sites had fewer negative effects, the use of some of them led to procrastination and poor acculturation to university life.

Student Achievement During the Pandemic

According to three reports, arithmetic scores have declined more than reading scores (Barshay, 2021). The surveys also revealed that there were significant learning gaps between the wealthy and the less fortunate. Trying to describe how pupils are doing academically has proven to be rather difficult due to the fact that school closings and pandemic experiences differ from family to family and state to state.

The current data ignore a sizable portion of students who are from low-income families. Due to the pandemic, many low-income students were less likely than other students to attend class in person or complete online examinations at home. Additionally,

there was no achievement data available for high school students who were in danger of dropping out at this time.

Based on research from July 27, 2021, the consulting company McKinsey & Company estimated that 800,000 elementary school children were 4 months and 5 months behind in reading and math respectively (Barshay, 2021). Estimates of learning loss are based on how students did on the i-Ready exams taken in class in the spring of 2021. According to McKinsey & Company's analysis, as this generation of less-educated children enters the workforce, the size of the U.S. economy could be reduced by \$128 billion to \$188 billion annually. Only if action is not taken to address the serious learning loss will this happen.

The very next day, on July 28, 2021, the nonprofit test developer NWEA released a more thorough study (Barshay, 2021). NWEA revealed that during the pandemic, children were learning significantly less (Barshay, 2021). Additionally, it demonstrated how low-income Black and Latinx pupils were falling further and further behind academically. According to NWEA, student reading and math scores decreased by 3–6 and 8–12 percentiles respectively, as compared to spring 2019 (Barshay, 2021). It did not state how many months the students were behind. The average third grader fell from the 55th percentile to the 43rd percentile as a result, based on students who took the test in the third grade in 2021. However, compared to American schoolchildren, NWEA's clientele is more White and more suburban. NWEA acknowledged that the issue is not as severe as it appears from its analysis because many low-income students chose not to take the assessment in the spring of 2021, despite the fact that it was accessible both in person and online (Barshay, 2021). According to NWEA, the Measures of Academic Progress

Assessment was administered to more than 3,000,000 students in Grades 3-8 in the spring of 2021 (Barshay, 2021). More than 10% of American public school students' academic achievement was recorded in 12,500 public schools.

Teachers all around the country acknowledged that they did not cover everything they would have in a typical school year. Information that teachers did not teach was not something students had to learn. According to NWEA, academic progress among children has not regressed (Barshay, 2021). During the 2020–2021 academic year, student achievement usually increased, although at a slower rate. In contrast to previous years, White students learned less in 2020–2021. NWEA did observe further declines in academic attainment among Black and Latinx pupils throughout the pandemic school year, though (Barshay, 2021).

During the pandemic, the achievement differences between students of various races and ethnicities widened. When compared to students from high-income families, where fewer pupils are qualified to participate in the free and reduced lunch program, scores for students who qualified for free and reduced lunch plummeted three times as much. Some students in other studies reportedly experienced no learning loss at all, according to Lake (Barshay, 2021); however, the learning loss was substantial for many students.

Testing specialists from throughout the nation were convened by Lake (Barshay, 2021) to assess learning loss calculations. In July, they released a report. The analysis featured 12 various projections from 2020 through the beginning of 2021. These figures, according to Lake, are just the tip of the iceberg because experts expected student achievement to have declined even more if pupils who did not take the diagnostic tests

were considered.

Understanding what each child needs is more crucial than knowing the precise amount of learning loss experienced by the average American student. The only way to provide the proper resources to the students who require the most help is to have that information. According to Lake (Barshay, 2021), it is critical for policymakers to comprehend the variety of learning losses and avoid providing generalized remedies.

Learning Theories

Learning is the process of learning, modifying, or enriching one's information, values, attitudes, skills, behavior, and worldviews. It brings together environmental experiences, individual experiences, and influences. Theories of learning create ideas that can explain how these processes function. Beginning in the early 20th century, learning became a subject of scientific study. Cognitive psychology, behaviorist theories, social constructivism, constructivism, experiential learning, multiple intelligences, contextual learning theory, and community of practice are some of the major theories of learning (UNESCO, 2016).

Behaviorism

Behaviorist viewpoints developed in the 1900s and took center stage in the 20th century. The central concept of behaviorism is that learning comprises a change in behavior brought about by the learning, application, and reinforcement of linkages between environmental cues and the subject's perceptible behavioral reactions (UNESCO, 2016). Measurable modifications in behavior are of interest to behaviorists.

Cognitive Psychology

Cognitive psychology supported the transition away from behaviorism. In the late 1950s, it started. Theorists of cognitive psychology saw persons as information processors. They abandoned the behaviorist view of humans as collections of reactions to environmental stimuli. The development of the computer as an information processor, which became analogous to the human mind, had an impact on cognitive psychology, which focused on complicated mental phenomena (UNESCO, 2016). Behaviorism did not take this into consideration. Learning is defined as the acquisition of knowledge in cognitive psychology because the learner processes information by absorbing it, applying cognitive processes to it, and storing the results in memory.

Constructivism

The idea that students are not merely passive consumers of information was birthed by constructivism. In the 1970s and 1980s, constructivism first appeared. Theorists of constructivism hold that students actively construct their knowledge through interactions with their surroundings and the restructuring of their mental architecture. Constructivism has various iterations. The learner-centered approach, in which the teacher acts as a cognitive facilitator rather than a knowledge transmitter, is present in all versions, nevertheless (UNESCO, 2016).

Social Learning Theory

Social learning theory was created by Albert Bandura in 1977 (McLeod, 2023a). He employed behavioral and cognitive frameworks that included motivation, memory, and attention. According to his learning theory, social context plays a role in how people learn. Additionally, according to Bandura, learning is aided by ideas like imitation,

modeling, and observational learning.

Situated Cognition

The development of the perspective of situated cognition and learning in the latter half of the 20th century altered the constructivist understanding of learning. Situated cognition and learning highlighted how important context is, especially in terms of social interaction. As the groundbreaking work of Vygotsky and others gained attention and support, learning and cognition grew stronger. The information-processing constructivist method received criticism since it believed that learning and cognition took place alone in the mind, separate from the environment and interactions with it. Many people believed that knowledge was independent of its context and self-sufficient. According to the new perspective, cognition and learning are interactions between the person and the environment. Knowledge is contextual and a byproduct of its activity, culture, and context.

Experiential Learning

Experiential learning, which is based on constructivist and social theories of learning, is another idea that has to do with student accomplishment; however, the basis of learning is experience. The experiential theory focuses on how experiences encourage learning and motivate learners. Learning is about having worthwhile experiences that influence people's everyday habits and knowledge.

In 2016, Carl Rogers (McLeod, 2023b) argued in favor of experiential theories. He thought that experiential learning comes from within. According to Rogers, learning is a natural tendency for everyone, but they can only become completely engaged in the learning process. The following insights were offered by Rogers: (a) since we cannot

teach people directly, learning can only be facilitated; (b) when learners feel threatened, they become more rigid; (c) meaningful learning takes place in environments where the learner's threat is minimized; and (d) learning is more likely to occur and last when it is self-initiated.

Multiple Intelligences

In many learning theories, it is assumed that learning is a universal human process that all people go through in accordance with certain rules. Gardner (1983) questioned this idea. Gardner developed his notion of multiple intelligences in 1983. Every person's level of intellect, in Gardner's opinion, is made up of a variety of different intelligences. These intelligences include linguistic, spatial, musical, bodily-kinesthetic, intrapersonal, interpersonal, and logical-mathematical. Despite being hypothetical, educators are of the opinion that Gardner's theory broadens their conceptual outlook beyond the conventional constraints of knowledge, instruction, and assessment.

Many of the concepts of these learning theories are included in the community of practice and situated learning theories. These theories were created by Lave and Wenger (1991). Communities of practice are not just found in educational institutions; they also exist in places like businesses and the workplace. All learning is placed, according to the situated learning hypothesis. The most effective places for learning to take place are in communities. The interactions that take place within a community of practice have the potential to build social capital that improves the well-being of the community's members. Concerns about adapting daily activities and learning objectives to satisfy the demands of the 21st century—namely, knowledge that is technically driven—led to the development of 21st century learning and skills. Teachers are promoting the development

of fundamental subject knowledge, digital literacy, and critical and systems thinking, as well as interpersonal and self-direction skills in response to the current conversation about 21st century skills.

Research on Public Schools

Since the Puritans first arrived on American soil, public education has existed in the United States. Since then, there have been discussions and analyses of the philosophy, purpose, and objectives of public school education. A look back at the very first American schools is required to understand how America got to where it is today in terms of education (Chen, 2020).

During the 17th century, Puritans who were residing on American soil understood the importance of public education. The Puritans believed that education was crucial for instilling fundamental religious ideals and academic skills. The Boston Latin School in Boston, Massachusetts, opened its doors as the city's first public high school in 1635. Massachusetts Bay Colony ruled in 1647 that towns with a population of 50 should have a public elementary school and those with a population of 100 should have a Latin school. At that time, reading instruction was the main purpose of education so children could learn to read the Bible. Puritan ideals and fundamental Calvinism were also taught in schools.

Schools in the 18th century were either private or devoted to religion. Private academies took the place of the majority of the public schools built during the 18th century. Early private schools that only accepted male students ended up becoming feeder schools for Ivy League colleges. In the 1970s, many of these schools transitioned to being coeducational institutions.

Thomas Jefferson advocated for a government-funded educational system during this time. Jefferson's proposal contained a two-track system that separated laborers from experts. Jefferson had a concept for a system, but it was not implemented until the following century. Ministers oversaw several of the public schools in the 18th century. Both male and female students could use them for free. Even a small percentage of government money was given to some schools to aid with operating expenses.

A number of public schools emerged in the 1840s, marking the start of the 19th century's progression of public education into the current system. According to the Public Broadcasting Service, the 19th century classroom was a bare bones establishment that reflected the rural community's predominance of economic living (Chen, 2020). There were a few schoolbooks, slates, and chalk as learning aids. Oral tests and recitals were frequent daily occurrences. One educator worked with students of all ages and skill levels.

In the 19th century, education was a communal endeavor. Building student desks, providing firewood, and maintaining the stable where the horses that students rode to school lived were all responsibilities shared by residents of the neighborhood. The teacher, who was typically a single woman, was taken care of by the community. The teacher rotated locales while staying in the homes of neighborhood residents.

In 1937, Horace Mann was appointed the secretary of education of Massachusetts. He played a crucial role in the development of a larger network of public schools. Horace Mann concentrated on developing basic education and teacher training. Mann also created the concept of grouping students according to grade and age. The multi-grade classroom was eventually done away with by this arrangement. The common school

movement started in the northern states and quickly spread, but it did not take off in the south until the turn of the century. At that point, 34 states had put in place mandatory education laws requiring children to stay in school until a certain age. In the majority of the states, that age was 14. Similar education legislation was only implemented by four southern states.

At the conclusion of the 19th century, the United States Supreme Court made a ruling in the *Plessy v. Ferguson* case (Coletti, 2017). The ruling permitted the state of Louisiana to provide Black and White passengers with separate but equal railroad cars. Public schools began to adopt this concept gradually. Youngsters of color and White children attended different schools. Federal law finally made racial segregation in public schools mandatory, which resulted in Black schools receiving less financing than schools in White communities.

Desegregation did not become a household word in public schools until *Brown v. Board of Education* (Chen, 2020). According to the judgment, school segregation is inherently unfair and must be eliminated. Regardless of the decision, it took school districts a while to totally end segregation. Although some might claim that segregation still persists merely because of the way schools are zoned, it is no longer allowed for public schools to discriminate against pupils based on their race or gender.

The early schoolhouses of the 19th century look nothing like the schools of today. Multiple classrooms are included in public school facilities, enabling the division of students by grade, class, and occasionally ability. Technology has permeated every aspect of public school instruction as students learn to prepare for the modern workforce. The system of public education is far from ideal. Public schools are nevertheless plagued by

numerous problems. However, the development of public education in the United States shows the country's commitment to preparing all citizens for a successful and wealthy republic.

It is important to look at how public schools function today and the variables that influence student accomplishment in addition to their historical development. The majority of people link student academic success to the caliber of their schools and professors. Actually, just one third of student achievement is influenced by schools. Additionally, circumstances outside of the classroom have an impact on student progress. The contribution of non-school influences to student accomplishment is about two thirds. This must be taken into account whenever academic achievement is discussed. The pandemic has in many ways strengthened that.

Any things that contribute to stress or endanger student mental and physical health may have a negative effect on their academic performance. Violence or child abuse, family substance misuse, or child malnutrition may be the cause of some of those detrimental mental and physical effects; however, both beneficial and harmful external factors might have an impact on student academic achievement. Academic achievement will rise as a result of factors that promote the emotional, psychological, and personal development of children. Participating in youth organizations, having great role models in their lives, reading more often, and having exposure to many cultures are a few of these favorable characteristics. Non-school variables like home life may have had a substantial impact on student academic progress, whether positively or negatively, given the COVID-19 pandemic, which forced students to stay at home.

"It's not only making sure your kids are doing their homework, it's about creating

a passion for knowledge and greatness," said former president Barrack Obama (Ou, 2021, para. 3). Academic success in other areas can be supported by giving students opportunities to engage in learning activities they enjoy and feel confident in. When children have access to activities that enhance their physical and mental well-being, lower their stress levels, and explore their developing interests, they are better able to concentrate in class and successfully deal with academic problems.

Teachers and their students faced significant challenges as a result of the closure of schools, the public health crisis, and the economic catastrophe. The American educational system was not designed or structured to handle a pandemic-related catastrophe. The mechanisms needed by school systems to continue providing good instruction and the gaining of knowledge during the closure and to act as a safety net for many students were absent. The pandemic's full impact may not yet be known, but it is obvious that student academic performance has declined during the outbreak. Given the different ways in which the pandemic has extended already-existing socioeconomic disparities and how these disparities affect learning and educational outcomes, it is also evident that educational imbalances are expanding (Garcia & Weiss, 2017; Putnam, 2015; Reardon, 2011; Rothstein, 2005). The ability to receive effective teaching is now difficult or even impossible for many pupils who previously had the most difficulty learning to learn efficiently and succeed in school under typical circumstances.

When the 2020–2021 academic year began, several schools were still technically closed. If students are to make up lost ground, teachers are to fulfill their jobs successfully throughout and after the pandemic, and the public school education system is to achieve its goals of excellence and equity during the next phase of the pandemic, it

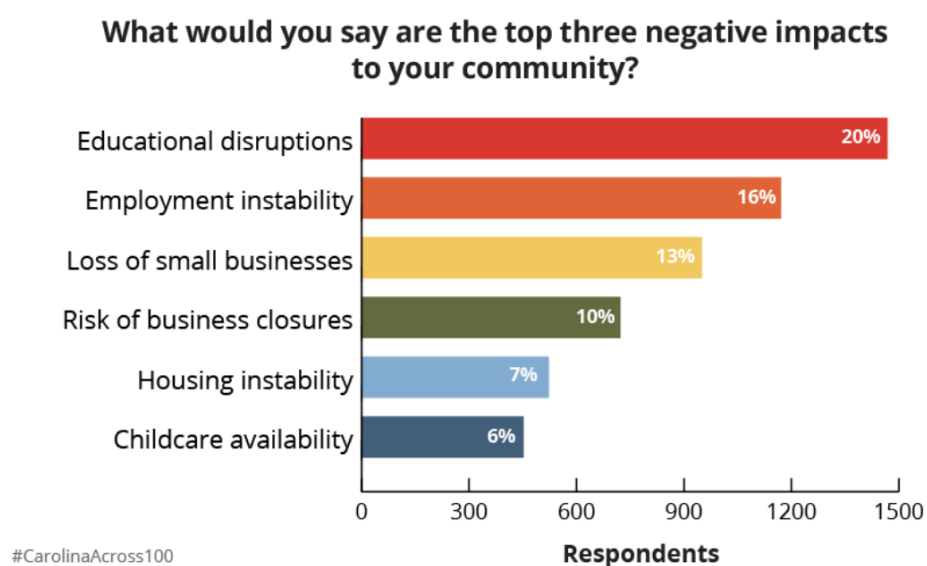
is critical to identify which children are struggling the most and how much learning and development they have missed. It is also crucial to understand the barriers to their learning and the potential issues stopping teachers from effectively instructing these children. The most important step is to decide what investments are required to address these problems. A system that is built on meeting children where they are will be essential to uplifting them and enhancing their academic performance (Domina et al., 2022). Young people had difficulties as a result of the COVID-19 pandemic throughout the world, including in North Carolina. Some of these issues put our young people at risk for illness, created financial instability, and caused emotional anguish. While the pandemic exposed our young people to these difficulties, it also caused disruptions in their education, forcing schools to close in March 2020 and swiftly learn how to offer and manage remote education to pupils who were rendered homebound by the COVID-19 pandemic. It continued after that. These alterations persisted throughout the 2020–2021 academic year. Schools found it difficult to implement new routines that met the community's pressing demands, facilitated learning, and attempted to safeguard student health. According to statistics from the Carolina Across 100 poll, respondents' top issue was the disruption of the educational process (Parry, 2022). The COVID-19 pandemic has a considerable impact on schooling, according to those who took part in the poll. They also identified education as a sector that would be severely damaged and suffer long-term consequences. Despite possible variations in school districts and other elements like availability of WiFi and broadband services for virtual learning, these findings were impressively significant across North Carolina counties. Furthermore, Carolina Across 100's data from its in-depth interviews supported similar worries. A

Guilford County responder who was questioned referred to the COVID-19 outbreak as a "gut punch," particularly for schools that were already struggling to close student achievement gaps (Parry, 2022).

Although the majority of the K–12 children in North Carolina have resumed their classroom instruction in the regular manner, things are by no means back to normal. Children and the public schools in North Carolina have been significantly impacted by the COVID-19 pandemic.

Figure 2

Top Three Negative Impacts on the Community



Some believe that the phrase "learning loss" is misleading when used to characterize the interruptions brought on by the COVID-19 pandemic. Data from tests given to 5.5 million students in third through eighth grade in schools and across districts across the United States during the pandemic show that students continued to make academic progress during that time. The pandemic did, however, appear to limit

achievement growth rates, particularly in mathematics. Even though these data, which are only available for the subset of students whose schools administered the NWEA's Map Growth assessment, suggest that the pandemic slowed academic achievement growth for all students across all ethnic groups, the disruptions seem to be especially pronounced for students in high-poverty schools as well as for students who are Alaska Native, American Indian, Black, and Latinx.

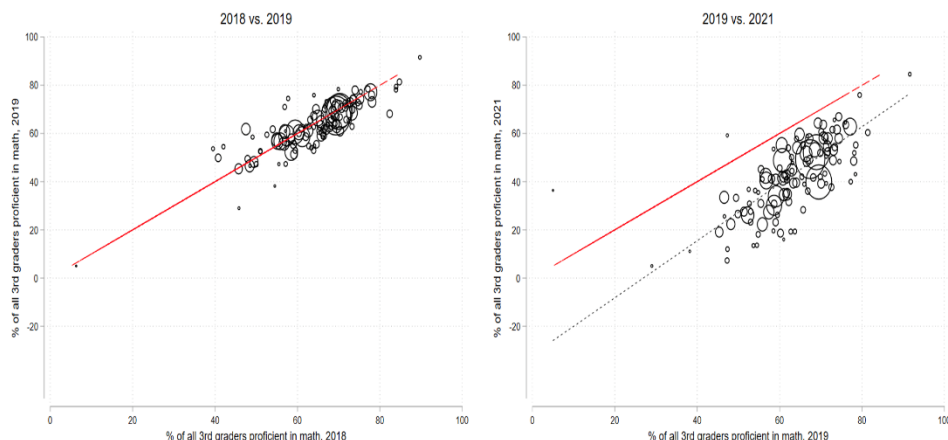
Similar learning disruptions are evident in North Carolina schools, according to preliminary research. In 2019, 65% of third graders in North Carolina met the criteria for math competency for their grade level; however, in 2021, only 44% of North Carolina third graders had achieved the competency criterion in mathematics after a year of disruptions brought on by the pandemic. Although the pandemic interfered with student reading progress as well, it does not seem to have had the same impact as the disruption in mathematics. Third-grade proficiency levels in North Carolina schools decreased from 57% in 2019 to 46% in 2021.

The extent to which these disruptions vary throughout the public school districts in the state of North Carolina is depicted in Figure 3. A district is represented by each dot on the figures. Dots representing districts with higher enrollments are correspondingly bigger. Because third-grade student arithmetic performance in 2018 was virtually a perfect predictor of their math success in 2019, every district in the state is lined up on the diagonal red line in the graph on the left. The graph to the right shows that the pandemic, however, disturbed that stability. Nearly all North Carolina school districts reported significantly lower third-grade math proficiency ratings in 2021 compared to 2019. Third-grade math proficiency suffered in districts all over the state, in great cities

and little villages, from the mountains to the sea, as a result of the COVID-19 pandemic.

Figure 3

District Variations



The fact that the data are not flawless must be noted. Less than 10% of third-grade students in North Carolina public schools chose not to come into their school buildings to take the test in 2021, despite the fact that the test on which these graphs are based was taken by nearly all third graders in those years. The test was also not given remotely. Additionally, just one component of student growth was covered by these data. This information only gave a hazy picture of what pupils and teachers actually went through throughout the pandemic. During the challenging years of the COVID-19 pandemic, students throughout the state of North Carolina probably suffered losses and developed strengths that cannot be gauged by these exams.

Research Gaps

While the pandemic and its aftermath persist, society will also still deal with the effect the pandemic has had on student achievement. Further studies on how the pandemic has affected academic achievement should either extend or replicate previous studies. Some new questions may arise as the investigation of how academic achievement

has changed since the shutdown of public schools and all schools nationwide continues. One of those questions is certainly how schools are addressing student achievement now that they have opened back up. What academic provisions are there for those the virus is still affecting? What do the data tell us about student academic achievement before and after the pandemic?

While the literature provides information on the start of the pandemic, school closings, and student achievement, it fails to mention what student achievement looked like before the pandemic in public schools. It also fails to discuss how student performance and academic achievement were not accessible during the 2019–2020 school year due to the pandemic and school closings. The literature does not pinpoint any specific grade level or school level; it only mentions the effects on student achievement as a whole throughout the United States.

This research specifically targeted one specific area and one specific level using a mixed methodology to determine the effects of student achievement during the pandemic. It took a deeper look into the guiding factors that have affected student achievement during the pandemic.

Research Questions

The subsequent research questions were crucial to this study in determining how the current pandemic has affected student achievement. These questions helped establish differences and similarities in how global health crises in both the past and the present have affected student achievement.

1. What are middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement in middle schools?

2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

Summary

While some research has taken place, it is also clear that more research is necessary to determine how the pandemic has impacted student achievement. It is also important to learn how constructivist theory aligns with the effects of the pandemic on student achievement. The immediate need to adjust how schools function at the height of the pandemic resulted in the use of trial, error, and logic. People, including students, have clearly had to adjust to new ways of learning and conducting school, and this validates the view of cognitive and constructivist theorists that people learn through experience. What remains in question is how this experience has affected students academically.

Chapter 3: Methodology

The techniques used for gathering and analyzing data for this study are covered in this chapter. The methodology for this research is a qualitative study. The goal was to obtain teacher perspectives regarding how the COVID-19 pandemic has impacted student achievement, enrollment, attendance, mental health, and social and economic factors while students engaged in remote learning as opposed to face-to-face learning, which is the conventional approach for delivering instruction to students in public schools.

As the COVID-19 pandemic was unlike any other issue most people have had to face or deal with, research is still underway to identify the impact of the pandemic on student learning; however, the aim of this study was to offer recommendations and insight based on the following questions:

1. What are middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement in middle schools?
2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

Research Design

A qualitative research design was used in this study. A method of inquiry known as qualitative research involves gathering information using surveys and questionnaires. It differs from the quantitative method since it makes use of text and visual data, has special data analysis stages, and draws inspiration from a variety of designs. In order to

respond to inquiries concerning experiences, meanings, and viewpoints, the qualitative technique typically considers the participant's point of view (Hammarberg et al., 2016).

The qualitative research methodology has a wide range of traits. When carrying out a study employing qualitative research, it is crucial to consider the requirements of the potential audience. One of the hallmarks of qualitative research is a natural environment. Researchers frequently gather information on the ground or at the location where the participants encounter the problem or topic being studied. The researcher is the primary instrument, which is another quality of the qualitative approach. The people who actually acquire and analyze the data are the researchers. The qualitative method's use of several sources of data rather than relying just on one is another distinguishing feature. These could include audiovisual data, documents, observations, and interviews.

The typical method used by qualitative researchers is inductive construction of patterns, categories, and themes. To do this, the data are arranged into more ethereal informational pieces. This procedure demonstrates switching back and forth between the themes and the database until the researcher has built a thorough set of themes. Deductive research examines the data from the themes in the past to evaluate whether further evidence is needed to support the theme or if it is sufficient to stop there. Researchers keep their attention firmly fixed on learning what participant perceptions of the problem or issue are throughout the entirety of the qualitative research procedure.

The research process emerges for qualitative researchers. It cannot be prescribed as a result. After data have been gathered, it is possible that some or all of the process's steps will change or shift. The fundamental tenet of qualitative research is to get information about the topic or issue from the participants and then conduct the study to

gather those data.

Reflexivity is another quality of the qualitative research methodology. Inquirers consider their participation in the study. They consider how their culture, histories, and experiences may have an impact on how they understand the evidence and what they attribute to it. This approach goes beyond emphasizing study biases and values. In actuality, this is how the researcher's history may influence the study's course.

The goal of qualitative research is to create a detailed picture of the topic or subject being examined. Another quality of the qualitative method is this procedure, which is referred to as the holistic account. This entails presenting information from many points of view, highlighting key elements of a situation, and outlining the overall image that develops. This image reflects reality and how things go on in the actual world. (Creswell, 2013).

Qualitative research requires the researcher to go into the field to collect the data needed to report accurate findings. Yin (2015) suggested that researchers who use the qualitative method approach conduct research with three distinct actions. His first suggestion was that the researcher collect data clearly to allow for the transparency and review of others. His second suggestion was that the research should ensure that the data are precise and accurate. The third and last suggestion was to not deviate from what the findings have revealed through the research conducted.

Research Participants

The participants came from a small rural school district that consists of four high schools, three middle schools, eight elementary schools, one alternative school, and one virtual school. I purposefully selected participants in this research study from the three

middle schools in the district. The participants were certified teachers of core subjects such as math, English language arts, social studies, and science; exceptional children's teachers; and teachers who taught career and technical education and elective classes who were able to provide their perspectives on the effects of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, and how effective remote learning and teaching was during that time. The participants provided information on how the pandemic affected student achievement, as they work directly in education.

Teachers participated because they were able to provide insight into virtual teaching during the pandemic, student participation, and student achievement in the classroom concerning content area information, as well as how difficult it was to teach or instruct missing students. Teachers had to navigate and adjust how to deliver instruction during school closings caused by the COVID-19 pandemic. Also, they had to swiftly adjust to online remote instruction while still producing packets for students who did not have access to Wi-Fi where they resided.

Initially, it was thought that insight from principals, assistant principals, and central office district leaders would also be beneficial to this study; however, principals and assistant principals were not the main ones teaching students. Although it was their responsibility to make sure instruction took place and students were learning, they were not the main people who had to interact with the students. Therefore, I decided that the main focus would be on the middle school teachers and their perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. While principals and assistant principals can also share

how they believe the pandemic impacted student achievement, enrollment, attendance, mental health, and social and economic factors, in this study, it was crucial to hear the opinions and perspectives of the teachers.

As with the initial thinking of principals and assistant principals, the initial thought was that including central office district leaders in this study would be crucial for understanding the perceptions and thinking patterns from the central office level to the school level, because while school administrators and teachers adjusted to their new situations relating to the COVID-19 pandemic, school district leaders had to meet with the state governor and other state leaders for guidelines on how to operate schools remotely, along with adjusting to new laws during that time. However, wanting to hear from teachers was most critical in this research survey since they are the frontline workers when it comes to interacting and engaging with the students.

The idea that the district testing coordinator would be beneficial in this study was also a consideration. However, because the existing data that were used in this study were public, there was no need to include the district testing coordinator in the study as a participant. The existing data used in the study were quite self-explanatory and did not require participation from the district level.

I addressed biases by making sure all participants signed a consent form that committed them to ensuring that the responses they provided were valid and truthful. I addressed this by presenting data from all three middle schools.

Procedures

I collected existing assessment data, particularly EOG data and attendance data from three middle schools in a rural school district. The 2018–2019 academic year, which

was prior to the pandemic, is when these EOG data were collected. School data from the 2019–2020 school year were not available because there were no EOG data for that school year due to the need for remote teaching and learning. The governor announced that the state would not conduct testing for the 2019–2020 school year. EOG data collected also came from the 2020–2021 school year, during which the pandemic was at its height. During the 2020–2021 school year, most school systems were still operating remotely due to the high number of COVID-19 fatalities. During this period, North Carolina school systems were required to implement Plan A, face-to-face in the building; Plan B, a hybrid model for teaching and learning; and Plan C, virtual teaching and learning only. Existing EOG data also came from the 2021–2022 school year, when all schools went back to having students in the school building in the traditional way. At this time, school systems began to regain some sense of normalcy for students. The existing EOG data showed what student achievement looked like before the COVID-19 pandemic, during the COVID-19 pandemic, and after the COVID-19 pandemic and helped to determine the impact the COVID-19 pandemic had on student achievement, enrollment, attendance, mental health, and social and economic factors based on middle school teacher perceptions.

I also provided a survey to gain the perceptions of middle school teachers on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Teachers answered the survey questions and provided their perceptions of how they believed the COVID-19 pandemic impacted student achievement, enrollment, attendance, mental health, and social and economic factors. I used a Likert-type scale as a part of the survey data collection to determine how

participants felt about the processes that took place during the COVID-19 pandemic, as well as how they felt those processes impacted student achievement, enrollment, attendance, mental health, and social and economic factors during the pandemic. A Likert-type scale is a close-ended, forced-choice scale in a questionnaire or survey that provides a series of answers that go from one extreme to another. American psychologist Rensis Likert developed this scale in 1932. He wanted to find ways to measure individuals' attitudes systematically. I analyzed these data along with the existing student achievement and attendance data to determine whether there was a correlation between the perspectives of educators and the existing data that were reviewed (Vinney, 2019).

Instrumentation

A Google Form was one of the instruments utilized to gather and analyze data. The Google Form allowed me to provide open-ended questions related to the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors in middle schools, while also providing immediate data based on the responses of the participants.

Other tools used for this study consisted of a focus group, existing student achievement data, and existing attendance data. The existing data were crucial in helping to determine the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors based on teacher perceptions.

Based on the data provided in the research instrument and tools, I was able to create a focus group for further investigation of middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and emotional factors. Using multiple sources of data to

conduct qualitative research helped to provide a more accurate view of middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Content Validity

Multiple validity procedures were used to determine the validity of the data collected. For the validation process, I emailed a consent form (see Appendix A) and survey (see Appendix B) to the participants through a Google Form. The survey consisted of five open-ended questions. I also used a Likert-type scale for this study that consisted of nine questions. The Likert-type scale consisted of responses such as agree, disagree, strongly agree, and strongly disagree. Each survey item's validity was evaluated by me using the Lawshe method of content validity (see Appendix C). By employing the Lawshe approach, it was verified that every piece of information gathered was essential to the study.

Each participant, who was a teacher from one of the three middle schools, received an email invitation. The invitation explained the purpose of the research. It was made clear in the email and consent form that participation was entirely voluntary and that individuals could withdraw their involvement in the study at any time. An email and consent form, along with a calendar invite to a zoom meeting, were sent to participants who volunteered to participate in the focus group (see Appendix D).

Data Collection

This was a qualitative study using the triangulation method. I collected both existing data and qualitative data. Participants were emailed a survey with open-ended questions to get their perspectives on how the COVID-19 pandemic has impacted student

academic performance, enrollment, attendance, mental health, and social and economic factors. The participants also answered questions on a Likert-type scale to gain their perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Both the open-ended questions and the Likert-type questions, along with the focus group responses, provided informed data on the perceptions of middle school teachers on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. The data collected the insights gained on the perceptions of middle school teachers on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors was a critical element of this study.

I collected existing EOG assessment data for sixth-, seventh-, and eighth-grade students. I collected EOG assessment data from before the pandemic during the 2018–2019 school year. Data are not available for the 2019–2020 school year as no EOG assessments took place due to the onset of the COVID-19 pandemic in March 2020; however, I collected EOG assessment data for the 2020–2021 school year, during the height of the pandemic. Again, the 2020–2021 EOG assessment data represent data during the pandemic for sixth-, seventh-, and eighth-grade students. I also collected EOG assessment data for sixth-, seventh-, and eighth-grade students for the 2021–2022 school year, which represent achievement data from after the heart of the pandemic and when students were once again engaged with in-person learning throughout the school year. Existing data from before, during, and after the COVID-19 pandemic were significant when comparing the data to middle school teacher perceptions of the impact of the

COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors in a North Carolina rural school district.

Data Analysis

To obtain answers to each of the research questions, I examined data gathered from the study participant responses. After collecting all the responses, I reviewed the answers to determine common themes in the responses. Also, I reviewed existing student achievement data and attendance data along with the survey responses and focus group responses to determine the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Existing student achievement data and existing attendance data before the pandemic, during the pandemic, and after the pandemic helped to provide a clearer picture of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. The existing data along with the teacher perception data were used by me to answer the three research questions.

Summary

In order to better understand how the COVID-19 pandemic has affected student achievement, enrollment, attendance, mental health, and social and economic factors, this study sought teacher perceptions. In alignment with the purpose of this study, I conducted research to determine middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and emotional factors. Participants consisted of core teachers, exceptional children's teachers, elective teachers, and career and technical education teachers from the three middle schools. Open-ended questions and questions utilizing a Likert scale were the instruments

used to gather data based on the perspectives of the participants and were provided in a Google Form. Moreover, a focus group was conducted to get additional information about middle school teacher perceptions of the COVID-19 pandemic's effects on student achievement, enrollment, attendance, mental health, and social and economic factors.

The three middle schools and the leaders of the school district can all benefit from the study's conclusions. This research will help school district leaders and teachers to gain valuable insight into the perceptions of middle school teachers on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors and steps that can be taken based on the findings. This research is beneficial in defining steps that can be implemented in the future to avoid how student achievement, enrollment, attendance, mental health, and social and economic factors were impacted by the COVID-19 pandemic of 2020.

Chapter 4 provides a detailed analysis of the research and its conclusions and links the conclusions to the three research questions for this study. Chapter 5 provides a summary of the research and its findings and makes connections between them and other studies that were discussed in Chapter 2's literature review.

Chapter 4: Results

This chapter presents the study's findings in full as well as an overview of them. The purpose of this study, the research questions, the research design, and an overview of the participants are presented before the sharing of pertinent information related to this research study.

Purpose

The purpose of this qualitative study was to learn what teachers thought about the effects of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. While gathering middle school teacher viewpoints was the study's primary goal, it was also important to look at some of the existing data to see how things changed throughout the pandemic as it relates to student achievement and attendance. Perception data from three middle schools were collected to assess how the COVID-19 pandemic has affected student mental health, enrollment, attendance, achievement data, and social and economic factors of the COVID-19 pandemic. Teacher perspectives on the impact of the COVID-19 pandemic were collected and analyzed along with existing data.

Research Questions

Three research questions were used to guide this study. These research questions helped to develop the questions for the survey and the focus group to gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, mental health, enrollment, attendance, and social and economic factors. The research questions established the parameters for how the participants would be surveyed and how the focus group would be conducted. Responses and focus group data were analyzed and used to

find common themes within the study. The following research questions served as the study's guiding principles:

1. What are middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement in middle schools?
2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

Research Design

Two data collection instruments were used to collect research for this study. First, I used a survey to gain teacher perceptions. The survey was created using Google Forms. The survey consisted of five open-ended questions and nine Likert scale questions.

Overview of Participants

Sixty-seven middle school teachers in a small rural school district received the survey. Eight elementary schools, three middle schools, four high schools, one alternative school, and one online school make up the school district. The teachers invited to participate in this study were teachers from the three middle schools who taught sixth-through eighth-grade students. These were teachers who taught core content classes, elective classes, and special education. Only 26 of the 67 teachers who were asked to complete the survey did so. As stated in the IRB application, the expectation was that 15 to 30 teachers would complete the survey. Although I would have loved to receive 100% participation in the completion of the survey, it is actually surprising that I was able to get

39% of the people who received the survey to complete it.

Following the completion of the survey, those who wished to participate in the focus group volunteered to do so. Of the 26 participants who completed the survey, 12 of them said that they would be interested in participating in the focus group.

Data Analysis

While this research study's primary focus was on teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, it was also important to take a look at some of the existing data that were collected before, during, and after the pandemic to note the impact of the COVID-19 pandemic.

Middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors were gained through a survey and focus group. Based on teacher perceptions, the data gathered through the surveys and focus groups were examined for common themes to identify the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Existing Data

The pandemic hit all schools but specifically public schools hard. It was such an unforeseen circumstance that public schools had to pivot quickly to adjust to the unforeseen circumstances of the pandemic. While student achievement data were not collected during the 2019-2020 academic school year due to the abruptness of the COVID-19 pandemic and the closures of the North Carolina public schools, the existing data that occurred before the pandemic, during the pandemic when schools functioned on

three different schedules, and after the pandemic tell a story about the impact of the COVID-19 pandemic in middle schools. Therefore, it really is crucial to examine the data already available to determine the effect of the COVID-19 outbreak on middle schools.

Only public data could be looked at for this purpose, as the district was extremely specific that internal data could not be used. Therefore, the existing data that were collected were collected from the North Carolina teacher report cards. Table 2 shows the academic achievement data of the three middle schools in reading before, during, and after the pandemic. Data from 2018-2019 show the proficiency level of each of the three middle schools during the academic school year before the pandemic. Data from 2020-2021 show the proficiency level during the pandemic when schools operated on three different school plans with Plan A being all virtual, Plan B being a hybrid model of virtual and in-person, and Plan C being completely in-person. It is crucial to remember that the implementation of Plan C did not start until April 2021, during the 2020–2021 academic year. The school achievement data in reading show the proficiency level of each school for the 2018-2019 academic school year, the year before the pandemic. School A had a proficiency level in reading before the pandemic of 46%, School B had a proficiency level in reading of 58% before the pandemic, and School C had a proficiency level in reading of 37.9% before the pandemic. According to the data, there was a significant drop in reading proficiency among students at all three middle schools during the pandemic in the 2020–2021 academic year. School A saw a decrease in student achievement in reading of 14%, School B saw a decrease in student achievement in reading of 13.7%, and School C saw a decline in student achievement in reading of 9.7%. However, once students were back in school in person full-time, each school saw an

increase in student achievement in reading. During the 2021-2022 academic school year, School A's student achievement increased by 6.1%, School B's student achievement in reading increased by 7.1%, and School C's student achievement in reading increased by 3%. According to the data, this indicates that students learn more effectively when receiving instruction in person than when receiving it remotely.

Table 2

Student Achievement Data–Reading Proficiency

School year	School A	School B	School C
2018-2019	46%	58%	37.9%
2020-2021	32%	44.3%	28.2%
2021-2022	38.1%	51.4%	31.2%

Table 3 shows the academic achievement data of the three middle schools in math before, during, and after the pandemic. Data from 2018-2019 show the proficiency level of each of the three middle schools during the academic school year before the pandemic. Data from 2020-2021 show the proficiency level during the pandemic when schools operated on three different school plans with Plan A being all virtual, Plan B being a hybrid model of virtual and in-person, and Plan C being completely in-person. Once again, it is important to note that Plan C did not occur until April 2021 of the 2020-2021 academic school year. The school achievement data in math show the proficiency level of each school during the 2018-2019 academic school year, the year before the pandemic. School A had a proficiency level before the pandemic in math of 39.7%, School B had a proficiency level in math of 51.8% before the pandemic, and School C had a proficiency level in math of 24.1% before the pandemic. Just like in the case of reading, the data show a significant drop in student achievement in math across the three middle schools

that occurred during the pandemic during the 2020-2021 school year. School A saw a drop in student achievement in math of 21.2%, School B saw a drop in student achievement in math of 18.3%, and School C saw a decline in student achievement in math of 7.6%. However, just like in the case of reading, once students were back in school in person full-time, each school saw an increase in student achievement in math. During the 2021-2022 school year, School A's student achievement in math increased by 14.8%, School B's student achievement in math increased by 11.8%, and School C's student achievement in math increased by 8.6%. The data again showed that this is a sign that in-person learning is considerably more effective for students than remote learning.

Table 3

Student Achievement Data—Math Proficiency

School year	School A	School B	School C
2018-2019	39.7%	51.8%	24.1%
2020-2021	18.5%	33.5%	16.5%
2021-2022	33.3%	45.3%	25.1%

Student enrollment is another key factor related to the impact of the COVID-19 pandemic. Once the pandemic hit and it was announced that schools would be closed, student enrollment started to decline. Teachers were teaching small groups of students and at times maybe only one or two students were showing up virtually. Table 4 shows the number of students enrolled in each middle school before the pandemic and the enrollment of students during the school year that schools closed due to the pandemic. It is important to note that the enrollment of students in each school during the 2019-2020 school year is the enrollment of students before the school closures. There is no public data that show a decline in student enrollment during the 2019-2020 school year. A

decrease in student enrollment is shown the school year after the school closings when schools were operating on three different plans during the 2020-2021 school year.

Although schools began to operate once again fully in-person during the 2021-2022 school year, each middle school continued to have a decrease in student enrollment.

Table 4

Student Enrollment

School year	School A	School B	School C
2018-2019	470 students	572 students	407 students
2019-2020	504 students	570 students	616 students
2020-2021	490 students	531 students	554 students
2021-2022	437 students	521 students	536 students

Along with the decline in student enrollment, student attendance and student absences became an issue. While we are aware that many students stopped participating in school once the governor called for all schools to be closed, it is not until the 2020-2021 school year that we see an increase in the percentage of chronic absenteeism in students. Table 5 shows the percentage of chronic absenteeism of students in each school before the pandemic, the initial school year of the pandemic, during the pandemic, and after the pandemic. While student enrollment continues to decrease, the percentage of chronic absenteeism of students continues to increase.

Table 5

Percentage of Chronic Absenteeism

School year	School A	School B	School C
2018-2019	20.13%	16.02%	18.90%
2019-2020	9.52%	8.9%	12.82%
2020-2021	26.53%	38.22%	46.20%
2021-2022	43.48%	39.18%	54.97%

Survey

The survey used in this study was created using Google Forms. Nine Likert scale questions and five open-ended questions were included in the survey. In contrast to the open-ended questions, which only allowed for short replies, the Likert scale questions required participants to choose one of five possible responses: strongly disagree, disagree, neutral, agree, and strongly agree. A yes or no response was required for the final question, which asked participants if they would be willing to take part in a focus group. While 46.2% of the respondents who completed the survey indicated they were interested in participating in the focus group, 53.8% of the survey respondents said they were not interested in participating in it. The questions included in the survey are listed below.

Open-Ended Questions

- What grade(s) do you teach?
- What subject(s) do you teach?
- Do you believe the COVID-19 pandemic affected student achievement and if so in what ways?
- How was student enrollment and attendance affected by the COVID-19 pandemic?
- In what ways do you believe the COVID-19 pandemic affected the mental health of the students?

Likert Scale Questions

- Students benefitted from remote learning during the COVID-19 pandemic.
- The mental health of the students was affected by the COVID-19 pandemic.

- Student enrollment decreased significantly during the COVID-19 pandemic.
- The COVID-19 pandemic had a huge impact on student achievement.
- During the COVID-19 pandemic, economic and social factors affected student achievement.
- Students had ample access to technology and Wi-Fi during the COVID-19 pandemic.
- Student attendance declined significantly during the COVID-19 pandemic.
- Students did better academically with in-person learning than they did with remote learning.
- Would you be willing to participate in a focus group?

Emerging Themes From the Survey

The data acquired from the surveys completed by the participants were analyzed for existing themes. After analyzing the survey responses multiple times, I was able to recognize some of the emerging themes. Due to the survey being implemented with both short answer and Likert scale questions, I purposely analyzed the short answer questions first. Table 6 highlights the themes that emerged based on the responses from the participants.

Table 6*Emerging Themes–Short Answer Survey Questions*

Identified themes	Survey questions
Teaches Grades 6-8	What grade(s) do you teach? (48%)
Electives/CTE	What subject(s) do you teach? (40%)
Isolation, access, socially, no effort	Do you believe the COVID-19 pandemic affected student achievement and if so in what ways? (100%)
Illness, access, not engaging, other	How was student attendance and enrollment affected by the COVID-19 pandemic? (89%)
Isolation and social skills	In what ways do you believe the COVID-19 pandemic affected the mental health of the students? (63%)

As the researcher, I wanted to get an idea of what grades the participants taught. This was critical to this study because it would allow me, the researcher, to know what voices were being represented in this study. I was shocked to learn that of the 21 participants who completed the survey, more teachers who taught all three grade levels were the ones who participated in the survey than teachers who taught each specific grade level. There was a total of 11 teachers who taught all three grade levels who participated in the survey. There was a combined total of eight elective and career and technical education teachers who participated in the survey. Of the teachers who taught the core subjects such as mathematics, English language arts, science, and social studies, four sixth-grade teachers participated in the survey, five seventh-grade teachers participated in the survey, and six eighth-grade teachers participated in the survey. I then specifically looked at what classes the participants who completed the survey taught. Three of the teachers who participated in the survey taught English language arts classes, five of the teachers taught math classes, four of the teachers taught science classes, two teachers

taught social studies, and three teachers taught reading and math specifically due to being exceptional children's teachers. I expected more of the core teachers to participate in the survey due to the fact that many of them have a more intimate relationship with their students due to spending most of the day with them.

Of the 26 participants who completed the survey, all of them stated that they believed that the COVID-19 pandemic affected student achievement, except one. However, the main reasons noted were isolation and being affected socially, not having access to technology, and students just not engaging and putting in any effort. While all the participants except one felt that student achievement was impacted by the COVID-19 pandemic, some of the participants gave other reasons for this.

Ten of the participants who stated that the COVID-19 pandemic affected student achievement focused on students being behind academically and also being affected socially. While one participant referenced that the achievement gap was not due to the pandemic, they also stated that the pandemic widened the achievement gap. Five of the participants referenced students being isolated from in-person learning and not engaging virtually as a reason why student achievement was affected by the COVID-19 pandemic. The other six participants referenced that students basically did not put any effort forward and expected to pass classes with no work being put forth.

Participants provided some of the reasons as to why they believed student achievement was affected by the COVID-19 pandemic. One of those reasons is when students were at home, they were not provided with structure, and a lot of students were home alone and not monitored as they would have been with in-person school. Another reason provided was students feeling entitled and having a lack of cooperation for

learning, along with a lost interest in learning. Looking at the teacher perceptions from the survey as to whether the pandemic had an impact on student achievement and existing student achievement data, it is obvious that student achievement declined during the COVID-19 pandemic. While the existing data can only show the decline, participants in the survey were able to shed some insight into why student achievement declined based on their perceptions.

The second phase of the survey consisted of questions using the Likert scale. Participants were able to answer questions by selecting one of the following: strongly disagree, disagree, neutral, agree, or strongly agree. SD in the Table 7 represents strongly disagree, D represents disagree, N represents neutral, A represents disagree, and SA represents strongly agree. Table 7 shows the responses of the participants for Questions 6-14 from the research survey. It is based on these responses of the survey participants that I was able to determine some things that emerged from the survey.

Table 7

Participant Responses/Emerging Themes–Likert Scale Survey Questions

Question	SD	D	N	A	SA
6	5	12	4	5	0
7	3	1	3	9	10
8	1	1	5	12	7
9	1	0	0	10	15
10	0	0	1	12	13
11	4	12	5	4	1
12	1	1	0	11	8
13	0	0	4	11	11
14	0	1	4	8	13

While Table 7 shows the responses of the survey participants, it also clearly shows middle school teacher perceptions of the impact of the COVID-19 pandemic. Each

question was carefully designed to find out how the COVID-19 pandemic impacted things including academic performance, enrollment, attendance, mental health, and social and economic factors. Using the Likert scale as part of the survey gave a broader view as to whether or not participants agreed or disagreed with how or if the COVID-19 pandemic impacted student achievement, enrollment, attendance, mental health, and social and economic factors. Below are the Likert scale questions that were asked in the survey and the findings.

Question 6: Students Benefitted From Remote Learning During the

Pandemic. Sixty-five percent of the survey participants did not believe that students benefitted from remote learning during the COVID-19 pandemic. As shared in the first part of the survey, many students were disengaged in remote learning even when they were logged on. Other students did not have access to technology and therefore could not log on to engage in learning remotely.

Question 7: Students' Mental Health Was Affected by the COVID-19

Pandemic. Seventy-three percent of the survey participants agreed that student mental health was affected by the pandemic. One of the themes that emerged from the survey was that isolation was a big part of how student mental health was affected. Students not being able to interact with peers or people outside of their homes played a huge part in their mental health. Another issue was students not being able to socialize with others properly due to being in isolation for so long. Based on the survey results, some students did not know how to engage with others or handle conflict. Another theme that emerged from the survey as it related to the mental health of students is that students were now fearful of losing family members or friends due to having lost family members during the

COVID-19 pandemic. Some students were also afraid of touching things and people in fear that they might catch the disease.

Question 8: Student Enrollment Decreased Significantly During the COVID-19 Pandemic. Seventy-three percent of the survey participants agreed that student enrollment decreased significantly during the COVID-19 pandemic. As the existing data have already shown, student enrollment decreased and continues to decrease. Survey participants noted that some of the decrease was due to students being fearful of returning to in-person school and illness.

Question 9: The COVID-19 Pandemic Had a Huge Impact on Student Achievement. Ninety-six percent of the survey participants believed that the COVID-19 pandemic had a huge impact on student achievement. Some participant perceptions as to why or how the COVID-19 pandemic impacted student achievement were as follows:

- Students were unable to engage because they lacked access to technology.
- Students are not putting forth any effort into their schoolwork and learning.
- Students were already behind academically and the pandemic just made it worse.
- Students do not know how to engage with others socially.
- Students are just not interested in learning.

Question 10: There Were Many Social and Economic Factors That Affected Students During the COVID-19 Pandemic. Ninety-six percent of survey respondents concurred that during the COVID-19 pandemic, a variety of social and economic issues had an impact on students. More in-depth dialogue and perceptions were saved for the focus group as it related to the impact the COVID-19 pandemic had on social and

economic factors when it came to middle school students. It was during the focus group that participants had the opportunity to express their actual thoughts about how the COVID-19 pandemic had impacted social and emotional factors.

Question 11: Students Had Ample Access to Technology and Wi-Fi During the COVID-19 Pandemic for Remote Learning. The responses to this question aligned with the responses to Question 6. Sixty-two percent of the survey participants did not agree that students had ample access to technology during the COVID-19 pandemic to participate in remote learning. Many of the survey participants perceived remote learning as not being beneficial during the COVID-19 pandemic. One of those reasons was that some students did not have access to Wi-Fi. Living in a rural community made it difficult for some students to receive Wi-Fi services. While all students had access to a computer, being that the district was a one-to-one district with technology, it did not mean that all students had access.

Question 12: The COVID-19 Pandemic Negatively Affected Student Achievement. In alignment with Question 9, 92% of the survey participants agreed that the COVID-19 pandemic had a negative effect on student achievement. Some of the reasons why the survey participants believed the COVID-19 pandemic had a negative effect on student achievement are already listed under Question 9. Again, the responses are also aligned with existing data that show a decline in student achievement during the COVID-19 pandemic.

Question 13: Student Attendance Declined Significantly During the COVID-19 Pandemic. Based on survey participant responses, student attendance absolutely declined during the COVID-19 pandemic. Eighty-five percent of the survey participants

agreed that student attendance declined significantly during the COVID-19 pandemic. This question is also aligned with Question 8 about student enrollment. Based on teacher perceptions shared in the survey, attendance was an issue due to illness and fear. Some participants noted that students and staff did not come to school just because they did not want to, while another participant mentioned that some were absent because they were on Disney vacations. What is evident based on teacher perceptions and existing data is that student attendance declined during the COVID-19 pandemic and continues to decline even now.

Question 14: Students Do Better Academically With In-Person Learning Than They Do With Remote Learning. Eighty-one percent of the survey participants agreed that students do better academically with in-person learning than they do with remote learning. Existing data show an increase in student achievement once students were engaged again with in-person learning full-time. More in-depth discussion surrounding this topic was discussed during the focus group with the focus group participants. While the research survey about middle school teacher perceptions of the impact of the COVID-19 pandemic gave us some valuable insight into participant perceptions, a focus group was implemented to gather further research on teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Focus Group

As the survey's final question, teachers were asked to email me if they would be willing to take part in a focus group. Of the 26 participants who completed the survey, 12 responded that they were willing to participate in the focus group. However, not many of

the teachers who agreed to participate in the focus group emailed me, which made it difficult to know who the focus group members would be because the survey was anonymous and did not offer contact information. Middle school teachers were once again sent an email with a reminder about the survey and a request to send an email if they were interested in taking part in the focus group. Once the reminder was sent, I received emails from 10 of the 12 teachers who stated in the survey they would be willing to participate in the focus group. Those 10 teachers were sent an invitation to participate in the focus group.

Zoom was used to conduct the focus group in order to accommodate participant schedules and locations. Due to the focus group being held virtually, participants were emailed the consent form along with the invitation. Only five of the 10 teachers who received an invitation to attend the focus group actually did so. While I would have liked to have 100% participation in the focus group, I am glad that 50% of the 10 teachers who were sent the invitation to participate were present. The participants in the focus group consisted of three female and two male teachers. One of the teachers taught sixth grade, two of the teachers taught seventh grade, and two of the teachers taught eighth grade. Three of the participating teachers taught science, one taught social studies, and one taught math.

I began the focus group meeting by thanking the participants for joining the meeting. I reminded the participants that participation in the focus group was voluntary and that they could leave the group at any time. I reviewed the norms for the meeting and then we began the focus group discussion. The following questions were asked in the focus group (see Appendix E) to lead the discussion.

- What role do you think the COVID-19 pandemic played on students' social and economic factors?
- Why do you believe student attendance and enrollment declined during the COVID-19 pandemic?
- What does the End-of-Grade (EOG) data say about student achievement during the pandemic?
- In what ways were students' mental health affected by the COVID-19 pandemic?
- What have we learned from the COVID-19 pandemic and what can we do better if we were to face such a situation again?

Emerging Themes From the Focus Group

The focus group Zoom meeting was recorded, and participant comments were analyzed for any existing themes. After reviewing and listening to the discussion multiple times, I was able to recognize some of the emerging themes from the discussion. The focus group participants actively participated in the discussion and provided great insight from their perspective of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Table 8 shows some of the comments from the focus group discussion for each question.

Table 8*Focus Group Questions and Participant Responses*

Focus group questions	Participant responses
1. What role do you think the COVID-19 pandemic played on student social and economic factors?	<p>“It was a major hindrance for them, both socially and economically.”</p> <p>“I think it probably came from the effect of the parent mainly. Seeing them in an economic struggle when we are already in a very struggling economic area would exacerbate that even more so to put more stress on the child and make them feel trapped already in a trapped situation.”</p> <p>“Yeah, I am thinking of Covid when everything shut down. I think a lot of the parents for the kids we have, the lower income some of the things that would be affected like with no work, and stuff and all that. Even just food was an issue for some of the kids so I think when all of the companies shut down it affected the kids. The socio-economic status for some of our kids was already low before Covid so I think it hit the parents even harder.”</p> <p>“And to think about the trauma going along with that with some of these kids already having a struggling background on top of Covid.”</p>
2. Why do you believe student enrollment and attendance declined during the COVID-19 pandemic?	<p>“I mean one being just the aging of our kids in general. I mean we’re talking about our kids having to be remote and stay focused when students at our school already struggle to stay focused in the classroom. So having them get on a synchronous or asynchronous work and to do it without the proper guidance at home, some students might have a quiet distraction-free place but I am sure, even for myself, it’s a struggle to be distraction-free when I work at home. So being in that situation as a child who is still growing and developing, I think it is even more of a struggle without being in the classroom. You have to have strong personal responsibility skills for that.”</p> <p>“I just say that we have to consider our area as far as attendance was concerned. At that time, we had so many children that were rural that did not have the wireless connectivity. We had the MiFi’s and could get them to the homes but if the homes couldn’t receive the service, it was for null and that absolutely, in my opinion played a part as well. So much.”</p> <p>“It was also a shock value. Parents weren’t used to the idea of monitoring their kids through the day. And so, when Covid came, and that expectation went on parents, I think some of the parents just didn’t know how to monitor them because they had them the whole day and didn’t really understand the technology or what is expected of the kids. So, I think the parents just didn’t know and perhaps didn’t know how to ensure that they were engaged in the remote learning classes. Cause I know they talked a lot about just not understanding the zoom classes.”</p> <p>“Yeah, I definitely have to agree with that too. There is a, definitely a technology barrier when you talk to parents about how Google and Zoom work. Um, they, uh, I have to like, when I’m talking about like how a platform works when we’re assigning work to the students. They can definitely see that, I have to walk them through the process of how we assign work, how they can monitor their kids, and how they can look to see if it’s</p>

(continued)

Focus group questions	Participant responses
	<p>done. So just even not being on a Zoom call or having the Wi-Fi, just checking their students work and making sure the kids are on and, and seeing that it's not just only turned in, but the work is actually done. What I would say could also played a part.</p> <p>“In some cases, the parents were not around, so the child might have been left with an older sibling or some relative or so. So, they were not supervised or properly supervised, so they basically did what they wanted.”</p> <p>“I would say, and I hope this sparks some more conversation. A transformed or not transformed, but a transferred norm if students weren't, if they weren't producing, in-person. And then by the time that Covid came about, it was kind of a lose-lose situation because now the student that wasn't performing in the classroom, in person now they could go home, not perform, and then blame it on being in a remote environment, not being, in person with an instructor or a teacher not being able to get peer, peer led or, or peer directed activities that could help them focus more on their academia. I am looking at it from that perspective. I would love to hear someone challenge that notion.”</p> <p>“It's kind of like they get outta jail free monopoly card if you will. Yeah, I will at least applaud our system for an attempting when we, when we had to go home in 2020, I will at least applaud our system for trying to continue to engage kids with the Zoom calls. Because when my children came home, they came home. There was no more work, there was no more teaching. It was done.”</p>
<p>3. What does the EOG data say about student achievement during the pandemic?</p>	<p>“I mean, I heard earlier this year in the news that the eighth-grade math in North Carolina was the lowest it had been in 20 years. And I would say that probably has to do with covid.”</p> <p>“The data shows that there was a definite decrease in the 2020-2021 school year then 2021-2022 last year, it definitely increased. Every school went up at least somewhere between nine to 12%. Um, So it's probably the biggest factor in the decrease in that year and then the increase of being back in-person.”</p> <p>“it definitely looks like there could be a ripple effect too. You are only looking at middle schools. If you think about the students that are incoming to middle school too, you might see that as well.</p> <p>“I mean, clearly, it's a significant decline, and you can see that even after that it has taken its time to go back, not to where it was, but at least there's an increase after you have the regular school. But there was a lot of learning loss and, and so it's going to take a while for the system to build itself back up after Covid.”</p> <p>“It was a significant drop, but then you can see when we came back and had a full year in person, and at least that's a little bit encouraging to me to see the numbers start to go back up again.”</p> <p>“What it actually says to me is, our students do better with in-person learning.”</p>

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Focus group questions	Participant responses
4. In what ways were students' mental health affected by the COVID-19 pandemic?	<p data-bbox="610 226 1435 716">“What I was going to say is it increased anxiety for those students that had got accustomed after being home after, you know, the quarantine thing or whatever you want to call it and then having to come back into an in-person learning environment it was kind of like a shock to their social system, if that makes sense. If you were in fourth grade and now you're coming back to sixth, seventh, Eighth, nine, 10th, whatever grade level and you've gotten accustomed to being at home, gotten into a certain routine of how you do things, whether you are looking at your computer screen, or doing your assignments, you've gotten accustomed to that, and now you have to come back in person, look at a teacher in person, this student, that student besides you not knowing if this student is a carrier or if your teacher or instructor is a carrier, and that you may get sick and possibly experience some type effects from, from what was put out through the news and through all media, social media type things. It kind of starts taking a mental effect on the student's well-being and it kind of clouds their academic performance. That's from the perspective that I see or saw rather.”</p> <p data-bbox="610 747 1435 989">“Going off of that too and talking about being at home in an isolated situation for extended periods of time. Parents may or may not be at work or working from home and busy. Very lots of lack of structure and then going into a heavily structured situation the following year. I mean, that right there could just be a source of anxiety. Just having this like laid back routine and then going into a very structured routine. I mean, that would, that in itself would make anyone very stressed out and probably affect how they're processing things.”</p> <p data-bbox="610 1020 1435 1262">“I'm thinking that it also affected some students, it affected their self-esteem because there was a certain comfort in not showing your face and trying not to put your camera on. You didn't have to answer. You could just be in your shell. When they are face-to-face, they are kind of forced to come out of that shell and try to express and communicate with their peers even. It took a while, even when we came back, like students weren't wearing the masks because of safety, they were wearing the mask because they didn't want to show their faces. They just wanted the comfort of not being seen.</p> <p data-bbox="610 1293 1435 1472">They just wanted the comfort of being not seen. So, I think the covid and the remote classes, it kind of hampered their development in terms of having a little more self-esteem for them. It took a while for students to be comfortable in their skin and to show their faces, because a lot of them kept wearing the mask and it wasn't really for safety. They just didn't want anybody to see their faces.”</p> <p data-bbox="610 1503 1435 1566">“I agree with that. I 100% agree with that. Especially, you know, when you see a lot of children would wear their mask under their nose.”</p> <p data-bbox="610 1598 1435 1692">“Yes, it became like a little blankie for them when they returned to school. The little thing that they held on to when they don't want to deal with their self-esteem stuff. That's what I think.”</p> <p data-bbox="610 1724 1435 1871">“We're talking about an age where they're just starting to get into more independent thinking, developmentally expanding their minds are developmentally maturing more and then being more social and being more independent so what she just said is very true, especially with the ages we teach.”</p>

(continued)

Focus group questions	Participant responses
	<p>“And I'll say, when we started this pandemic, in our home we had a 10, turning 12, a one month and a 14-year-old child. And I know what it did to them, and we have the resources, so I think about all of our children that didn't have those resources.”</p> <p>“I do agree with all that has been said. Well, at that time I was in Jamaica and my daughter, she had just started high school and she and her friends, what they did, well, they didn't know each other face-to-face, so they would, they had their little groups and after school they would meet to do their assignments and they had fun. They were online chatting with each other for hours so when it was time to go back, they were so excited cause they wanted to see each other in person. They wanted to socialize. And going back was a big thing for them. The morning when they were to go back it was such great joy for them so what they did, they would meet in the evenings, do their assignments and so forth. They did extremely well so for that group it was like overwhelming. They wanted to go back, face to face. I mean, when you went there and spoke with the teachers, They'll tell you, oh, we wanted to see this one because she was so vibrant. She was full of life. They wanted to meet her, well, that's my daughter in person, because she was so full of life and energy.”</p>
<p>5. What have we learned from the COVID-19 pandemic and what can we do better if we were to face such a situation again?</p>	<p>“I'm still going to lead with, I got to see our systems' response. I got to see my children's systems' response and I got to see the system's response in the neighboring counties around me and I still feel like based upon that, our response was head and shoulders above everybody else. We were fast, we were providing meals, we were providing hotspots, we were zooming, we were making the decisions of what was in the best interest of the children, not making political decisions. I don't want that to go unnoticed, but what we could do better, maybe there could be a greater partnership with local internet providers to maybe look at, you know, getting service to children in rural areas. Um, maybe a community partnership with. I mean, parents needed support that they didn't have. You know that a lot of times there were a lot of children in the house. Um, maybe some sort of, you know, community partnership with a local Y or something to figure out free based programs.”</p> <p>“I think, and I can really only speak to the staff at my school. I think the staff stuff, um, for the most part, quickly adapted to the change. It was a lot. I mean, some of us didn't know about the Zoom, we didn't know how to do this, and every minute there was something new for us to do with the Zoom. There was all these different technologies that we have to do for remote and I think for the most part staff adapted eventually and pretty quickly too with all the changes and tried to do their best. I think that was one of the things that we learned, definitely learned about the new technologies that is open. And the other thing that, um, I don't know what, I'm in agreement with the other teacher in terms of more community involvement because the kids needed somewhere else to go apart from home and there was not a lot of options, especially if the parents have to go to work. There was not a lot of options. There was not a lot of help for the parents. In terms of what, so we talk about the teachers, we talk about, you know, doing stuff for the kids, but they have to live in the homes where the parents were not prepared for it and not enough was done for that part of it.”</p>

(continued)

Focus group questions	Participant responses
	<p>“We learned a new way to prepare a new type of preparation from traditional learning, in-person learning. We learned how to have to create, um, Pretty much on the fly until we got a structured process in place. And it, not just in our county, but throughout the United States, throughout the world, globally. We had to learn how to create assignments with students. We had to learn how to engage our students, um, on a platform that they were familiar with, but not familiar with if that makes any sense. It was definitely a learning process on learning how to engage, learning how to prepare, and learning how to understand who we were as individuals, learning who we were as a staff, learning who we were as global citizens. That is kind of the perspective that I saw and it really kind of like resonated in me. If this situation were to happen again, what we could do better is communication, communications with our communities, establishing some type of line with the parents, with those organizations and other agencies that house students that we bring into our school programs. Being able to communicate with those organizations and those leaders so we can help the students stay on task and do what they need to do to be academically successful despite the challenges and situations that they face. This Covid thing, it threw everybody a curve ball, but we took it, we learned from the mistakes that were made and we became better. That’s how I see it.”</p>
	<p>“To add on learning from it, I don’t have much experience because I wasn’t teaching at the time nor was I working for the county at the time but something I learned from Teach for America is getting more training in what was available to us in remote learning. We went through so many different sites, and ideas and platforms on how we can teach the kids. It’s hard to do independent group work with just a Zoom meeting or Google so thinking about new ways or other ways of teaching remotely would probably go a long way.”</p>
	<p>“I must agree that we have learned different ways in which to prepare, different ways in which to approach whatever it is that we are doing. When I started, when we were first sent home, what I usually did because I knew nothing about this technology, zoom, I knew nothing about Google Classroom so what I would do, I would call each student individually and go through step by step. I called this one, start the questions and then call that one. You can just imagine having 20 students in your class and doing all of that. Cause I just did not know. Well, after that, when I learned about Zoom, I still had my Blackboard and I would have my class, and of course I would teach as I would normally teach but after a while, you learn about the videos and different stuff but it has been a learning process and I have learned a lot. Preparation wise, I could do better in that area and in terms of the different methods and approaches. The whole preparation and the approach would have been different. As somebody mentioned earlier about the communities, it is a community effort. It would have to be a situation where the community has access to the technology and the students have access to the different devices so it’s a whole lot of work. It doesn’t matter where and which end you look at it, it’s a whole lot of work. The parents would also have to be involved so that we could keep them where they needed to be at so it wouldn’t be the teacher, it would be the whole community.”</p>
	<p>“I look at it like a science lesson, not from the perspective of a science</p>

(continued)

Focus group questions	Participant responses
	<p>teacher but the part of having to adapt. Not so much from a Darwinistic perspective but a perspective of in order to function, and in order to literally make it to the next level from those different levels. No telling what administrators at that time, even the superintendent and the board of education had to sit in on and listen to and had to try to make work and trickle down information and the thought theories or processes that had to be implemented in some form or fashion. Our district, I can't speak for any other district, but our district, we did a pretty good job. The information that we got, we were able to adapt and by us being able to adapt, we helped our students and engaged parents and even some of our borderline parents be able to adapt with the learning processes of the students and the students themselves, you know they could have some type of at least normalcy even though it wasn't a full circle normalcy type structure."</p> <p>"Going off of what he said, our entire school system is on the traditional school mindset so going virtual is a completely new thing with technology advancement and everything so it is really important to follow the science. I mean, when we are talking about controlling the pandemic when it was at its worst, New Zealand followed the science and was one of the first countries to bring its covid cases down to zero so keeping with that same line of thought, following the science to best prepare these kids, I think would be really helpful."</p>

The themes emerging from the focus group discussion were anxiety and self-esteem, adapting, and community. While much discussion was had on the five questions implemented in the focus group discussion, anxiety and community stood out the most. The discussion about anxiety was focused on how the COVID-19 pandemic impacted student mental health. All the participants believed that students developed anxiety due to the pandemic which made having to be back in school in person and interacting with other students difficult for many students. The teachers believed that students wore masks, not for safety reasons but to cover their faces so they did not have to be seen. According to teacher perspectives, the mask became somewhat of a security blanket for students once they returned to in-person learning.

It was mentioned several times during the discussion about students, teachers, and parents having to adapt to a new way of learning and adjusting to a new situation. Student social and economic factors were impacted by the COVID-19 pandemic because of the

adaptation that took place during that time and, according to teacher perceptions, made a difficult situation even more difficult for students and families who were already struggling pre-pandemic.

When asked what we could do better if we ever encountered such a situation again, community was mentioned many times. Participants believed that there needed to be more communication and more assistance from the community to provide students and parents with support. They also believed that students needed an outlet and somewhere else to go besides their homes. More community involvement and communication were the consensus of the focus group participants.

Addressing Research Questions

Research Question 1: What Are middle school teacher perceptions of the Impact of the COVID-19 Pandemic on Student Achievement in Middle Schools?

This question was addressed in the survey. Questions 3, 6, 9, 11, 12, and 14 in the survey addressed this question. Question 3 in the focus group also addressed this question.

Survey Question 3: Do you believe the COVID-19 pandemic affected student achievement and if so in what ways?

Survey Question 6: Students benefitted from remote learning during the COVID-19 pandemic.

Survey Question 9: The COVID-19 pandemic had a huge impact on student achievement.

Survey Question 11: Students had ample access to technology and WiFi during the COVID-19 pandemic for remote learning.

Survey Question 12: The COVID-19 pandemic negatively affected student achievement.

The purpose of this question was to gain middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement. Middle school teachers mentioned that the COVID-19 pandemic did impact student achievement because there was not an equitable source of technology or Wi-Fi availability, students were not engaged in remote learning, and some students could not log on due to not having access. They also believed that some students were not being monitored and therefore did not have the structure needed to be engaged in remote learning.

Research Question 2: What Relationship, If Any, Exists Between Teacher Perceptions of Student Enrollment, Attendance, Mental Health, and Social and Economic Factors of Student Achievement During the COVID-19 Pandemic? This question was addressed in the focus group. Participants addressed this question in the focus group by providing their perceptions and answering the five focus group questions. The five focus group questions that addressed this research question are as follows:

- What role do you think the COVID-19 pandemic played on students' social and economic factors?
- Why do you believe student enrollment and attendance declined during the COVID-19 pandemic?
- What does the EOG data say about student achievement during the COVID-19 pandemic?
- In what ways were students' mental health affected by the COVID-19 pandemic?

- What have we learned from the COVID-19 pandemic and what can we do better if we were to face such a situation again?

Student enrollment, attendance, mental health, and social and economic factors played a huge role in student achievement during the COVID-19 pandemic. Students not engaging in remote learning or not being able to engage in remote learning, students developing anxiety and self-esteem issues due to lack of social interaction, and students struggling financially had a huge impact on student achievement during the COVID-19 pandemic.

Research Question 3: What Themes Exist Among Middle School Teachers Concerning the COVID-19 Pandemic? This was addressed in both the survey and the focus group. Numerous themes emerged as the data were analyzed and evaluated. Access to technology, lack of student engagement, anxiety, and community involvement were the themes that existed among the middle school teachers concerning the COVID-19 pandemic.

Trustworthiness

Credibility of the research finding was obtained by using multiple research instruments. A survey was created using Google Forms, and a focus group was conducted using the virtual platform Zoom to collect information for this research study. The conclusion of this research study cannot be transferred to other districts. It would be feasible for other districts to determine if gaining teacher perceptions of this type of study would be beneficial to their school district. There has been enough information on this provided in this study for it to be replicated to determine middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement.

Summary

This chapter revealed the findings from the research study. I gained teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. The data were collected and analyzed using a survey created with Google Forms and a focus group. The survey was sent to 67 middle school teachers across three middle schools. Of the 67 teachers who received the survey, only 26 teachers completed it. Although 12 teachers replied yes to participating in the focus group, only 10 of them provided their email as requested. Only five of the 10 middle school teachers who received invitations to participate in the focus group showed up to participate. Responses from the participants in both the survey and the focus group helped to reveal themes associated with middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Using the data discussed in Chapter 4, recommendations and implications are discussed in Chapter 5.

Chapter 5: Discussion

This study sought to learn how middle school teachers perceived how the COVID-19 pandemic affected student academic performance, enrollment, attendance, mental health, and social and economic factors. The COVID-19 pandemic was an unforeseen crisis around the world and particularly in the United States and the public school system. It left many students behind academically and missing from school, created a mental health issue, and impacted social and economic factors. This study revealed how middle school teachers felt about the impact of the COVID-19 pandemic on specific areas. Teachers provided their perspectives on student achievement, enrollment, attendance, mental health, and social and economic factors and how they were impacted by the pandemic. A survey created in Google Forms and a focus group were implemented to conduct the study and collect data on middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. District emails were used to invite teachers from three middle schools to participate in the survey after reviewing and agreeing to the consent form sent to them. After reviewing and accepting the consent form, 10 survey respondents who indicated an interest in taking part in the focus group were emailed an invitation and information about the Zoom meeting.

The formulation of the survey and focus group questions was guided by three research questions. Answers to the survey questions and focus group questions provided by the participants were analyzed for existing themes. The following research questions served as the basis for this investigation:

1. What are middle school teacher perceptions of the impact of the COVID-19

pandemic on student achievement in middle schools?

2. What relationship, if any, exists between teacher perceptions of student enrollment, attendance, mental health, and social and economic factors of student achievement during the COVID-19 pandemic?
3. What themes exist among middle school teachers concerning the COVID-19 pandemic?

The information gathered from the survey and focus group discussion is examined in Chapter 5. This chapter covers a summary of the results, the theoretical framework, the implications for practice, and the delimitations and limitations. Also included in this chapter are suggestions for additional research.

Summary of Findings and Support Theory

The purpose of this study was to reveal middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. The findings from this research give a clearer view as to how teachers perceived the impact of the COVID-19 pandemic on education. Much of the research collected is aligned with the information provided in Chapter 2. Many of the research participants believed that student achievement declined due to students not having access to technology, students not being engaged, and students not having the traditional school structure they were used to. There were detrimental repercussions on student mathematical achievement, according to seven research studies (Clark et al., 2020; Depping et al., 2021; Engzell et al., 2021; Kuhfeld et al., 2020; Maldonado & de Witte, 2021; Schult, 2021; Tomasik et al., 2020). There were detrimental repercussions on student reading achievement, according to five research

studies (Clark et al., 2020; Engzell et al., 2021; Maldonado & de Witte, 2021; Schult, 2021; Tomasik et al., 2020). According to two studies, there was a detrimental impact on student performance in other areas including science and social studies (Engzell et al., 2021; Maldonado & de Witte, 2021). This is consistent with the loss of learning brought on by the closing of schools due to COVID-19. Further study on how the pandemic has affected academic achievement should either extend or replicate previous studies.

Research participant perceptions of student attendance and enrollment were somewhat aligned with their perceptions of the impact of the COVID-19 pandemic on student achievement. Students were not showing up virtually because they did not have access to WiFi or because they were not being monitored. Rebecca Tippet, director of Carolina Demography at UNC-Chapel Hill's Carolina Population Institute, claimed the state's public schools had roughly 63,000 fewer students enrolled in them in the second month of the academic year, a 4.4% decrease from the previous year (Granados et al., 2021).

According to the survey responses from the research participants and the focus group discussion that was conducted, the effect of the COVID-19 pandemic on student mental health was a cause of anxiety. Not being able to socialize with their peers, being isolated from people outside of their immediate family members, and not having to be seen due to remote learning played a huge part in student mental health. According to the responses of the research participants in the focus group discussion, students wore masks as a security blanket so they could not be seen, not so much for safety. Students develop connections, healthy lives, and emotional development mostly in schools; that is until the pandemic forced the closure of schools and prohibited pupils from returning to their

regular lives. In retrospect, what schools were advising students to do was wholly incompatible with what the majority of people would consider a healthy lifestyle (Granados et al., 2021).

Constructivist theory and cognitive theory served as the theoretical foundation for this research project. Constructivist theory states that a student develops understanding through trial, error, and logic. Constructivism is an educational philosophy that asserts that people actively create their own knowledge and that the learner's experiences shape reality (Elliott, 2000). This study addressed two types of the constructivist theory: social constructivism and cognitive constructivism.

Social constructivism was developed by Lev Vygotsky in 1978 (Mcleod, 2023c). According to Vygotsky, social interaction is the key to learning. Students build a community of shared meaning with their peers through cooperating with others. Cognitive constructivism was developed by Jean Piaget (Ansorge, 2020). According to his theory, people acquire knowledge through their ideas and experiences. With the COVID-19 pandemic being unexpected, students and teachers had to learn how to quickly adapt to the constant changes that were occurring. Students learned how to navigate remote learning and adjust to not being able to interact with their peers. In alignment with the research participant perspectives, the theoretical framework used for this study suggests that students learned through their experiences. However, students lacked learning in the area of social constructivism because they were not able to socially interact with their peers, which, according to Vygotsky, is the key to learning.

Implications for Practice

This study revealed the perceptions of middle school teachers of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. Several themes came out of this research, including the following: lack of access to WiFi or technology, lack of student motivation, an increase in anxiety, and community support.

While this study only focused on middle school teachers, it would be beneficial to conduct further research studies to gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors across all grade levels in order for school districts to discover the impact of the COVID-19 pandemic and make sound decisions if there was an emergency like the COVID-19 pandemic that were to occur again.

The findings from this study can be used to guide school district leaders on how to maneuver and address some of the areas that have been impacted by the COVID-19 pandemic based on teacher perceptions. For this particular study conducted on middle school teachers in a rural school district, it would be beneficial for the school district to gain a wider perspective by engaging teachers at all grade levels in either a discussion on their perceptions of the impact of the COVID-19 pandemic or a survey. These studies can also be implemented to gain the perspectives of district school leaders and then compare them with teacher perspectives on the impact of the COVID-19 pandemic to help make sound decisions on increasing student achievement, enrollment, and attendance; improving the mental health of students; and addressing social and economic factors that are now impacting student learning. While school systems have been impacted by the

COVID-19 pandemic, more studies are needed to determine the true impact of COVID-19 on student achievement, enrollment, attendance, mental health, and social and economic factors.

One of the biggest implications of practice based on the perceptions of the middle school teachers would be for the community to be more involved if we were to find ourselves in such a situation again. The consensus was that the community could have done a better job in providing more support to parents and students. While all agreed that this particular system did a phenomenal job of adjusting and adapting quickly to the constant changes and focused on what was in the best interest of students, they still believed that the community could be more involved.

Delimitations and Limitations

This study is relevant to the area being sampled and may not necessarily apply to all school systems across North Carolina. I sent the survey to 67 middle school teachers in three middle schools, and 26 teachers completed the survey. I gathered the middle school teachers to participate by emailing them an invitation to participate. The initial invitation consisted of 21 middle school teachers participating. I sent a follow-up email, which resulted in five more middle school teachers participating in the survey. This resulted in a 39% participation rate in the survey. Twelve middle school teachers who took the survey and indicated they would like to take part in the focus group discussion were asked for their email addresses. Ten of the 12 middle school teachers gave me their email addresses, and it was those 10 to whom an email invitation to take part in the focus group discussion was sent. The focus group discussion was only attended by five of the 10 middle school teachers who received an email invitation to participate. The focus

group discussion had a 50% participation rate as a result.

This study benefited from having access to statistics on student attendance and enrollment as well as past and present student achievement data. The ability to examine historical student achievement data as well as middle school teacher perceptions provided a clearer picture of the impact that the COVID-19 outbreak had on student achievement. However, it is also clear that further discussions and studies can help district leaders have a better understanding of how teachers across all grade levels perceive how the COVID-19 pandemic impacted student learning, enrollment, attendance, mental health, and social and economic factors.

One limitation that occurred during this study is only being able to access public data. Not being able to access internal school data limited the possibility of comparing existing data to the teacher perception data. Another limitation of this study was time constraints. Waiting on approval to move forward with this study was a bit agonizing because it limited how much time and focus would be provided for this study. Also, having to rely on teacher participation to gain at least 25% participation in the survey provided limitations because it was a waiting game to see how many teachers would respond to the survey. Participation in the focus group also had its limitations. Twelve teachers expressed a willingness to take part in the focus group, however only two initially offered their email addresses. It was necessary to remind survey respondents to email me if they were willing to participate. The reminder prompted 10 teachers to email me but still proved to provide limitations when it came to scheduling the focus group. Some of the teachers had planned other events at the time the focus group was scheduled and therefore, they were not able to attend.

Another thing that limited this study was the absence of both current and historical data as it relates to the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. While the 1918 Spanish Flu pandemic may be well documented, how it affected student achievement is not well documented. Also, because the COVID-19 pandemic is more current, there is a limited amount of research readily available to address the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

Although this study specifically addressed middle school teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, it did not address middle school student perspectives on the impact of the COVID-19 pandemic. The only aspects of this study that involved students were existing student achievement data and existing attendance and enrollment data. While this study specifically focused on middle school teacher perceptions of the impact of the COVID-19 pandemic, I am well aware that future research should be considered to address the perceptions of teachers across all grade levels of the impact of the COVID-19 pandemic.

However, in order to determine the perceptions of teachers on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, I focused on middle school teachers only for the purpose of this study due to the limited number of middle schools that exist in the school district. Focusing on too large of a school district or all grade levels in a school district may have presented itself to be more of a challenge than focusing on one particular grade span.

Suggestions for Future Research

The findings of this study produced some curiosity about the perceptions of middle school teachers, high school teachers, and district leaders. I would suggest that the school district use this same survey and also conduct a focus group discussion to gain the perspectives of elementary school teachers, high school teachers, and district leaders on the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

I would also suggest that existing student achievement data and attendance and enrollment are looked at from the elementary and high school levels for correlations to teacher perceptions of the effects of the COVID-19 pandemic.

I would also suggest that if the school district leaders choose to further investigate such a study that they also consider looking at internal data such as data related to mental health and data related to social and economic factors to gain a better insight and to see if the data align with the teacher perspectives on the impact of the COVID-19 pandemic.

Once the research data have been finalized and analyzed to include all grade level spans, I would suggest providing teachers with professional development to address the areas of concern that have been impacted by the COVID-19 pandemic moving forward by implementing action research. According to the University of Central Missouri (Whitaker, 2011), action research entails a methodical approach to reviewing the data. In order to address the effects of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors, action research implementation will be essential. It will also be helpful for knowing how to address these issues if we ever find ourselves in a similar situation in the future.

Conclusion

The goal of this study was to learn how teachers perceived the COVID-19 pandemic affected student performance, enrollment, attendance, mental health, and social and economic variables. I deliberately targeted three middle schools in a small rural school district in North Carolina and invited teachers from the three middle schools to take part in surveys and focus groups.

The survey results allowed me to focus on emerging themes based on how teachers perceived the COVID-19 pandemic's effects. This research survey not only let me learn about teacher perspectives on the COVID-19 pandemic's effects, but it also enabled me to get the answers to the research questions that served as the study's guiding principles. In this study, recommendations for additional research were also presented along with implications for practice.

By conducting this research study, I learned how teachers perceived the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors. The focus group yielded some great discussion on teacher perceptions of the impact of the COVID-19 pandemic. The focus group discussion makes me want to take a deeper dive into the perceptions of teachers on the impact of the COVID-19 pandemic and makes me hope that the school district will develop research to further gain teacher perceptions of the impact of the COVID-19 pandemic on student achievement, enrollment, attendance, mental health, and social and economic factors.

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Appendix A

Consent Form for Online Survey

Dear Teachers,

My name is Sherria Grubbs. I am conducting a research study on Middle School Teacher Perceptions on the Impact of the COVID-19 Pandemic. I am sending this email to invite you to participate in a research study by completing a survey. The purpose of this research is to gain teacher perspectives on the impact of the COVID-19 Pandemic in middle schools. Participation in this research is strictly voluntary. However, your participation is greatly appreciated. Please read the informed consent below.

**Gardner-Webb University
IRB Informed Consent Form for Online Survey**

Middle School Teachers Perceptions on the Impact of the COVID-19 Pandemic

The purpose of this research is to gain teacher perspectives on the impact of the COVID-19 Pandemic in middle schools. As a participant in the study, you will be asked to complete an online survey. It is anticipated that the study will require about 10-15 minutes of your time. Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. The information that you give in the study will be handled confidentially. Your data will be anonymous which means that your name will not be collected or linked to the data. There are no anticipated risks in this study. You will receive no payment for participating in the study. You have the right to withdraw from the study at any time without penalty by exiting the survey. The research results from this study will be made available to the school district being studied. If you have questions about the study, contact:

If you have questions about the study, contact:

Sherria Grubbs Researcher
Telephone: 919-819-3435 E
mail: grubbss@gcs.k12.nc.us

Dr. Benjamin Williams Dissertation Chairperson
Telephone: 919-634-0346
Email: Bwilliams22@gardner-webb.edu

Dr. Sydney K. Brown IRB Institutional Administrator
Telephone: 704-406-3019
Email: skbrown@gardner-webb.edu

Clicking the link below to continue on to the survey indicates your consent to participate in the study: If you are not 18 years of age or older or you do not consent to participate, please close this window.

<https://forms.gle/Z2eaFXd9pyK27h259>

Appendix B

Survey Questions

Middle School Teacher Perceptions on the Impact of the COVID-19 Pandemic on Student Achievement

Survey Questions

Open Ended Questions

- What grade(s) do you teach?
- What subject(s) do you teach?
- Do you believe the COVID-19 pandemic affected student achievement and if so in what ways?
- What affects did the COVID-19 Pandemic have on student enrollment?
- In what ways do you believe the COVID-19 pandemic affected the mental health of the students?
- What social and economic factors of the students were affected by the COVID-19 pandemic?

Likert Scale Questions

- Students benefitted from remote learning during the COVID-19 pandemic.
- The mental health of the students was affected by the COVID-19 pandemic.
- Student enrollment decreased significantly during the COVID-19 pandemic.
- The COVID-19 Pandemic had a huge impact on student achievement.
- During the COVID-19 Pandemic, economic and social factors affected student achievement.
- Students had ample access to technology and Wi-Fi during the COVID-19 Pandemic.
- Student attendance declined significantly during the COVID-19 Pandemic.

- Students did better academically with in-person learning than they did with remote learning.
- Would you be willing to participate in a focus group?

Appendix C

Survey and Focus Group Question Validation Form

Name of Reviewer: _____

Instructions: This form has been designed to evaluate the validity and the effectiveness of the survey and focus questions to be used in the research study: *Middle School Teacher Perceptions on the Impact of the COVID-19 Pandemic on Student Achievement*.

Please review each question below and rate it by marking an “X” in the appropriate column. Space has also been provided for you to make comments or suggest revisions.

Open-Ended Survey Questions	Essential to the research study	Not essential to the research study but useful for the research study	Not essential to the research study at all	Comments
What grade(s) do you teach?				
What subject(s) do you teach?				
Do you believe the COVID-19 pandemic affected student achievement and if so, in what ways?				
What effects did the COVID-19 pandemic have on student enrollment?				
In what ways do you believe the COVID-19 pandemic affected the mental health of the students?				
What social and economic factors of the students were affected by the COVID-19 pandemic?				
Likert Scale Questions				
Students benefitted from remote learning during the COVID-19 pandemic.				

The mental health of the students were affected by the COVID-19 pandemic.				
Student enrollment decreased significantly during the COVID-19 pandemic.				
The COVID-19 pandemic had a huge impact on student achievement.				
During the COVID-19 pandemic, the economic and social factors affected student achievement.				
Students had ample access to technology and wi-fi during the COVID-19 pandemic.				
Student attendance declined significantly during the COVID-19 pandemic.				
Students did better academically with in-person learning than they did with remote learning.				
Would you be willing to participate in a focus group?				
Focus Group Questions				
What role do you think the COVID-19 pandemic played on students social and economic factors?				
Why do you think student attendance and enrollment declined during the COVID-19 pandemic?				

What does the EOG data say about student achievement during the COVID-19 pandemic?				
In what ways were students' mental health affected by the COVID-19 pandemic?				
What have we learned from the COVID-19 pandemic and what can we do better if we were to face such a situation again?				

Thank you for your time and effort in helping to validate the questions for my research study.

Sincerely,

Sherria Grubbs

Appendix D

Informed Consent Form for the Focus Group

Middle School Teachers Perceptions on the Impact of the COVID-19 Pandemic on Student Achievement

The purpose of this research is to gain teacher perspectives on how the COVID-19 Pandemic effected student achievement. A focus group will be conducted via zoom. As a participant in the focus group, you will be asked a series of open-ended questions. It is anticipated that the focus group will require about 60 minutes of your time.

Participation in this focus group is voluntary. You have the right to leave the focus group at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. The information that you give in the focus group will be handled confidentially. The focus group will not be anonymous. You will receive no payment for participating in the focus group. You have the right to leave the focus group at any time without penalty by exiting the zoom meeting. Data from this focus will be made available to the school district. There are no anticipated risks in this study.

If you have questions about the study, contact:

Sherria Grubbs Researcher

Telephone: 919-819-3435

Email: grubbss@gcs.k12.nc.us

Dr. Benjamin Williams Dissertation Chairperson

Telephone: 919-634-0346

Email: Bwilliams22@gardner-webb.edu

Dr. Sydney K. Brown IRB Institutional Administrator

Telephone: 704-406-3019

Email: skbrown@gardner-webb.edu

Clicking the zoom link below to join the focus group indicates your consent to participate in the focus group.

If you are not 18 years of age or older or you do not consent to participate, please close this window.

Topic: Focus Group on Middle School Teacher Perceptions on the Impact of COVID-19

Time: Feb 23, 2023, 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us06web.zoom.us/j/76713839407?pwd=ObZecX5xauKq2e4Ck6Si4fTmbh9OhZ.1>

Appendix E

Focus Group Questions

Middle School Teachers Perception on the Impact of the COVID-19 Pandemic on Student Achievement

Focus Group Questions

- What role do you think the COVID-19 pandemic played on students social and economic factors?
- Why do you believe student enrollment and attendance declined during the COVID-19 pandemic?
- What does the EOG data say about student achievement during the COVID-19 Pandemic?
- In what ways were students' mental health affected by the COVID-19 pandemic?
- What have we learned from the COVID-19 pandemic and what can we do better if we were to face such a situation again?