

TWICE-EXCEPTIONAL AUTISM AND HOME EDUCATION: A
PHENOMENOLOGICAL ANALYSIS

by

Tiffany B. Hartman

Liberty University

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

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Name and degree, Committee Chair

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ABSTRACT

It is common for autistic and particularly twice-exceptional (2e) children to be schooled from home at a higher rate than their neurotypical peers. Much of the current research investigating this phenomenon is conducted from the perspective of the public school system. This point of view is generally critical of the curriculum taught in the home, has largely limited parental voices in the literature, and overlooks possible circumstances in the public school system that might have led families to choose to homeschool. This qualitative analysis conducted open-ended interviews of parents with twice-exceptional autistic children who have home-educated or currently educate their children at home. It explored parents' reasons for choosing to homeschool, and it gathered insight into their experiences as they transitioned from public schooling to the home environment. The data indicated two theories. The first was that parents tend to choose to homeschool their 2e, autistic children because the public schools are in some way not meeting their needs. The second theory was that transitions to homeschool were positive in some households and challenging in others. Those experiencing positive transitions likely benefitted from self-directed learning, one-on-one time, and fewer distractions of home education. Families who experienced difficulty typically had schedule conflicts (such as working parents), and parent burnout. Implications of this study may inform public schools of the under-served 2e population and encourage better accommodations for the students. This cannot be done, however, unless the students are evaluated, and their autism is recognized.

Keywords: Twice-exceptional, 2e, twice-exceptional autism, Autism, homeschooling, exceptional student services, special education, public school system

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Dedication

This project is dedicated to my soulmate, Jim, who relentlessly validates me, upholds me, and refuses to let me give up on my goals. I will never be able to thank you enough for supporting me. I could not have done this without you. To Stella and Jimmy: You are capable of anything. Find your passion and allow God to show you the way.

All of the glory is owed to my Lord and Savior, Jesus Christ. He led me to this; it is His work.

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Thank you for believing in me.

I am thankful to the University. As a person of faith, I have always believed that God and science are symbiotic, not mutually exclusive. Thank you for creating an environment in which students can overtly incorporate God into their research.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Autism Spectrum Disorder (ASD) is a developmental disability characterized by communication, social, emotional, and behavioral challenges. Symptoms can include repetitive behaviors, sensory processing challenges, difficulty with transitions, learning and communication differences, and more (Centers for Disease Control and Prevention [CDC], 2020). A twice-exceptional (2e) child is one who is both disabled (autistic, in this case) and gifted (intellectually, for this study). It is estimated that only 6% of disabled students are also gifted (Baldwin et al., 2015), and since 2e students often achieve high or adequate grades, it is common for public schools to deny them the support they need in order to reach their academic potential (Blustain, 2019).

Parents of autistic and particularly twice-exceptional students frequently choose to educate their children from home, either temporarily or permanently, during their primary schooling years (Baldwin et al., 2015). Much of the current research exploring this phenomenon is conducted from the vantage point of the public school system, which is critical of curricula being used in the home, and fails to investigate reasons why parents choose to homeschool (Simmons & Campbell, 2018).

This study conducted a series of open-ended interviews with parents of 2e students with autism who either homeschool or have homeschooled their children. Questions focused on the reasons why the parents chose to home-educate their 2e students as well as their experiences and observations during their transitions between the public school and homeschool environments.

Background

Twice-exceptional children with autism are members of an exceptionally small group of students with developmental disabilities, who are also intellectually gifted. This group of about 6% of the disabled student community is unfortunately known to fall through the cracks of the public education system, and even the medical industry, likely because their giftedness can obscure their disability (Baldwin et al., 2015). Research has shown that early intervention can help autistic children to acquire skills for navigating society throughout their formative development and into adulthood (Bejarano-Martín et al., 2020; Lazaratou et al., 2017; Magalhães et al., 2017; Manohar et al., 2019). Sadly, therapy is costly (Rogge & Janssen, 2019) and sometimes scarce or not widely available (Antezana et al., 2017; Benevides et al., 2017; Cloet et al., 2017; Kakooza-Mwesige et al., 2021), and if a 2e student is performing academically at or beyond grade level, they are frequently denied evaluations and therapeutic support from the public school system (Blustain, 2019).

Unfortunately, denying support to a disabled child on the basis of intellectual giftedness fails to take into consideration meltdowns/emotional dysregulation, sensory overloads, frustrations, various types of anxiety, socially inappropriate behaviors/deficiencies, etc., which can, and do, affect the learning of both the disabled child and his or her peers. Children in this category also tend to be excluded from gifted programs that usually do not accommodate disabled students, while also being denied the help they need in the classroom (Maddocks, 2020; O'Sullivan et al., 2017; Renzulli & Gelbar, 2019; Ronksley et al., 2019).

There exists an apparent disconnect between the medical and educational communities, as schools often deny exceptional student services evaluations to 2e students, despite having thorough reports from specialized developmental pediatricians detailing a child's need for

educational intervention as a result of their disability (Kong et al., 2020; Shahidullah et al., 2018). Blustain's (2019) investigative article interviewed parents and teachers of 2e students and found this to be an apparent phenomenon in New York. Several parents complained of their children being denied access to accommodations, which are supposed to be guaranteed to them by federal disability education laws (IDEA, 2004). One parent in particular reported attending a meeting with district resource personnel with a detailed diagnosis in-hand, along with a teacher advocate who was willing to vouch for the child's needs, and still, the school denied her child an evaluation (Blustain, 2019).

Blustain's (2019) interviews of the teachers perhaps explained these perplexing occurrences: the teachers expressed a concern that 2e students are, in reality, children with autism who have come from families with means, so they perform academically better than other autistic children. They worried, therefore, that offering assistance to this population would disproportionately benefit children from middle to upper-class homes. This bias, of course, is unfortunate and likely inaccurate. Furthermore, federal disability education laws do not discriminate based on socioeconomic status or perceived socioeconomic status (IDEA, 2004). A few of the parents in Blustain's (2019) article successfully sued their school district, but they indicated that it was exhausting, lengthy, and expensive.

In addition to the difficulty of accessing resources from public schools are further issues of teachers lacking training for teaching autistic students (Magalhães, 2017), the increased likelihood of bullying for autistic children (Matthias et al., 2021; O'Hagan et al., 2021), and high teacher to student ratios. Large classrooms mean less educator time to help those students who need accommodations the most, relegating parents with the sole responsibility of finding

alternative ways to help their children, including seeking training themselves (O’Nions et al., 2018; Parker et al., 2020).

It is no wonder families with autistic children oftentimes experience higher levels of stress than other families. Charged with the task of advocating on behalf of one’s child with the school district can be time consuming, costly, and emotionally taxing (Alhuzimi, 2021; Argumedes et al., 2018). Sadly, there is evidence of the existence of a perpetual cycle in which stressed-out parents can affect the general outcome of any interventions received (Estes et al., 2021), so the stressors brought on by the nature of the difficulty securing resources can effectively sabotage their efficacy.

In the Bible, Jesus offered His perspective about disabilities. His disciples asked about a man who had been blind from birth; they wanted to know if the man was blind as a result of his parents’ sins or his own sins. Jesus replied that neither the man nor his parents had sinned, but the man’s blindness was an opportunity for others to see the good works of God in him (*King James Bible*, 2022, John 9:1-3). In modern times, society can follow this teaching of Christ by using the resources we have available to us (programs, charities, therapies, services, professions) to support those who are disabled and thereby glorify God with our good works. The public school system in the United States is widely accessible; it has the potential to support all children who need and/or seek assistance.

With respect to the Bible, if social systems fall short of supporting 2e autistic children, there is even a greater responsibility for parents to protect and provide for the needs of those with whom the Lord has entrusted them (*King James Bible*, 1 Timothy 6:20, 2002). It is therefore not surprising that many parents choose to educate their autistic children at home, as there are some clear benefits for the students. Due to the low teacher to student ratio, home education presents

more opportunities for student-directed learning, fewer distractions, and fewer forced transitions, which may also reduce emotional distress, sensory overload, and overall frustration (Anderson, 2020; Angell et al., 2018). There is evidence to suggest that when given the autonomy of self-directed learning in a home-based educational setting, some autistic children are better able to develop self-management skills (Hampshire & Allred, 2018). Choosing home-based education does not disqualify students from public school resources, either.

Problem Statement

Autism Spectrum Disorder presents with several characteristics that can affect learning and education, including meltdowns, trouble with transitions, hyper-fixations, an inability to focus, repetitive behaviors, and social challenges (CDC, 2020). When a child with autism is also gifted, their twice-exceptionality can mask their disability in some ways, because they oftentimes perform well academically and are, therefore, refused therapeutic support. Research suggests that early intervention is crucial for mitigating many of these difficulties (Lazaratou et al., 2017). However, therapy can be inaccessibly expensive (Rogge & Janssen, 2019) and is not available in every area (Kakooza-Mwesige et al., 2021). Some families have been able to access disability support through the public school system, but many are turned away from evaluations or do not receive adequate help (Hurwitz et al., 2020). It has been found that some parents of autistic and 2e with autism children lose trust that the school system is acting in the best interest of their children when evaluations and services are refused, delayed, or ineffective (Simmons & Campbell, 2019).

In the year 2019, it was estimated that roughly 26,000 autistic children in the United States were homeschooled (Simmons & Campbell, 2019). Most of the current research

investigating autism and homeschooling is written from the perspective of the public school system (Simmons & Campbell, 2019), which is perhaps ironic, because those who are educating the children are their parents. For this reason, there was a need to explore the experiences of parents who felt called to educate their 2e autistic children from home; there is a need for scientific inquiry into the parents' reasons for homeschooling and into the subsequent experiences of transition for those who left the public school system. This study contributes parental voices to the body of knowledge, which benefits the scientific community.

Purpose of the Study

The purpose of this qualitative, phenomenological study was to explore the reasons why parents choose to homeschool their 2e autistic children and their experiences with transitioning to home education from the public school system, to identify any themes related to these topics, and to contribute the voices of the parents to the body of knowledge.

Research Questions

Research Questions

RQ1: Why do parents of twice-exceptional autistic children choose to homeschool?

RQ 2: How do parents who homeschool their twice-exceptional autistic children describe their experiences as they transitioned from the public school environment to the home education environment?

Assumptions and Limitations of the Study

There are, unfortunately, limitations inherent to qualitative research, particularly with respect to studies gathering data from participant interviews. It is possible that participants' recollections of events could have been inaccurate, and due to the nature of parental advocacy for disabled children, it is not known how emotional factors might have affected each participants' memories and experiences. It is therefore acknowledged that complete researcher and participant objectivity in this study were likely impossible, so the researcher was committed to keeping subjectivity in check by remaining aware of any personal biases and regularly monitoring personal opinions, values, beliefs, and attitudes throughout the duration of the study. This extended to the interpretive process of the data. Transcriptions were first analyzed using NVivo™ software to help objectively data mine for themes and reduce researcher bias. Afterward, the constant comparative method was used, which is devised to account for validity as each interpretation and finding is compared with existing findings. In this way, the constant comparative method was also designed to mitigate researcher confirmation bias (Glaser & Strauss, 2017).

It was assumed that while participants were also subject to bias, they were honest in their responses. In order to encourage their candor, participants were assured that their confidentiality would be preserved and that they could withdraw from the study at any time, and for any reason, without ramification. All of the participants' qualifying data, including their children's diagnoses, and testing scores, were parent reported and not externally verified, so the results relied on parents' truthful reporting and also their understanding of evaluation results in order to be able to report them accurately.

Due to the small sample size of the study, its results were not expected to be externally generalizable. However, it should be acknowledged that twice-exceptional students are

estimated to represent only 6% of disabled students (Baldwin et al., 2015), so the population from which to draw participants is also small. The study, therefore, was more concerned with internal generalizability. Internal generalizability is rooted in grounded theory (Holton & Walsh, 2016), meaning that the goal was not necessarily to generalize the results to the population, but it was to lay the groundwork for theory and application by identifying common themes present in the phenomenon.

Theoretical Foundations of the Study

Researchers have found that, when compared with their neurotypical peers, a disproportionate number of autistic children are homeschooled at some point in their primary education years (Baldwin et al., 2015; Simmons & Campbell, 2019). It has been concluded in other studies that twice-exceptional students are capable of thriving academically with the proper support; opportunities for flexibility in the curriculum, learning in terms of interest, and self-directed learning have resulted in academic success, even placing 2e students in prestigious universities around the United States (Baldwin et al., 2015; Hampshire & Allred, 2018; Wu et al., 2019).

Here, it is evident how science supports the Word of God; it can be seen that empiricism and spirituality are not mutually exclusive. Scholarly inquiry is a tool of humanity to discover the mysteries and to contextualize the counsels of our Creator. If executed honestly, God and science work in harmony. The present study was theoretically rooted in the works of the scholars who have identified that simply choosing to serve twice-exceptional students in reasonable ways can help them to reach their academic, mental, and emotional potentials. Biblical concepts have already counseled readers in this regard. First, Christ was direct with His

apostles about disabilities; they are opportunities to glorify God (*King James Bible*, 2022, John 9:1-3). This can be accomplished by finding ways to support all disabled children, not just those who are not gifted.

Secondly, believers are counseled to not provoke or frustrate children (Ephesians 6:4 *King James Bible*, 2022). It can be argued that twice-exceptional students are oftentimes positioned to fail; if they are unable to receive evaluations or support as a result of their giftedness, they may find separation from home to be intolerable, they may struggle to be accepted by peers and educators due to behaviors like meltdowns and “stimming.” Their giftedness may cause boredom as well, but their inability to access gifted programs is stifled because once again, accommodations are not available. It is not difficult to imagine how this might be frustrating to a child, particularly a child who might struggle with emotional regulation.

Finally, the failures of the public school system to follow scientifically-identified methods to serve 2e students, which are supported Biblically, may explain why many parents feel called to homeschool their twice-exceptional children in order to compensate for the deficits left behind when the public school system is unable or unwilling to provide equal access to support for all disabled students (Proverbs 22:6, *King James Bible*, 2022).

Definition of Terms

The following is a list of definitions of terms that were used in this study.

Home educating – In the context of this study, home education refers to homeschooling, not to be confused with online public or private schooling.

Meltdown – A meltdown in autism is a form of emotional dysregulation that is generally the result of overwhelm arising from sensory processing difficulties. It

is often characterized by loud crying or screaming, fleeing, destructiveness, or even violence (Matthias et al., 2021).

Stimming – Stimming is a term used to describe repetitive characteristic behaviors in autism, which are expressed in order to comfort oneself. These can include but are not limited to repeating words, making involuntary noises, rocking, spinning, or even hitting one’s head on hard surfaces (Matthias et al., 2021).

Twice-exceptional (2e) – A twice-exceptional student is one who has both a disability and an academic/intellectual gift. In the context of the proposed study, the disability is autism (Maddocks, 2019).

Significance of the Study

The scholarly body of knowledge on the topic of 2e autism and homeschooling is lacking in both volume and in parent voices. Since much of the current research in this regard is conducted by those affiliated with the public school system, and public schools’ funding is affected by parents’ decisions to homeschool their children, there is a possibility of intentional or unintentional bias in previously published studies. Additionally, many of these studies do not investigate the changes in emotional wellbeing in children after they transition to the home learning setting.

The collection of data from those who chose or continue to choose to not participate in the public school system was valuable to the scientific community because it provided more context to previously published works, it allowed for parents’ voices and experiences to be both present and prioritized in this discussion, and it has the potential to affect the ways in which public schools serve students and families in the twice-exceptional autism community.

Summary

Parents of twice-exceptional autistic children oftentimes choose to homeschool their students at some point in their education. 2e students are frequently denied evaluations and therapeutic interventions, which are said to be guaranteed to them by federal education laws (IDEA, 2004), because, as they are told, they are performing on-level or above-level in school (Blustain, 2019). This does not take into consideration characteristics of the developmental disability that can and do affect learning. Public school-affiliated researchers have studied this phenomenon, but their methods tend to be critical and focused not on the reasons parents chose alternative education or the experiences of those families, but on the curricula being used to educate autistic children in their homes (Simmons & Campbell, 2019). The current study aimed to fill this gap by directly interviewing parents who have chosen to homeschool their 2e autistic children; it intended to gain a better understanding as to the reasons parents chose/choose alternative education and how they experienced the transitional period into the home setting. The current study provides context to previously published articles as well as allows for a greater contribution of parent voices into scholarly journals.

CHAPTER 2: LITERATURE REVIEW

Overview

Representing an estimated 6% of students with disabilities are those known as twice-exceptional (2e) children. Twice-exceptional children are unique; they present with both a disability and a co-existing intellectual gift. There are a number of different disabilities; however, this study will focus exclusively on autism and twice-exceptionality. Twice-exceptional children can be difficult to identify because disabilities can conceal gifts, and gifts can mask disabilities (Baldwin et al., 2015). This presents a conundrum for the public school system: In addition to identifying, evaluating, and supporting this small population, research has found that 2e students tend to thrive in school when the learning is flexible, customized to their interests, and self-directed (Wu et al., 2019). Providing such an environment may be difficult, especially if a school's resources are limited.

Perhaps as a result, parents of 2e students often find that schools are unwilling to evaluate their 2e children and, if they agree to do so, it is common for the children to not be given proper classifications, accommodations, or support from the public school system. It is reported by some parents that 2e students are said to not qualify for assistance because their assessment scores suggest that the children are performing on-level or above-level, even when challenging behaviors are present (Blustain, 2019).

Parents frequently find themselves in situations where they must effectively (and repeatedly) advocate for their children in a system that, for some, exists as more of an educational barrier than a facilitator of free public education with disability accommodations that are supposed to be guaranteed to every student in the United States (IDEA, 2004). Simultaneously, it is common for parents of 2e students to choose alternative education

modalities, including homeschooling. While some are critical of this prospect, 2e students have reported that homeschooling allows them flexibility, a smaller classroom, opportunities for creativity, and the ability to self-direct their learning (Madaus et al., 2022). The Bible teaches that it is ultimately the responsibility of parents to raise their children (Proverbs 22:6, *King James Bible*, 2022), and children can become discouraged if they are frustrated or provoked, which can happen at school if their disabilities are not being accommodated (Ephesians 6:4, *King James Bible*, 2022).

Description of Research Strategy

The studies presented and discussed in this chapter were located in Liberty University's online Jerry Falwell Library using the following search terms: 2e, twice exceptional, twice exceptionality, twice exceptional with autism, autism and bullying, autism, and homeschooling, and 2e and homeschooling. Filters were utilized to customize searches to include journal articles that were peer-reviewed. Other sources included a relevant news article detailing parent experiences and teacher perspectives, an article from the Centers for Disease Control and a reference to an educational law for students with disabilities. These sources were found on their official websites using an internet search engine. Biblical references were discovered using the search option on the King James Bible Online website (*King James Bible*, 2022), using the following terms: Disabilities and parenting. Biblical references were also found through the researcher's personal study of the Word.

Review of Literature

Twice Exceptionality

Twice-exceptional children are those who are both disabled and possess characteristics and/or traits consistent with giftedness. In the case of this study, 2e children are those who have autism and giftedness concurrently. The difference between a gifted student and a gifted student with a disability is one of cognitive processing deficit, which is linked to performance in a low-achieving area (Maddocks, 2019). In his study, Maddocks (2019) identified some of the homogeneous characteristics of 2e children, such as a strong lingual/verbal ability and a low to average cognitive processing (particularly, speed) ability. Maddocks (2019) acknowledged, however, that his sample was limited because it did not represent all of the ways in which a child could be gifted.

According to Baldwin et al. (2015) 2e students can be difficult to identify because their disability might conceal their giftedness, or their giftedness could mask their disability, and they are estimated to comprise only about 6% of students who have disabilities. They might fail to complete work, call out in class, be disinterested, disorganized, or they may act out. Twice-exceptional students might also perform well academically, making it difficult for them to receive help from the public school system. Lee and Ritchotte (2017) explained that society cannot afford to allow this small population of students to fall through the cracks; they referred to the phenomenon of twice exceptionality as a silent crisis, because many go undiagnosed and/or are refused needed support from the public school system.

Baldwin et al. (2015) conducted a multi-case study in which they examined 3 children who were classified as 2e. After reviewing their data, Baldwin et al. (2015) recommended strategies for serving this population, which is known to be under-served: addressing the

student's strengths and weaknesses, providing appropriate social and emotional support, offering adaptations for strengths and accommodations for weaknesses, and providing a supportive, safe environment in which the successful learning of all students is prioritized.

Madaus et al. (2022) conducted a multiple case study of 40-2e with ASD post-secondary/college students who attended prestigious universities in the United States. The authors noted some common characteristics, such as the students possessing excellent writing and language skills while simultaneously struggling in mathematics, a high percentage (90%) of participation in club sports despite social awkwardness, and a high propensity for comorbid mental health disorders such as anxiety and depression. The authors stated that these students would have likely been considered to have Asperger's prior to 2013, when the industry subsumed the diagnosis under the autism spectrum umbrella. The researchers were interested in which factors enabled success in college, and which factors were barriers for this group of students. Results suggested that it was the flexibility to self-direct learning as well as a love for learning that enabled the students to perform well academically. However, they tended to struggle with teaching methods, deadlines, and time management. It was suggested that 2e students can excel in universities with proper support.

In a small, one-student case study, Yenioğlu et al. (2022) studied a single child by interviewing the student, the student's mother, the student's teacher, and the student's special education teacher. The authors found it interesting that the student had a large circle of friends, as this is not typically characteristic of 2e children; however, this could be the result of the child's support system or the success of his therapeutic support. The authors concluded that it was important for students themselves to be aware of their own diagnoses and characteristics and that teachers should be trained on these as well. They stated that focusing on strengths rather

than deficiencies helps the 2e child integrate better into school, and they shared a list of desires from the student himself: he wanted smaller classrooms, shorter lessons, and teachers who are open-minded and flexible with learning.

It is frequently found in the literature that 2e students perform better academically when the curriculum is flexible and learner-directed. Wu et al. (2019) noted the importance of tailoring learning curricula to 2e students, which allows them the freedom to explore their interests and strengths while also supporting them in their challenges. The authors mentioned that this teaching philosophy is not limited to 2e students, but that with the uniqueness of every learner, any student could benefit from the education model. In their research, Wu et al. (2019) studied 2 twice-exceptional fifth-grade students with autism. After a series of interviews, surveys, and questionnaires, the researchers found in common 3 themes that are present in optimal learning conditions for 2e students: flexibility, strength-based curricula, and a safe learning environment.

It is possible that a contributing factor to the lack of academic success of some 2e students is underachievement, which is a frequently noted trait in twice-exceptionality. Perhaps for these students, the curriculum is too boring, too easy, or even too monotonous. Lamanna et al. (2020) noted that the underachievement of 2e students can contribute to behavioral issues in the classroom, so the authors studied ways to reverse it. They studied two twice-exceptional students from another study who were also underachievers. The results suggested that having an appropriately challenging curriculum, the proper medication, and a positive connection with one's teacher could help the students reverse their underachievement tendencies and become better engaged in their learning.

An online news article emerged in 2019 in which Blustain (2019) interviewed several parents of 2e children in New York who had interacted with the public school system regarding their children's disabilities and giftedness. Unfortunately, none of the parents reported positive experiences. A parent and advocate explained that since many 2e children have high marks on their report cards, it is common for them to not receive the support that they need from their schools. Her organized group approached the school board with the results of a survey of 500 parents who expressed that they had difficulty accessing help for their 2e children, and the state eventually passed legislation requiring teacher training for 2e students. While this was progress, the parents interviewed for the article said it is difficult to prove that 2e students exist because, while a student can have a verified disability, it must be one that affects their education and in some cases, the reasons given for denial are vague and/or subjective. If 2e students' scores are high, according to the experiences expressed in the article, they are at risk of being dismissed by their district's exceptional student services. According to the Individuals with Disabilities Educational Act (IDEA, 2004), however, any student suspected of having a disability has the right to receive an evaluation from the public school system, regardless of their cognitive skill.

The Blustain (2019) article reported stories from other parents who attended meetings with teachers and advocates, and with diagnoses in-hand, but who were refused evaluations and services anyway. Blustain (2019) interviewed teachers in the same district, who expressed their concern that services for 2e students disproportionately benefitted middle- and upper-class families, since those families are more likely to have the time and resources to work with their children, pay for private support, and advocate for their children. If this is the case, it is possible that twice-exceptional students are, in fact, disadvantaged. If the public education system stigmatizes them on the basis of assumed socioeconomic status, it could be rendering them less

likely to receive the same support that their peers who perform differently academically are receiving.

Gierczyk and Hornby's (2021) meta-analysis reviewed fifteen articles published between the years 2000-2020. Their findings revealed that teacher training, a continuum of intervention, a collaboration of parents, teachers, and special education staff, and a focus on developing strengths as much as addressing deficits were all vital components of supporting 2e students. The authors concluded that 2e children could effectively learn in general education settings with proper support. Unfortunately, based on the Blustain (2019) article, this particular group struggles to retain support.

Rogge et al. (2019) investigated the financial costs of autism: medical/healthcare, therapy, special education costs, loss of production costs, informal care, and loss of production for caregivers, and costs of accommodation, which included respite and out-of-pocket expenses. Their analysis found that education expenses were some of the highest faced by families of children with autism, so being denied evaluations and support by the school system based on a co-existing giftedness has real, sometimes unaffordable, consequences for families. It furthermore denies disabled learners of their educational right to a free, public education that is accommodating of their needs (IDEA, 2004).

Foley-Nicpon and Assouline (2020) reviewed several studies for their analysis of 2e students and how school psychologists are positioned to make all the difference in the challenges faced by this small percentage of the student body. The authors explained that a better understanding of twice exceptionality could bring more opportunities for 2e students in gifted programs, and it could also help to prevent missed diagnoses. They continued that while school psychologists tend to be well-versed in disabilities, they are generally less trained in recognizing

and enabling student giftedness. Foley-Nicpon and Assouline (2020) recommended more training and awareness, facilitated by school psychologists in order to help teachers better learn to recognize 2e students, and to also remember that educational testing does not necessarily identify twice exceptional. Lee and Ritchotte (2017) explained that it is not always the case that gifted and talented students tend to be high-performers; however, giftedness refers to potential, so evaluations and intervention from the public school system are needed in order to help students both with their gifts as well as with their deficits.

O'Sullivan et al. (2017) reviewed challenges for twice-exceptional students in other studies, then authored an article using a creative approach; they designed a model for inclusive learning for 2e students using the popular video game, Minecraft. This was rooted in what they called the educational potential of gaming, particularly one that allows for creativity and adaptability. The authors recognized the following needs for optimal learning: freedom and variety so that the students could learn in ways that interest them, the ability to engage with the real world in interesting ways, and an adaptable environment that is sensitive to the children's learning challenges. Minecraft, stated O'Sullivan et al. (2017), allows for exploration, simulated real-world scenarios, the learning of information about geography and history, puzzle rooms, and the incentive to learn basic computer coding (computational thinking). The authors concluded that their theory addressed the learning challenges of 2e students and provided a framework from which effective teaching and learning can occur.

Multiple Intelligences

The twice exceptional diagnosis is not necessarily identified by testing or even by using the Intelligence Quotient (IQ) assessment. It is possible that this is because there are many ways in which students can be gifted, and intelligence assessments like IQ only measure a few of

these. Howard Gardner (n.d.) is an American psychologist and professor at Harvard University in their School of Education. After extensive research, he developed Gardner's Multiple Intelligences Theory (MIT), a theory rooted in the concept of there being multiple ways in which children (and adults) can have strengths or even giftedness. The idea is that all of us possess some level of every intelligence, but that we are each uniquely strong in different areas. Gardner (n.d.) identified 8 intelligences in particular, including:

1. Spatial Intelligence, or the ability to manipulate and conceptualize objects
2. Bodily/Kinesthetic Intelligence, which is the ability to use one's body to solve problems or create things
3. Musical Intelligence, the sensitivity to beats and rhythms, pitches, or tones
4. Linguistic Intelligence, or sensitivity to the meaning, order, and sounds of words
5. Logical/Mathematical Intelligence, which is the understanding of relationships between numbers and symbols
6. Interpersonal Intelligence, or the sensitivity and ability to interact effectively with others
7. Intrapersonal intelligence, the ability and sensitivity to introspection and making decisions for oneself
8. Naturalistic Intelligence, which is the sensitivity to understanding nature in relation to itself and humans in relation to nature

Garmen et al.'s (2019) study piloted software that tests for multiple intelligences. The researchers had 372 primary school child participants, aged 5-9 years. Their results suggested that the software, called Tree of Intelligence, is most likely a valid instrument by which to measure multiple intelligences of children. This is beneficial to the support of MIT, because there is some controversy surrounding this concept. Papadatou-Pastou et al. (2020; 2021) have

concluded that since learning styles have been shown to be a myth, so too is the concept of multiple intelligences, especially because educators understand and implement them differently, while all believing they are adhering to the same theory. Gardner (n.d.) is clear when he explains that each intelligence can be expressed differently in different people, and it should be noted that MIT is not necessarily a learning style theory, but a way to explain and identify different intellectual strengths or gifts.

Importance of Early Intervention

The majority of science seems to agree that, in the case of autism, early intervention can positively affect outcomes in adulthood, but that access to therapy and support can be difficult to secure. Cloet et al.'s (2017) meta-analysis reviewed studies investigating access to support and early intervention for children with ASD. Early intervention in childhood impacts the ways in which autistic children develop into adulthood. It is believed that treatment in the first 6 years of life can help to prevent or minimize developmental delays. A failure to intervene early can result in both personal and social costs later in life, so the authors expressed their recommendation of making access to support and therapy available to all children with developmental delays and/or disabilities.

Kodak et al. (2020) also discussed the importance of early intervention and how it can help to eliminate or prevent the exacerbation (or development) of distressing behaviors, which can include those that are not socially acceptable or that are dangerous. The authors listed aspects of one's life that can be negatively impacted by distressing behaviors that are not addressed in early stages of development. In addition to social rejection and therapy interventions, was education. Kodak et al. (2020) continued that the intervention with the most empirical support is applied behavioral analysis (ABA), which can help a person with deficits

develop skills needed to engage with society and improve quality of life. Furthermore, early intervention is important because, according to the authors, the greatest benefits are generally realized if ABA is introduced before the age of 5 years.

Bejarano-Martín et al. (2019) disseminated an online survey to both parents of autistic children and professionals who work with autistic children. Their questionnaire featured a 7-point Likert Scale, and their study had usable data from 2032 participants. After analysis, the authors' results suggested that when support services for autism are being offered, professionals should consider prioritizing children based on their age and by the length of the time they have been waiting for help.

It should be noted that the science community does not unanimously agree with early interventions such as applied behavioral analysis. Mottron's (2017) article states that there is no scientific, ethical, or social justification for such interventions. According to the author, it is more efficacious to teach to the strengths of the autistic student rather than to work to suppress autistic behaviors such as repetition and the mirroring of social interaction typical to society. Parker et al. (2020) pointed out the problem-focused approach of ABA therapy and recommended a solution-based approach instead. They acknowledged that parent caregivers of children with ASD tend to suffer with elevated levels of stress, anxiety, and depression, and that it affects mothers more intensely than fathers. Their solution-focused therapy approach recognizes that while parents may not be experts with respect to autism, they are experts when it comes to their children. Their method is brief, future-focused, based on the goals of the client, and urges the family to teach the therapists about their strengths and weaknesses, while working in collaboration with the professional in order to achieve positive outcomes.

It is clear that many in the scientific community believe early intervention is a vital component to helping those with autism spectrum disorder to develop life skills that will help them traverse through life and society, and might reduce or eliminate distressing symptoms, which could improve quality of life. It is also clear that diagnostic and therapeutic services are not widely available, and they are expensive. Families without insurance policies underwritten to cover therapeutic interventions for developmental disabilities and/or families of low to average means might rely heavily on interventions available to their children through the public school system. In the case of 2e students who frequently score highly in some subjects, those students might be at an even greater disadvantage because it is more difficult to detect a need for disability-related educational support. If the results of the discussed studies are correct, refusing access to resources for autistic children denies them the opportunity for early intervention, which could affect them, their earning potential, their ability to live independently, and their overall finances for the rest of their lives. Furthermore, a delay in diagnosis and support fails to identify the root causes of some behaviors, leaving these students in a situation where they might be calling out in class, stimming, melting down, or exhibiting other behaviors associated with autism without professional explanation. A lack of diagnosis can leave them vulnerable to the frustrations and criticisms of their teachers and peers, placing them at a greater risk for bullying.

Access to Support

Access to support is a challenge for 2e children (Baldwin et al., 2015). It is also difficult to secure for autistic children in general. Manohar et al. (2019) evaluated 50 families of children with ASD and found that roughly 70% of the families initially met with their pediatricians, and only 20% received a diagnosis at their initial appointment. Sadly, the researchers found that it took over 14 months for most of the participants to finally receive a diagnosis after noticing the

onset of symptoms in a child. Punnoose (2019) reviewed the Manohar et al. (2019) article and referred to these delays in care as, “unacceptable,” and mentioned the necessity of liaisons between pediatricians and the rest of the healthcare team. Martinez et al. (2018) saw similar results in their study of 450 families. They also found that a delay in diagnosis and having to drive long distances for care were associated with shifting diagnoses and parents being told that their children did not have ASD. Since early intervention can help to reduce or eliminate the progression of negative symptoms, a delay in diagnosis can place these children at a further disadvantage. Shahidullah et al.’s (2018) study also raised concern about the “medical home” and the “educational home” of the patient operating independently of one another and how this can be to the detriment of the child. They listed recommendations for primary care physicians to remain current on the care that their patients have received by other providers and to refer their patients to providers who can offer comprehensive examinations.

Benevides et al. (2017) used data from the National Survey of Children with Special Healthcare to compare therapy needs with unmet support. Unfortunately, it was determined that there were more unmet needs in 2009 than there were in 2004, so it is possible that access to support is trending in the direction of a reduction in resources. The researchers also found that children with autism were significantly more likely to have unmet therapy needs than children with attention-deficit hyperactivity disorder. Reasons for unmet needs included costs of therapy, younger ages of the children, a lack of health insurance, and increased functional or behavioral difficulties.

Antezana et al. (2017) conducted a meta-analysis that aimed to examine the problem of access to autism support services for families who live in rural areas. Support includes diagnoses and treatment, and there are barriers to each of these, which vary based on individual

circumstances. There tend to be additional challenges to access in rural communities such as distance from healthcare providers, a lack of service providers, a tendency to not rely on healthcare professionals, and cultural characteristics such as lower socioeconomic statuses and lower levels of education. A review of the literature, according to the authors, suggested that while these factors tend to be present in rural communities, there is reason to be optimistic about the potential for telemedicine for this population in particular, as it is more accessible, more convenient, and possibly more affordable.

Similarly, Kakooza-Mwesige et al. (2021) reviewed studies conducted in different regions of the world and found issues similar to those in the Antezana et al. (2017) article: in areas with fewer resources, children with autism are diagnosed later in life if at all. Adults and older children are often diagnosed with conditions such as attention-deficit hyperactivity disorder (ADHD), depression, and/or anxiety, when the true, underlying diagnosis is autism. This is due to a lack of education, cultural understandings, and sometimes even fears about stigma. The researchers noted a deficit in resources for the autism community, even when taking into consideration the needs of caregivers, who often have fewer personal resources as a result of being unable to work often or at all. It was found that including parents as competent advocates, providing more financial and educational resources to families, and virtual support interventions could help those who lack assistance.

Perhaps not surprisingly, Lindly et al. (2018) found comparable results in their study of 651 children with ASD, ages 2-17, using data from the National Health Interview Survey. Common themes were issues with access to healthcare, affordability issues, and difficulty finding a healthcare provider. When taking into consideration children who are twice-exceptional and the ways in which their giftedness can mask their disabilities, it is not difficult to

understand how 2e children can have even greater difficulty accessing support. Not only is it challenging for the general disability population to receive adequate healthcare, but those who are also gifted face additional barriers; they might not have proper diagnoses, or their academic scores might be so high that their public school districts withhold evaluations and/or resources.

The National Institute of Health (NIH) funds autism research, and Cervantes et al. (2021) reviewed the agency's financial data in this regard between 2008-2018. They discovered that only approximately 9% of the total funds had been allocated toward learning more about whether autistic children were receiving the support they needed. The authors concluded that this was not enough, and that more investigation was needed. It would seem, based on funding allocations, investigating access to support may not be a high-level priority to the NIH, which might have an effect on barriers to access that are reported by so many.

Trouble with access to adequate support for children with autism might contribute to parental stress. Argumedes et al. (2018) evaluated data that had been gathered for a study investigating the effects of a parental intervention model in order to examine differences in the stress levels of parents with autistic children. Forty-two families, including both parents and their children, completed pre- and post-intervention assessments for stress. Their results revealed that family-centered interventions were effective in reducing challenging behaviors in autism, which can contribute to reduced parental stress levels. Similarly, Estes et al. (2021) studied 87 families with autistic children aged between 13-30 months old, and measured parent-stress levels and sense of parental efficacy before and after a year-long, in-home intervention. Their results found that parents who initially had higher stress levels had higher senses of parental efficacy with low-intensity intervention. However, parents who initially had lower levels of stress experienced higher senses of parental efficacy with higher-intensity intervention.

Additional findings for the mitigation of parental stress were identified by O’Nions et al. (2018) in their analysis of 15 case studies. They found 4 common themes with respect to parental coping strategies when their autistic children exhibited challenging behaviors: accommodating the child, modifying the environment, providing structure, routine, and familiarity, and supervision and monitoring.

In their article, Kong et al. (2020) acknowledged the importance of early intervention, the difficulty for many to access support, the disconnect between providers, the conflicting information and advice received by families, the distress of families and the burnout of caregivers. They offered a framework for a better solution to these unmet critical needs for help, using the acronym SYNAPSE (Systematic Network of Autism Primary Care Services). The model recommends establishing networks of healthcare professionals including primary care physicians, social workers, psychologists, psychiatrists, dieticians, special education teachers, and, of course, families and patients. Kong et al. (2020) estimated that most pediatricians have on average 200 patients with ASD, and with ASD often comes complex varieties of comorbidities. A team of specialists who communicate with one another and are specially trained to support autistic patients, they argue, could dramatically improve the current, fragmented system we have today.

Magalhães et al. (2017) interviewed twelve Portuguese mothers of autistic children (who were between the ages of 3 and 6). Consistent with much of the other available research, the mothers struggled with receiving assistance through every phase of the support system for children, beginning with the diagnosis. They expressed difficulty in the home and a lack of familial or community support. In order to receive assistance, it was necessary for the mothers, like those in other studies, to be proactive and persistent. They were concerned for the future

wellbeing of their autistic children. In fact, the results of the Magalhães et al. (2017) study indicated that there was a need for more formal support for autistic people well into adulthood.

School Refusal and Bullying

Anderson (2020) acknowledged that refusal to attend school by those with autism has received little scientific attention but is considered to be a serious problem. A web-based, anonymous questionnaire was created for the Swedish National Autism Association, with a target population of parents of children with autism, aged 6-21. There were 1799 responses to questions about approved grades, challenges, demands, and obstacles in education for students with ASD. The results found a high number of absences for students with ASD that were not related to illness. Female students had more short-duration absences than male students, and it was generally found that school absences for autistic students were associated with a lack of teacher understanding of ASD and a failure of teachers to adapt their methods to this population. Unfortunately, the results also found that only 50% of autistic students achieved approved grades.

It is evident that school refusal by autistic children might also be related to bullying, as studies show that children with autism are more likely than their neurotypical peers to be bullied (Adams et al., 2020; Bitsika et al., 2020; Chou et al., 2020; Cook et al., 2020; Forrest et al., 2019; 2020; Ochi et al., 2020). Ochi et al. (2020) studied 94 children with ASD and school refusal, and 143 children with school refusal who did not have ASD. Their results found that the children with ASD who were refusing to go to school were more likely to be refusing as a result of the bullying they were enduring when compared to the children without ASD. For the first group, bullying happened at younger ages, too. The authors concluded that, in particular,

children with autism should be monitored for school refusing behavior, as this could be an early sign of bullying.

Adams et al. (2020) studied the ways in which stereotypical ASD behaviors were correlated with negative peer experiences. Using the Interactive Autism Network (IAN), they recruited 279 parents of autistic adolescents in the 7th – 11th grade age group, who spent at least half of their school day in the general education setting. Logistic regression analyses were used to analyze the data collected from the Bullying and School Experiences of Children with ASD Survey. It was found that the behaviors of frequent meltdowns, poor hygiene, rigid rule-keeping, and self-injury were related to adverse interactions with their peers. The researchers did not expect to learn that tics and repetitive behaviors were related to a lower likelihood of the adolescents being verbally bullied by their peers. There were additional factors associated with others bullying autistic children. Matthias et al. (2021) found these additional factors in their examination of 1,000 students with autism. Using data from the National Longitudinal Transition Study of 2012, they found that the frequency of bullying of children with ASD was associated with the child's race, family situation, income, and highest level of attained parental education.

Forrest et al. (2019; 2020) used data from the 2011 Survey to Pathways to Diagnosis and Services in order to study 1057 autistic children and school bullying. They found that the two conditions that increased the likeliness of being bullied were resistance to change (rigidity) and not being especially aware of the social environment/context. Bitsika et al. (2022) studied 58 autistic boys, grades 1-6, who were victims of bullying. They wanted to determine whether psychological resilience was related to school refusal. Their study did not find any significant relationships between the psychological resilience of the bullied, autistic youth and the frequency

with which they refused to attend school. Chou et al. (2020) studied bullying and high-functioning autism in Taiwan. The researchers used self-report measures to examine the frequency of bullying and the levels of mental health of 219 adolescents who were considered to have high-functioning autism. Perhaps not surprisingly, it was determined that the students with high-functioning autism who were bullied, and who were both bullied and participated in bullying, had the highest levels of anxiety and depression.

Cook et al. (2020) studied 775 students, ages 11 and 12, with respect to their attitudes toward autism and bullying. The researchers collected survey data at the beginning and end of a school year. Their results found that students who were in schools that were inclusive of autistic students and provided opportunities for neurotypical students to interact with autistic students, had more positive attitudes toward autism. However, students who attended schools that did not integrate autistic children into their mainstream learning did not show prosocial opinions when it came to the bullying of autistic children. However, neurotypical students in these schools did seem to be concerned about inclusivity for autistic students. The authors concluded that contact with autistic students was related to better attitudes toward autism, and that there needed to be more inclusivity and teaching in all schools to increase the positive treatment of children with autism.

It seems, however, that while 2e students tend to be misunderstood, socially diverse, and even victims of bullying, many have deep, meaningful friendships. Based on the research of Conejeros-Solar et al. (2021), 2e students tend to have small numbers of close friends; perhaps 1 or 2 best friends. The researchers interviewed seventeen children who were the closest friends of 2e students in their school. The researchers found that the close friends were accurate in their understanding of their friends; they knew about their friends' strengths and challenges, and they

admired their friends' gifts. Being able to have close friendships such as these suggested that 2e students can be capable of meaningful social relationships.

Falling Through the Cracks

Students with autism can fall through the figurative cracks of the public school system in many ways beyond those that are related to learning and performing. It is known that children with autism can sometimes experience emotional meltdowns, which can result in unpredictable behavior, including running away. In addition to the dangers associated with running away from caregivers and teachers are the safety gaps in the public school transportation system. Angell and Solomon (2017) studied the experiences of 14 parents and conducted a case study of 2 autistic children who went missing while on the public school transport system. The investigation arose after the researchers noted several stories in the media about autistic children becoming lost, injured, or even dying on their journeys to and from school. The authors stated that in 30% of the reported cases, students were left on buses because drivers failed to check for children at the end of their route. Those who were non-verbal and unable to get the attention of drivers were left. Some children wander, face over-stimulation, and even bullying, placing them in the line of danger for an incident. In the first case study in the article, the 5-year-old child had been found an hour after he was due to arrive home; he was hiding on the bus. In the second case study, a child of the same age was placed on the wrong bus by school personnel. Both sets of parents expressed concern that they believed their children were being ignored and in their follow-up meetings with the schools, the schools were resistant to providing special needs resources to assure the parents it would not happen again. In their interviews with the 14 parents of children with autism, parents expressed concern for their children's safety while utilizing the public school transportation system.

Homeschooling and 2e/ASD

Since states in the United States have different homeschooling laws and regulations, it can be difficult to identify how many students may be homeschooled at a given time. While estimates vary, researchers agree that the homeschooling stigma is decreasing, and the numbers of families homeschooling is increasing (Jolly & Matthews, 2017). There is something of a discrepancy in the literature when it comes to the efficacy of homeschooling autistic children. While there are studies that have found homeschooling to be liberating and full of endless opportunities for student-directed learning, there are also studies that have found otherwise, such as the research conducted by Simmons and Campbell (2018). The researchers studied 9 homeschooling families of autistic children and found that parents were not implementing industry best practices, were not meeting minimum educational requirements, and were lacking in social interaction. Over half of the parents were utilizing some form of unschooling, a form of student-directed learning that does not necessarily utilize curricula or assessments; however, their interviews were overall positive. Parents cited positive changes in their children, such as their children not having to worry about being teased, not having to battle with the school about which support services their children needed, and not having to worry about the safety of their children.

Research to the contrary suggests that parents who homeschool their autistic children tend to be well-educated and are doing so because the public school system is in some way failing their children. Jolly and Matthews (2017) interviewed 4 mothers who blogged about homeschooling their gifted children. Of course, the children did not all necessarily have autism, but one was identified as having Asperger's (currently considered autism). Reasons given for choosing to homeschool were not unlike those given by parents of 2e students. The students had

tried public schooling, but they felt misunderstood, belittled, and not in control of their learning. It is worth noting that the parents interviewed in this study all held at least a 4-year degree, and 3 out of 4 held advanced degrees. Outdated stereotypes of homeschooling often involve incorrect assumptions that homeschooling parents are not formally educated. Renzulli and Gelbar (2019) highlighted a case in which the parents of a 2e student homeschooled their child because, while he was gifted, he struggled with difficult behaviors. It was not until they enlisted the help of a counselor who advocated on the child's behalf in education meetings, that they were able to secure the proper accommodations for their son so that he could thrive in school. The authors strongly recommend that school psychologists become more active in identifying and supporting 2e students in order to facilitate positive learning experiences and in order to comply with federal IDEA (IDEA, 2004) laws.

Ronksley-Pavia et al. (2018) interviewed 8 twice-exceptional students, aged 9-16 years in Australia. At least 4 out of the 8 had experience with both homeschool and public school, and the group was generally more satisfied with the education they had received at home than they had in public school. The students shared reasons why being 2e was difficult for them at school. The academic rigor was oftentimes lacking, teachers yelled at them often, they had difficulty understanding social context, they were called to present their work to other students, which was anxiety-provoking and embarrassing, and one child reported a teacher tearing up his work in front of him because she did not approve of his handwriting abilities. Homeschool allowed the students to work with less noise and distractions, as well as more opportunities to be creative and learner-directed, and it gave them a sense of control and safety. All of the participants indicated that they felt different from others and that they were also perceived by others to be different. Eight themes emerged: stigma of disability/invisible disability, stigma of giftedness, prior

experiences of stigma, stigma and coping responses, stigma of threatening environments, stigma of identifying as 2e, disconfirming stigma, and perceptions of twice-exceptionality. Participants reported being teased, misunderstood, and even bullied.

O'Hagan et al. (2021) focused their meta-analysis on the homeschooling of children with autism. Their study found 4 main themes including parents' reasons for homeschooling and how the family adjusted. It was found that while not every parent is a good fit for the homeschooling lifestyle, for children who had educated parents and who were involved with keeping their children active in social circles, homeschooling was generally a positive, liberating experience.

Biblical Foundations of the Study

One can begin to understand Christ's perspective of disabilities in John 9:2-4 (*King James Bible*, 2022). His disciples inquired about a man who was blind from birth; they asked if the man was blind as a result of his parents' sins or his own sins. Jesus replied that it was neither; the disability was a vehicle through which the miracles of God could be witnessed. Particularly in the case of 2e students, it is clear that the miracles of God are at work; they are literally considered to be individuals who are gifted.

Certainly, there are many families who are satisfied with the ways in which the public school system has supported their 2e children and, clearly, there are many who are not. Regardless, the Bible is clear that the mantle of raising children belongs to their parents (Proverbs 22:6, *King James Bible*, 2022). In Ephesians, 6:4 (*King James Bible*, 2022), we are cautioned to not provoke or frustrate our children; we should nurture them so that they do not become discouraged. Twice-exceptional students who are not being properly accommodated

may feel frustrated, distressed, and provoked; it seems that God is not content with this.

Children are a heritage of the Lord (Psalm 127:3, *King James Bible*, 2022).

The relationship between parent and child, and particularly mother and child, is ordained of God. Mother and child are knit together in the mother's womb, where the child is fearfully and wonderfully made. God watches over the development of children in the womb and beyond; they are not hidden from Him (Psalms 139:13-19, *King James Bible*, 2022). If societal systems are not properly serving the children, it is the responsibility of the parents to intervene. Such systems might fail 2e children by refusing to evaluate them, refusing to offer support, or refusing to accommodate disabilities in gifted programs. If such disservice also causes children to experience frustration and distress, there is an even greater responsibility for parents to protect and provide for the needs of those with whom the Lord has entrusted them (*King James Bible*, 1 Timothy 6:20, 2002), even if this means choosing alternative schooling methods.

Summary

Twice-exceptional students are those who have a disability (in this case, autism) along with an intellectual gift. This population of pupils comprises approximately only 6% of those with disabilities, and they can be difficult to identify because a gift can obscure a disability and a disability can conceal a gift (Baldwin et al., 2015). Research suggests that 2e students learn best when the curricula are tailored to their interests, are flexible, and provide opportunities for self-directed learning (Wu et al., 2019). While this may not be entirely realistic for many public schools to accommodate, it would seem that parents of children with verified autism diagnoses should minimally expect to receive an evaluation, especially because federal education laws require it (IDEA, 2004). Unfortunately, 2e students are oftentimes refused evaluations, with the

reason given that the student is performing at or above grade-level. Since this does not take into consideration difficult behaviors such as meltdowns, disruptive classroom behaviors, or other challenges, many 2e students navigate their school experiences without the support they need (Blustain, 2019).

Research shows that early detection and intervention, which is best begun before the age of 5 years, is a major predictor of whether symptoms will progress or even develop (Bejarano-Martín et al., 2020; Kodak, 2020; Lazaratou et al., 2017; Magalhães et al., 2017; Manohar et al., 2019). Furthermore, early intervention can predict outcomes in adulthood (Kodak, 2020). Unfortunately, support services for autism or even 2e children can be difficult to secure. They are not widely available, and it is common for resources to be limited in geographic locations where support exists (Lindly et al., 2019).

Parents of children with autism frequently homeschool their children at least temporarily at some point in their formative educations. In the past, homeschooling carried with it a negative stigma, but researchers report that the modality is becoming more popular and that the parents who homeschool their children are oftentimes holders of advanced degrees. The children who are homeschooled who have also been in public school report that homeschooling better aligns with their educational needs, as the opportunities for student-directed learning are abundant, the class size is small, and there is enough quiet for concentration (Jolly & Matthews, 2017).

Christ told His disciples that the miracles arising from disabilities can testify of God; they provide opportunities for others to serve and to witness healing (John 9:2-4, *King James Bible*, 2022). The Bible also counsels us to be careful to not frustrate and discourage our children, and in this case, those who tend to be remarkably vulnerable to heightened emotions (Ephesians 6:4, *King James Bible*, 2022). Raising up children is the responsibility of their parents (Proverbs

22:6, *King James Bible*, 2022), and when a system fails the children by refusing to support and accommodate them, homeschooling is one way for parents to follow the Word of God and perhaps it is why some feel called to do so.

CHAPTER 3: RESEARCH METHOD

Overview

This chapter will describe the research questions, research design, participants, study procedures, instrumentation and measurement, data analysis, delimitations, assumptions, and limitations of the study.

Research Questions

Research Questions

RQ1: Why do parents of twice-exceptional, autistic children choose to homeschool?

RQ 2: How do parents who homeschool their twice-exceptional, autistic children describe their experiences as they transitioned from the public school environment to the home education environment?

Research Design

The current study was qualitative, phenomenological, and based in grounded theory. The most recent studies investigating the reasons why parents of autistic children frequently choose to home educate are generally not specific to 2e students, they lack parental voices, and they are written from the critical perspectives of those affiliated with the public school system (Baldwin et al., 2015; Simmons & Campbell, 2019). The use of a phenomenological design allowed the researcher to study the experiences of participant families and extrapolate themes and stories through careful, systematic collection and analysis of parental interviews using the inductive reasoning of grounded theory (Glaser & Strauss, 2017). In this way, the study fulfilled

its purpose of identifying reasons why many parents of 2e children choose to homeschool, it explored their experiences as they transitioned from public school to homeschool, and it gave parents the opportunity to have a voice in the scholarly body of knowledge.

Participants

Moser (2018) stated that in qualitative research, it is generally the case that the researcher and his or her team determine when their sample size reaches saturation. With respect to sample size for phenomenological studies, Moser (2018) indicated that fewer than 10 participants were necessary. However, as mentioned by Ellis (2016), there are many research methodology textbooks offering varying guidelines, but a sample size of 6 to 20 is sufficient. This was discussed with the university's department director and the dissertation committee chair, and all parties agreed that a sample of 12-15 participants was adequate for the scope of this project. Potential participants were recruited from a co-operative educational group that, in addition to hosting inclusive activities for all of its homeschooled students, also facilitates subgroup gatherings for neurodivergent group members. An announcement was made at one of the quarterly events, along with a dissemination of the formal recruitment letter to anyone expressing interest (see Appendix A). In addition, the recruitment letter was posted to a social media group designed for parents who support their 2e children. Finally, word-of-mouth was used as a recruitment technique, which was an effective recruitment strategy, as it is common for families in the autism and 2e communities to belong to similar groups and organizations. Since the study entailed interacting with living, human subjects, permission to move forward with the recruitment process was contingent upon Institutional Review Board (IRB) approval, which was granted on December 12, 2022.

Participants were required to be at least 18 years of age, with a 2e child with autism currently between the ages of 5-17 years. Since the identification of twice exceptionality does not require testing or a formal diagnosis, and because it is difficult to define due to the large number of possible combinations, for the purposes of this study, giftedness was verified by asking the parent participants to confirm the children's intelligence/academic achievement assessment scores. In order to participate in the study, a participant's child was required to score in an above average or higher category in at least one area on an intelligence and/or academic achievement assessment. Additionally, participants were required to provide the name of the practitioner and/or facility that/who diagnosed the child with autism, along with the date of diagnosis. Participants affirmed that they were the parent or legal guardian of the 2e child and resided in the same household as the child. Finally, in order to qualify for the study, the participants' 2e child(ren) must have, at some point, been enrolled in a public school and then subsequently in a homeschool.

Study Procedures

Once IRB approval was granted, the recruitment process began with the dissemination of the recruitment letter (see Appendix A) to a homeschool cooperative educational group. The group was not exclusively for children with autism, but there were several member families who had children with autism, and the subset met quarterly throughout the school year. The study was announced through a posting of the recruitment letter on the communication application, BAND (see Appendix B), which was regularly utilized by the cooperative group. The recruitment letter was also posted, with permission, in a private online group specifically created for parents who support their 2e children. Furthermore, those already known to the researcher

and suspected to qualify for the study were given copies of the recruitment letter in-person. They were encouraged to share information about the study through word-of-mouth with others they knew who may have also qualified for participation.

Potential participants could find contact information in the recruitment letter, and those who expressed interest were sent a letter (see Appendix E) through electronic mail with further information, specifying participation requirements along with a schedule from which they could select an available date and time to be interviewed if they wished to proceed. The informed consent letter was also included in this communication, and those who chose to participate were instructed to sign and return it along with the diagnostic and testing information requested.

As participants returned the requested information, interviews commenced over video conferencing. Each interview began with demographic questions followed by the interview questions (see Appendix F). Each of the open-ended video conferencing interviews were recorded and transcribed for data analysis, while maintaining the confidentiality of the participants. Unless a need for clarification arose, there was no other planned contact with the participants, aside from providing them with a copy of the finished study after it had been submitted to the university's digital commons.

Instrumentation and Measurement

Interviews for the study took place over Zoom video conferencing. The discussions began with demographic questions, followed by the semi-structured, open-ended interview questions (see Appendix F). Interview questions were developed by the researcher and the research committee, designed to specifically address the research questions. Recorded interviews were transcribed using Google Voice to Text. The transcribed interviews were then

analyzed using NVivo™ qualitative software, which identifies common themes in textual narratives. Using the themes discovered by NVivo™, the constant comparative method was then used to categorize the raw data into groups and formulate the theory. In addition to data analysis, the constant comparative method is a form of reliability testing in qualitative research because it acknowledges biases in sampling and interpretation of data (Glaser & Strauss, 2017). In order to account for dependability and confirmability, an audit trail, which is a detailed accounting of the researcher's thoughts, actions, and feelings throughout the process, was kept throughout the duration of the study (see Appendix G).

Since the study was phenomenological, the intent was to identify a potential phenomenon within an exceedingly small, specific group of the population. Generalizability and transferability were not necessarily the goal; however, by highlighting what could be a systemic disadvantaging of children with disabilities, the intent was to help bring any discovered problematic themes to the attention of those who can make meaningful changes to the public education system. In return, this study could help to provide 2e students with that to which they are entitled by federal education law, which is a free public education that reasonably accommodates their disabilities (IDEA, 2004).

Data Analysis

Following the video recording of the semi-structured interviews over Zoom video conferencing, and the transcribing of the conversations using Google Voice to Text, the text files of each interview uploaded to the qualitative software produced a word tree for each term,

showing links to all of the applicable narratives for that particular word. Relationships and common themes were then identified and used as part of the next analysis.

The constant comparative method was then utilized for further analysis. The constant comparative method is a thematic induction process and coding strategy of analyzing text data. It is rooted in grounded theory (the discovery of theory from data), which was designed to produce the same clarity in qualitative analysis that is typically found in quantitative analysis, so that it can be used for theory generation and development. It combines coding methods with theory and operationalizes results in case they are later tested using quantitative methods. The constant comparative method serves as a buffer against over-analyzing qualitative data and unintentional bias, which can occur when researchers seek only for positive relationships that confirm their prior beliefs

The constant comparative method is accomplished by separating the data into manageably-sized pieces so that similarities and differences can be identified. It allows researchers to find stories within the data. It compares data with data, data with codes, codes with codes, codes with categories, categories with categories, and categories with concepts. The constant comparative method is implemented in 4 stages of data comparison, ending with the writing of theory.

Delimitations, Assumptions, and Limitations

Delimitations

The study aimed to investigate the reasons why a reported elevated percentage of autistic children are homeschooled at some point during their primary education (Simmons & Campbell, 2019). It sought to understand the parents' reasons for choosing this particular alternative

education, and it strove to gain insight into the transitional experiences of the parents and their children. Since the autism spectrum is wide, and every autistic child has his or her own unique presentation, it can be difficult to find a homogenous sample, and since there is expressed concern over 2e children being excluded from the same resources offered to their non-intellectually gifted, autistic peers (Blustain, 2019), this small population of students were the focus of the research.

The target group was further limited to parents or guardians of children between the ages of 5 and 17, since these are the typical ages of students in the kindergarten – 12th grade population. There are several educational options: public school, private school, homeschool, microschoools, charter schools, Montessori schools, etc. For the sake of simplicity and in order to be able to reach the greatest number of participants, the 2e children in this study must have attended a public school followed by a homeschool at some point in their kindergarten – 12th grade educational years. Another parameter for inclusion in the study was that the participant must be the parent or legal guardian of the 2e child, and he or she must have been the home educator as well. Finally, participants were required to provide information regarding the child's evaluation for autism and giftedness. Evaluative professionals needed to have been developmental pediatricians, developmental psychologists, school psychologists, child neurologists, or psychiatrists. These requirements were intended to reach the largest, most homogenous group of participants possible.

Assumptions

1. Participants were honest in their responses
2. Participants were generally accurate in their recollection of experiences
3. There are various factors influencing parents' choices to homeschool their 2e children

4. The research questions elicited reliable responses
5. The researcher conducted interviews in a consistent manner

Limitations

As a phenomenological study, while it is not necessarily the goal, the findings will not be generalizable to the population because the sample size was small. Additionally, the participants interviewed represented only those parents of 2e children who, at the time of the study, chose or had chosen prior to the study to homeschool their children at some point. This could have eliminated populations such as single-parent households, families of lower socioeconomic status with more than one working parent, families of high socioeconomic status who might be attending private schools or who might employ private tutors, and parents who are unfamiliar with the lesser-known 2e designation, among others. The voices of parents who chose, at that time, traditional schooling methods for their children were not included in the data, so in addition to not being generalizable, conclusions could not be drawn about the typical experiences of 2e students within the public, charter, or private school systems.

Finally, as is the nature with qualitative research, accurate results depend upon participants' objectivity, honesty, and correct recollection of experiences, as well as researcher accuracy and objectivity, so the data was prone to error. All of the participants' qualifying data, including their children's diagnoses, and testing scores, were parent reported and not externally verified, so the results relied on parents' truthful reporting and also their understanding of evaluation results in order to be able to report them accurately.

Foreseen challenges of the study were mostly related to participant recruitment, reliability, availability, and cooperation. Participants were solicited via a social media announcement in a homeschooling cooperative educational group, through an online support

group for parents who supported their 2e children, and through the word of mouth. It was expected that some who agreed to take part in the interviews would not be willing or able to reach out to other potential contributors. If participants were enrolled, it was also anticipated that they could have changed their minds, they may not have been available, they may not have consented to video or audio recording, and/or they may not have been otherwise dependable.

Summary

The current study aimed to investigate the reasons why parents of 2e autistic children chose or had chosen to homeschool at some point in their kindergarten – 12th grade experiences. Participation requirements were limited to parents and legal guardians of 2e autistic students currently between the ages of 5-17 years. These specific parameters helped to preserve homogeneity without compromising sample size. The researcher recruited participants using the social media application, BAND, to solicit responses from a homeschool cooperative group, a Facebook group created to support parents of 2e children, and word-of-mouth. Interviews took place over zoom, and will begin with demographic questions, followed by the questions pertaining to the research questions.

The interviews were recorded, then transcribed using Google Voice to Text. After transcription, the files of each participant were uploaded to NVivo™, a qualitative analysis software, which searches for themes in text data. Those themes were then included in the constant comparative method analysis. The researcher maintained an audit trail, which is a detailed accounting of researcher feelings, actions, and opinions. This helped with reader confirmability, and it assisted the researcher in identifying personal biases in order to maintain as much objectivity as possible.

CHAPTER 4: RESULTS

Overview

Current research suggests that early intervention is critical for children with autism because it helps them to develop social and life skills that benefit them throughout their formative years and into adulthood (Kodak & Bergmann, 2020; Lazaratou et al., 2017). Unfortunately, access to therapy can be difficult to achieve since it is prohibitively expensive and not available in every geographic location (Rogge & Janssen, 2019). As a result, many families with autistic children rely on the public school system for assistance as federal law requires disability accommodations (IDEA, 2004). Ironically, data has shown that children with autism tend to be homeschooled more frequently than their neurotypical peers (Simmons & Campbell, 2019), which is antithetical to receiving intervention from the schools, and it raises questions about why this is the case and whether schools are meeting the needs of this group of students.

At a further disadvantage are those students who are 2e, as their intelligence can obscure their disability and/or cause them to be disqualified from assistance if they are performing at levels of average to well in school. Additionally, gifted programs tend to not accommodate 2e students, so these children can easily become the small group of students who fall through the system's cracks (Blustain, 2019). Scholarly inquiry into the topic of homeschooling 2e children is lacking, and much of what is available has been conducted by those within the public school system (Simmons & Campbell, 2019). This phenomenological study helped to fill this gap in research by providing an opportunity for homeschooling parents to contribute their voices to the body of knowledge as they answered the research questions:

RQ1: Why do parents of twice-exceptional autistic children choose to
homeschool?

RQ 2: How do parents who homeschool their twice-exceptional autistic children describe their experiences as they transitioned from the public school environment to the home education environment?

Participants were the parents or legal guardians of children with twice-exceptional autism, defined as having an autism diagnosis along with an intellectual gift. Parents were recruited through social media, a homeschool group, and word of mouth (see Appendix C). Interviews of 15 participants took place over Zoom, were recorded and transcribed, then analyzed using NVivo™ software and the constant comparative method.

Descriptive Results

Participants for this study were recruited through social media, a homeschool cooperative group, and word of mouth. Upon receiving IRB approval and permission from group administrators, announcements were posted to a Facebook support group for parents of 2e children and in a BAND group for Christian homeschooling families in Arizona (see Appendix B). A live announcement and invitation to participate was made in a homeschool cooperative group in Queen Creek, Arizona, and individuals who were suspected to be qualified for participation were approached in person or over the telephone using IRB-approved scripts (see Appendix C). Those who expressed interest in participating were sent screener letters (see Appendix E) and informed consent letters (see Appendix D) through electronic mail and were asked to complete and return them if they wished to continue. The screener letter requested that prospective participants verify their 2e child's formal autism diagnosis by indicating the name of the provider or facility who assessed the child as well as the date of the assessment. Additionally, prospective participants were asked which intelligence or academic achievement test was used to

verify giftedness, the score received on the assessment, the area of giftedness, the name of the assessor and the date of the testing.

In order to qualify for the study, prospective participants' 2e children must have scored above average on a formal intelligence or academic achievement test either in a specific category or overall as indicated by a composite score. Prospective participants must have homeschooled their 2e children following the children's attendance in a public school and the children must have been between the ages of 5 and 17 at the time of the study. A total of 26 responses were received: Seven were already known to the researcher, three were from word-of-mouth, two were from the homeschool cooperative group, 14 were from the Facebook support group, and there were no responses from the BAND homeschooling group. Participants were considered and scheduled for interviews in the order in which their responses were received. Seven of the responders did not qualify, three stopped responding, and one prospective participant agreed to participate as an alternate if one of the first 15 did not for some reason. Fifteen participants remained. The demographics of the participant sample are detailed in Table 1, and Table 2 briefly lists information about each participant's 2e child. Note that in Table 2, private school attendance is not reported, and some children participated in public preschool, which is reflected in their time spent in public education.

Table 1*Participant Demographics*

Participant	Age	Ethnicity	Education	Marital Status	Children in Home	Employment	Gender
1	34	White	Doctorate	Married	2	Full Time	F
2	32	White	Associate	Married	2	Full Time	F
3	25	White	Bachelor	Single	1	Full Time	F
4	36	White	Master	Married	2	Unemployed	F
5	47	White	HS	Married	2	Unemployed	F
6	42	Asian	Doctorate	Married	3	Part Time	F
7	42	White	Bachelor	Married	2	Full Time	M
8	36	White	Bachelor	Married	2	Unemployed	F
9	39	White	Associate	Married	4	Unemployed	F
10	36	Latina	Bachelor	Married	3	Full Time	F
11	34	Asian	Master	Married	2	Fulltime	F
12	33	White	Bachelor	Married	1	Unemployed	F
13	32	White	Bachelor	Married	4	Unemployed	F
14	42	White	HS	Divorced	2	Part Time	F
15	43	White	Master	Married	4	Full Time	F

Table 2*Participants' 2e Children Information*

Participant	Child Age	Years Since Autism Diagnosis	Gifted Area	Related Diagnoses	Months/Years	Public School
					Homeschooled	
1	9	5	Programming, Foreign Languages	N/A	1y	3y
2	7	5	Math, engineering	N/A	4m	2y
3	6	4.5	Reading	Oppositional defiant disorder (ODD), DMDD, ADHD	3m	3.5y
4	8	2	Reading, writing	ADHD, DMDD	4.5y	4m
5	12	8	Math	Tourette's, Tics	9y	3m
6	14	12	Math	SPD	5m	3.5y
7	10	8.5	Math, programming	N/A	4m	6.5y
8	9	5	Math	N/A	3y	1m
9	13	11	Science	Cerebral Palsy	1y	5.5y
10	11	6	Reading	Unknown	3y	3y
11	10	5	Engineering	N/A	2y	2y
12	9	5	Programming	Tourette's, OCD	3.5y	4m
13	8	3	Science, reading	ADHD	2y	2y
14	12	10	Math	N/A	3y	4y
15	13	9	Math	DMDD, ADHD, OCD	5y	2.5y

The interviews took place over Zoom video conferencing using the interview questions in Appendix F. The video conferences were recorded while transcription took place on a second device using Google Voice to Text. Following each interview, recordings were re-played and compared with the transcriptions, making corrections to any errors, and removing irrelevant conversation or repetitive transition words in preparation for text analysis. Once the interviews were properly transcribed, the videos were deleted, and transcriptions were saved on a password-protected external drive, which was secured in a locked cabinet. The following are brief summaries of each of the 15 interviews using pseudonyms to protect the privacy of the participants and their children. They are listed in the order in which they were conducted.

Interview Summaries

Participant 1: Tabitha

Tabitha (participant 1), at the time of the interview, was a 34-year-old married mother of two who worked full-time. She described herself as a White Italian who held a doctorate degree, with a 2e child who was 9 years old. She and her husband began homeschooling their 2e son a year earlier when the school withdrew the speech therapy resources he was receiving in Kindergarten the prior year. When Tabitha asked the school about this, she was told that it was because her son was achieving high test scores and, therefore, was not in need of resources. Tabitha also believed her son was being bullied at school because he was dysregulated when he would return home in the afternoons.

Their transition to homeschool was positive and “smooth.” Tabitha stated she believed her son was doing better because he did not have a teacher pressuring him and he was not being bullied; he could self-direct much of his learning towards his interests. Tabitha described her son

and the rest of their family as being happy as a result of their decision to homeschool, and would most likely not return to the public school system.

Participant 2: Brenna

Brenna (participant 2) was a 32-year-old, White, married mother of 7-year-old girl/boy twins. She worked full-time and held an associate degree. She began homeschooling her 2e son when he received a new school evaluation and after having received support for 2 years, the school informed Brenna that her child no longer qualified for assistance. The family's homeschool experience lasted approximately 4 months, until Brenna and her husband found a charter school that fit their children's needs.

She stated that homeschooling did not go well for their family because it was difficult to get into a routine and, as a working mother, she was short on patience, there were meltdowns, and she described the atmosphere as "chaotic." Brenna stated she would not homeschool again because it was too difficult for her, and her children were happy in their new charter school.

Participant 3: Bridget

Bridget (participant 3) was a 25-year-old, "mostly White," single legal guardian of one child. She held a bachelor's degree, and worked full-time remotely. Her 2e child was a 6-year-old. She had begun homeschooling her child only 3 months prior to the interview because, while the child had an individual education plan (IEP) the previous year, the district refused to re-evaluate her, stating that the child no longer needed support. Ironically, as Bridget stated, the child's behaviors escalated to a point where the school deemed her dangerous to herself and others and had planned to bus her to another location during the school days where she would

work mostly alone, away from the other students. Bridget stated, “I felt like I had no choice but to homeschool.”

Bridget described their transition to homeschooling as being an incredibly positive experience. Her child was able to work at her own pace, which was much quicker than average children. The one-on-one attention and the flexibility for the student to direct much of her learning, according to Bridget, seemed to be helping the child to self-regulate more consistently than before. Bridget stated that it was unlikely she would ever consider returning to a public school. In addition to the benefits they were receiving from homeschooling, Bridget said that the stress of public schooling was difficult for her, because the school repeatedly called her about her child’s behavioral issues.

Participant 4: Tara

Tara (participant 4) was a 36-year-old White, married, mother of two. She held a master’s degree, but she was not working so that she could care for her 2e, 8-year-old daughter. Tara began homeschooling from the beginning, but enrolled the child in public school after their developmental pediatrician recommended they should do so in order to access support. Public schooling did not work out well, possibly because the child was refused an evaluation. When Tara contacted the district and forwarded the diagnosis to the appropriate psychologist, the psychologist communicated that she did not believe that the student needed to be evaluated because she had “superior” scores on her intelligence test.

Due to her daughter’s separation anxiety, Tara stated it was too traumatic for her child to send her to school, and without professional support to help manage the imminent meltdowns and distress, she believed it was cruel to do so. She eventually gave up trying to get an evaluation and returned to homeschooling. Tara stated that she would never return to the public

school system. She explained, “If they aren’t going to do what is right for her while I am watching, what is there to make me believe they will when I am not watching?” According to Tara, after re-adjusting to their former homeschooling routine, she and her daughter were “much happier.” The child was able to focus on her interests, had far fewer auditory/sensory issues, and had a schedule that worked best for her needs.

Participant 5: Tanya

Tanya (participant 5) was a 47-year-old, White, German mother of two. She was married, had a high school diploma, and was not employed. Her 12-year-old son was her 2e child, who was encouraged to enroll at a local public school for gifted children. After doing so, Tanya was surprised when the district refused to evaluate her son after reviewing his diagnosis because his IQ indicated that he was a “high achiever.” Tanya stated that her son needed accommodations such as extra time on exams and assignments, but without an IEP, the teachers were not willing to work with the child. Instead, Tanya would receive phone calls from the teacher about her son “stimming” in class, a common manifestation of autism, and was being disciplined for doing so.

After roughly three months, Tanya re-submitted a homeschool sworn statement to the county and withdrew her son from the public school. She said that she “absolutely would not return.” Upon resuming their homeschooling routine, Tanya mentioned that her son slept quite a bit, which concerned her, but after a few days, things returned to normal. At home, Tanya said

that being able to give her son individualized attention and having an environment free of excessive distractions allowed him to thrive.

Participant 6: Karen

Karen (participant 6) was a married, Asian, 42-year-old mother of three. She had a doctorate degree, and was employed part-time. Her 2e child was 14 years old. He had a high composite score on an intelligence exam, but was nearly non-verbal. Karen's son began returning home from school showing signs of distress. She decided to send a monitoring device with him since he was unable to effectively verbalize his concerns. Karen stated that she was bothered by what she learned as a result; she found that he was being left alone often, almost as if they had "given up" on trying to help him.

She began homeschooling shortly afterward. She stated that it was "fine" at first, but since she works from home, the best thing for her family was for the children to be in school. At the time of the interview, all of her children were attending a private school, and all were happy with the choice. Karen stated that she would homeschool again if it was necessary, but that she preferred not to. She said that she would return to public schooling if needed, but at the time, she had no reason to consider it. She was not necessarily concerned if a school was public or private, but if they had the resources to offer to her 2e child.

Participant 7: Aaron

Aaron (participant 7) was a 42-year-old, married father of 2. He identified himself as a White-Jewish person with a bachelor's degree and full-time employment. His 2e child was a 10-year-old boy who was thriving until the school announced that they were closing their exceptional students program and would be consolidating it with other schools in the district. This was upsetting to Aaron's son, as he had formed positive relationships with his teachers and

was comfortable with his routine. This change disrupted him, so Aaron and his wife began homeschooling for a few months until they could find a better situation. Aaron said this was difficult for them since he and his wife were both employed, but they would do it again if they had to.

The transition to homeschooling was not especially eventful, but since their son had a tendency to be attached to adults, it was difficult for them to help him cope with not having his teachers in his life anymore. Aaron and his wife found another public school for their son, at which all parties are happy. Aaron stated that the school was exceptional with handling bullying problems, and having their child resuming his therapies had been beneficial.

Participant 8: Sandra

Sandra (participant 8) was a married, 36-year-old, White mother of 2. At the time of the interview, her 2e son was 9 years old. He had been a public school student while in Kindergarten, but Sandra withdrew him at the beginning of first grade. She knew that her son needed more assistance, so she approached the school for support. The school agreed to conduct an evaluation and an IEP, but they refused to give the child the classification of autism. Sandra was frustrated because she had the diagnosis from the physician in-hand, but the school told her that did not matter; it only mattered how the disability affected his learning. She stated, "...how can not being able to read and being basically non-verbal not affect his education?"

Sandra referred to their transition to homeschooling as, "magical," stating that before long, her son began to be more verbal and he started to read. She included that she was better able to build a solid relationship with her son and learn more about how to advocate for him, which was something, as Sandra said, the school was not willing to do. She continued that she

would never consider re-enrolling her child in a public school because their experience was negative, but also, their family moved frequently due to her husband being in the military.

Participant 9: Kathy

Kathy (participant 9) was a 39-year-old White, married mother of three with an associate degree. Her 2e daughter was a 13-year-old who began her education in the public setting, but when Kathy learned that the program at her public school was cancelled, she withdrew her child. The teachers who oversaw the program decided to open their own private school for children with autism, so during the transition, Kathy homeschooled her 2e daughter.

She explained that the transition to homeschooling was not easy because her daughter would get frustrated with her often, and her daughter struggled to sit still. Kathy stated she felt compelled to become certified in habilitation to learn how to best work with her daughter. Kathy continued that while she would homeschool her daughter again if it were necessary, she preferred not to, and didn't believe she would need to because her daughter was happy at her current private school.

Participant 10: Linda

Linda (participant 10) was a 36-year-old, Brazilian-American, married mother of three. She had a bachelor's degree and worked full-time from home. Her 2e daughter was 11 years old and was gifted in reading, but spent much of her time creating art. Linda began homeschooling her daughter in 2020 when schools were shutting down due to the pandemic. She explained that her daughter was not taking well to public online learning, so she decided to homeschool her instead. Homeschooling went very well for the family and they all "became much calmer." When it was time to return to school, Linda found out that the school had quietly removed her daughter's IEP classification of autism without notifying her, which, as Linda stated, was against

the law. She had fought hard for this classification to the point of threatening legal action, only to have it taken from her daughter without explanation or notice. Linda had grown tired of fighting the school district, so she decided to homeschool her daughter permanently.

Linda indicated that she would prefer to not have to return to public schooling for her child because she “felt like they do not care.” She explained that many parents like her were frustrated with the system because the schools hesitated to grant the autism category, despite parents having formal diagnoses.

Participant 11: Sabrina

Sabrina (participant 11) was a 34-year-old, married, Asian mother of two. She worked full-time outside of the home and held a master’s degree. Her 2e child was a 10-year-old boy who was always busy “inventing.” She had enrolled her sons at her local state university’s preparatory academy, which promised to accommodate her autistic son. Sabrina stated that before long, she noticed her son was getting behind and the school did not seem to do anything about it. “It was as if they’d decided he was a lost cause, so they gave up on him.” Sabrina looked for a private school that worked particularly with autistic students. She toured one such facility and was unimpressed. She stated that all of the lights were dimmed, and the teachers did not have the classrooms in order.

Sabrina indicated that she would go back to public schooling, but that she did not have the time necessary to tour many schools and make proper decisions for her child so she chose instead to continue with homeschooling. She described her homeschooling experience saying, “He loved it. I loved it. His face lit up; he was happy.”

Participant 12: Alyssa

Alyssa (participant 12) was a 33-year-old, married, White mother of one. She held a

bachelor's degree, but was unemployed so that she could care for her son. Her 9-year-old 2e son was initially homeschooled, but when their pediatrician recommended public school a year prior to the interview, Alyssa enrolled her son believing he would have access to more support resources. She was disappointed when her son was denied an evaluation. Her son was being bullied at school as he struggled socially, and he was bored. Since they were not able to receive an evaluation, and nothing was being done about the bullying or her child's needs for accommodations, she withdrew him from school and never planned to go back.

Their transition back to homeschooling was positive and Alyssa immediately noticed the difference in her son's demeanor over not having homework. He had much less stress and was more pleasant. This feeling of peace was felt by everyone in her home.

Participant 13: Janae

Janae (participant 13) was a 32-year-old White mother of four. She was married, not working, and held a bachelor's degree. She began homeschooling her 8-year-old, 2e daughter after the child began experiencing bullying at school, and nothing was being done about it by the school. She waited until the school year was over and did not re-register her child. She stated that she knew there were other schools that would probably handle things differently, but she was not willing to do what it took to find out, which was enrolling her daughter and seeing if the school would help with bullying; that would not be fair to the child, in her words. For these reasons, Janae was unwilling to re-enroll her 2e daughter in a public school.

Janae said that it took some time for her family to fall into a routine, especially because she suddenly began homeschooling 3 of her children at once; she explained that it was difficult to differentiate to 3 different levels at the same time, but before long, the family found a schedule

and homeschooling went smoothly. Her 2e daughter was happy learning from home, had a lot of fun learning, and was particularly interested in studying animals.

Participant 14: Tammy

Tammy (participant 14) was a 42-year-old single, married mother of twin daughters, both of which were autistic, and one of which was 2e. She had a high school diploma and worked part-time. Tammy took courses to help her learn how to best support her 12-year-old 2e daughter, and chose to homeschool because her daughter needed her, and she did not trust strangers to do what she considered to be her job. She described the transition to home education as “great” for herself and for her daughter; however, she also indicated that things felt “normal,” and normal for her meant things were difficult and chaotic. She eventually decided to send them back to public school because she believed her 2e daughter needed more help. Tammy eventually began to believe that homeschooling was not realistic for her since she was a single parent, and school allowed her daughter access to resources while Tammy was able to work. She stated that she would, however, homeschool her daughter again if that was what she needed.

Participant 15: Jennifer

Jennifer (participant 15) was a White, married, 43-year-old mother of four who held two master’s degrees and worked full-time. She began homeschooling her 13-year-old 2e son when he was in second grade because the school was frequently calling her about her son’s behaviors. When they first began their homeschooling experience, Jennifer said that it was difficult because her son’s behaviors were “extreme.” He was anxious and rigid. After receiving additional diagnoses and medication, he became calm, and Jennifer said they enjoyed working together.

She stated she would allow him to return to public schooling if he wanted to, but she did not believe he would want to because he was enjoying his homeschooling.

Analysis

Following the interviews, the qualitative analysis software, NVivo, was utilized to thoroughly, and objectively, search for common terms and themes within the data. For each interview question, a cluster analysis was run using a separate text file, which included every response for each question for a total of 10 text files. This revealed links between the particular terms and individual responses to the specific question. The text files were imported individually into NVivo. Identifying frequently occurring terms in the content was accomplished by using the explore tab, then selecting the query wizard. Exact matches were selected, as it set the algorithm to identify exact terms between the responses for each question. Since the NVivo analysis was used as a means to objectively identify commonly used terms so that the data could be analyzed using the constant comparative method, the 2 most frequently occurring terms or words were selected for each question.

Question 1: The 2 most frequently used terms in the fifteen responses for the first question were 'school' and 'help,' used 10 and 4 times, respectively, as shown in the word cloud generated in Figure 1. Figures 2 and 3 show the word trees associated with these 2 terms.

Figure 1

Question 1 Word Cloud

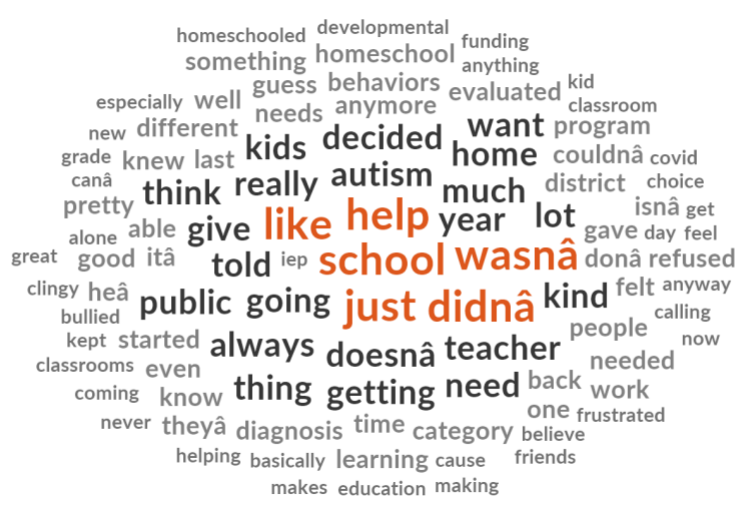
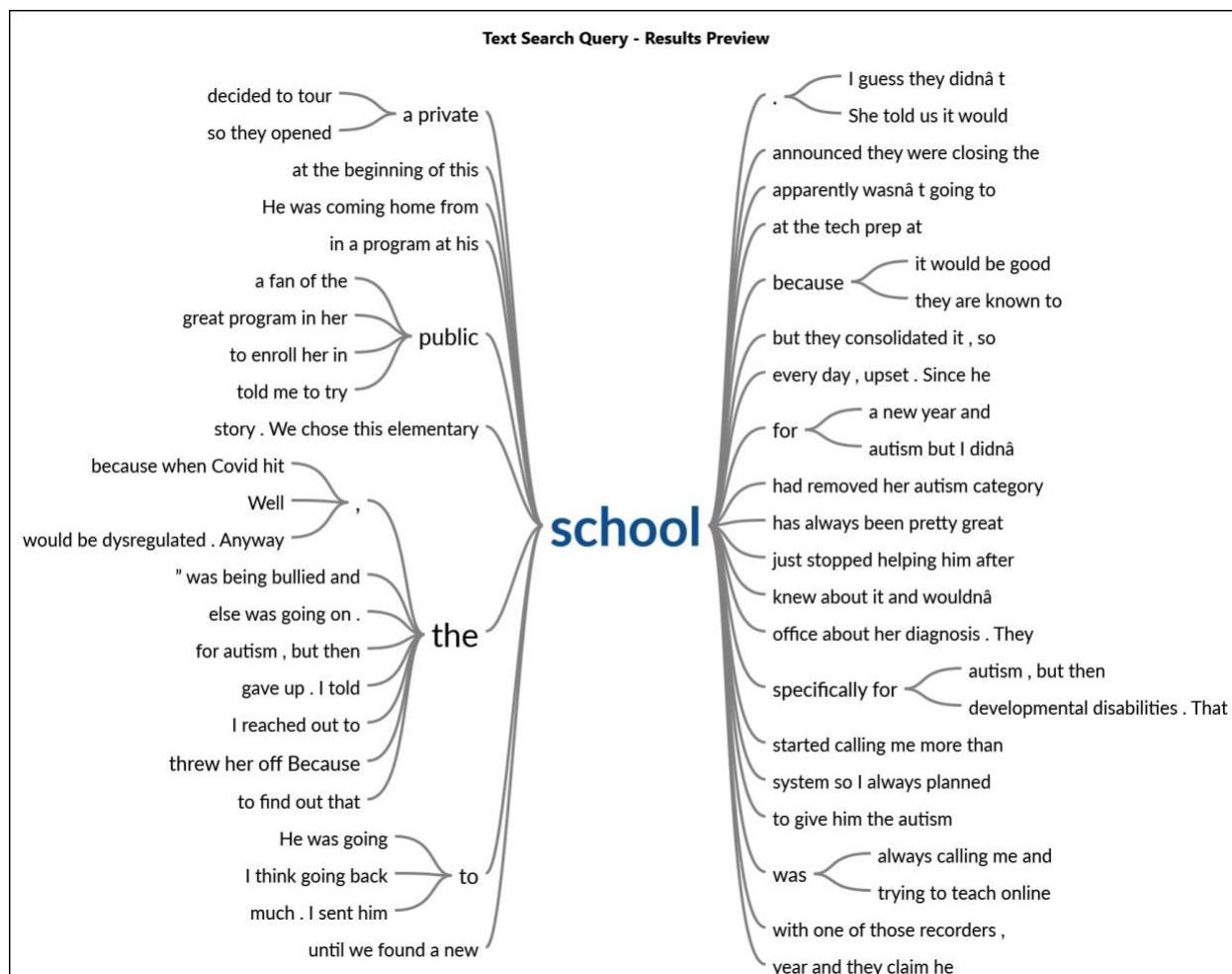


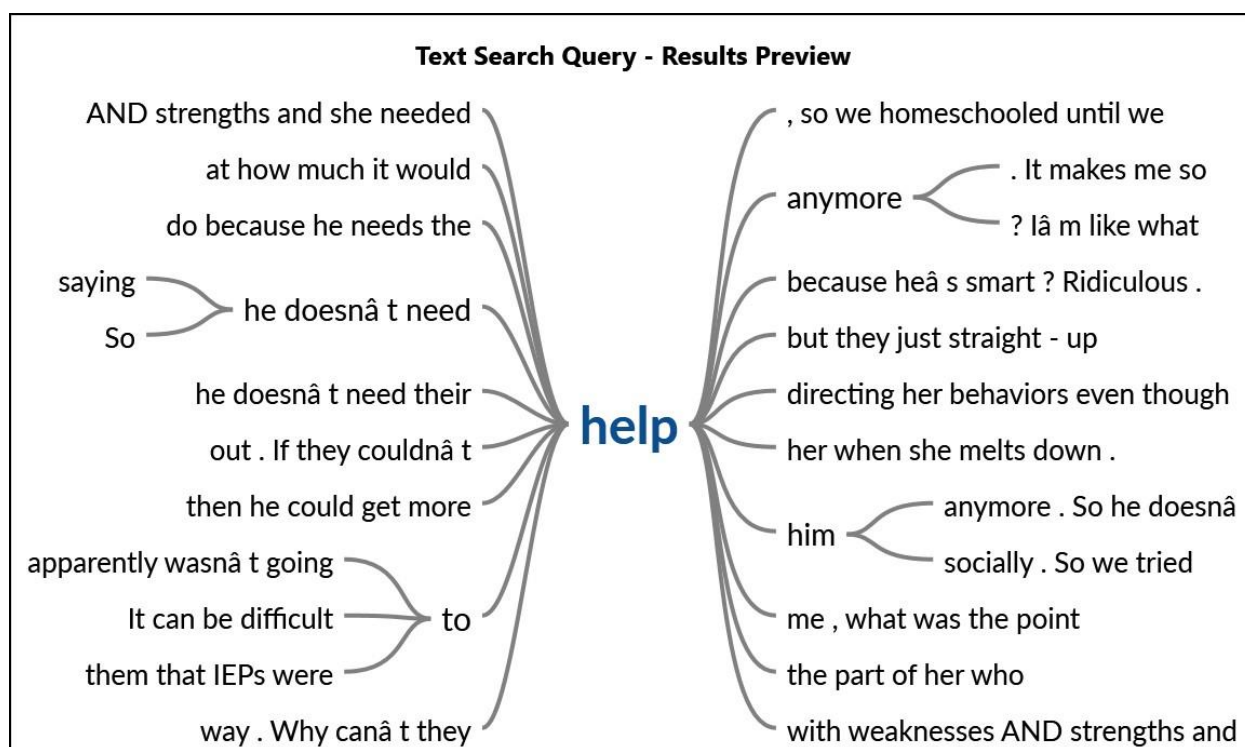
Figure 2*Question 1 Word Tree 'School'*

Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The public school either closed or consolidated their special education department.
2. The child was returning home from school frequently upset and/or dysregulated.
3. The school had revoked or would not recognize the child's autism classification.
4. The child was being bullied and the school would not intervene.
5. The school seemed to give up on the student and/or stopped helping them.

Figure 3

Question 1 Word Tree, 'Help'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The child was not receiving the help they needed with both weaknesses and strengths.
2. The school would not help the child because he or she performed well academically.
3. The school was unable to help the child during times of distress.

Question 2: Why would you or wouldn't you consider returning to public school (if still homeschooling)? OR Why would you or wouldn't you consider homeschooling again (if returned to public school)?

The 2 most frequently used terms in the fifteen responses for the second question were 'school' and 'don't,' used 27 and 14 times, respectively, as shown in the word cloud generated in Figure 4. Figures 5 and 6 show the word trees associated with these 2 terms,

Figure 4

Question 2 Word Cloud

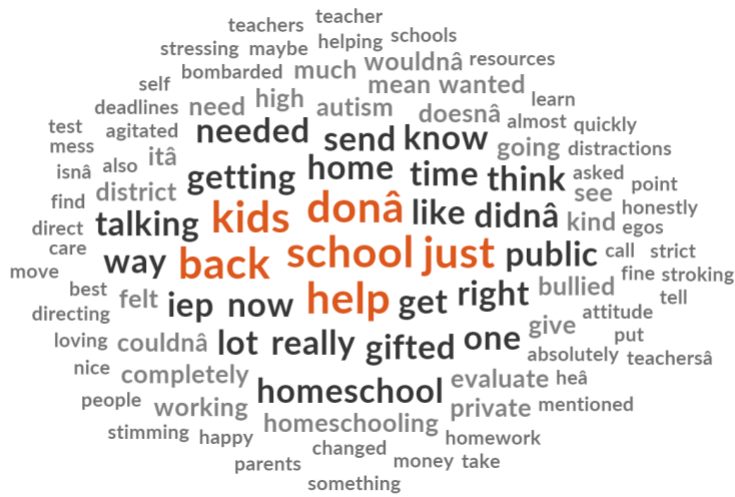
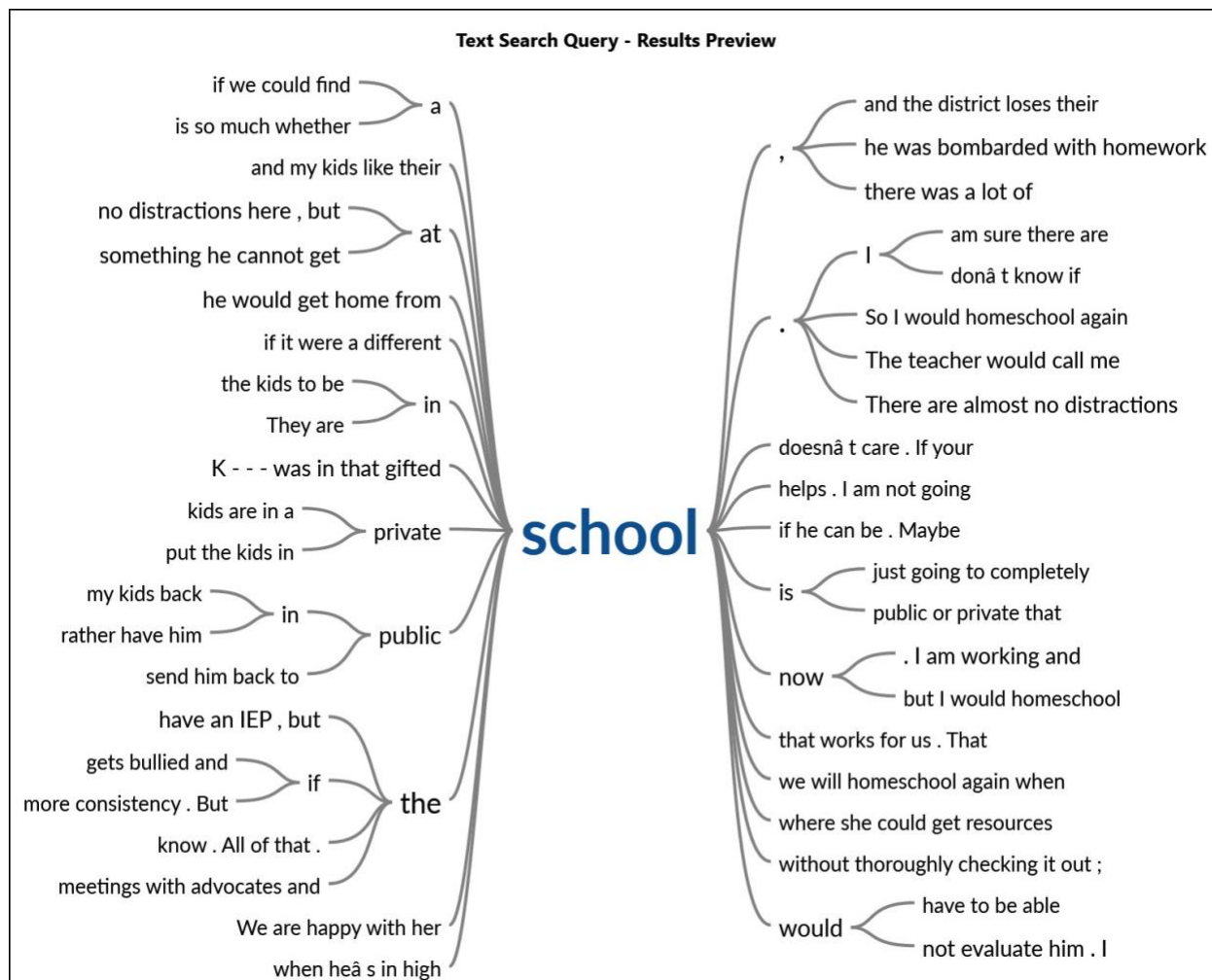


Figure 5

Question 2 Word Tree, 'School'



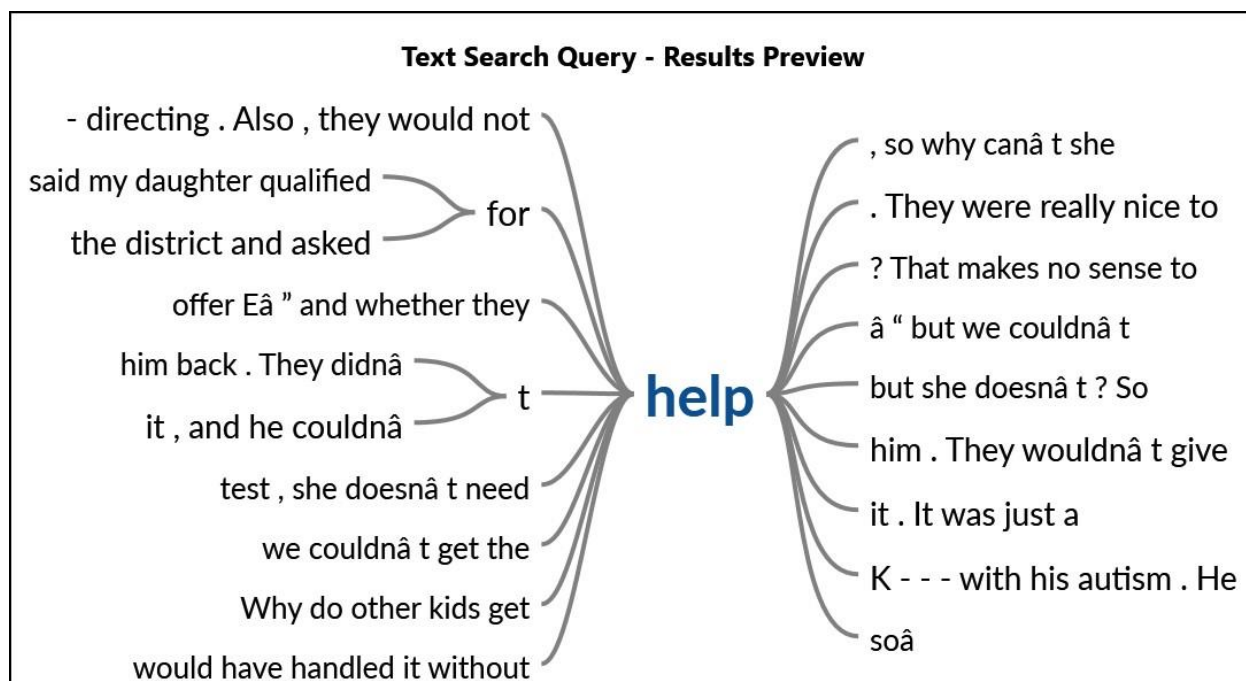
Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant would re-enroll their child in school if they could find one that fits their needs.
2. The participant was unlikely to homeschool again because their children are happy with their new school.

3. The participant was unlikely to return to public school because their child was thriving as a homeschool student.
4. The participant was unlikely to return to public school because they were assigned too much homework.
5. The participant was unlikely to return to public school because the school seemed to not care about their child.
6. The participant was unlikely to return to public school because the school refused to evaluate their child for an IEP.
7. The participant was unlikely to return to public school because their child had been bullied.
8. The participant was unlikely to return to public school without thoroughly investigating it.
9. The participant was unlikely to homeschool again because it conflicted with their work schedule.

Figure 6

Question 2, Word Tree, 'Help'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The public school did not help the participant's child with their disability because their test scores were high.
2. The public school would not help the participant's child despite the child having a medical diagnosis.
3. The participant's child could not get help from the public school like other students with autism.
4. The public school would not evaluate the participant's child for educational needs because the child's test scores were high.

Question 3: What was your experience with the public school system when you withdrew your child?

The 2 most frequently used terms in the fifteen responses for the third question were ‘just’ and ‘like,’ used 4 and 4 times, respectively, as shown in the word cloud generated in Figure 7.

Figures 8 and 9 show the word trees associated with these 2 terms.

Figure 7

Question 3 Word Cloud

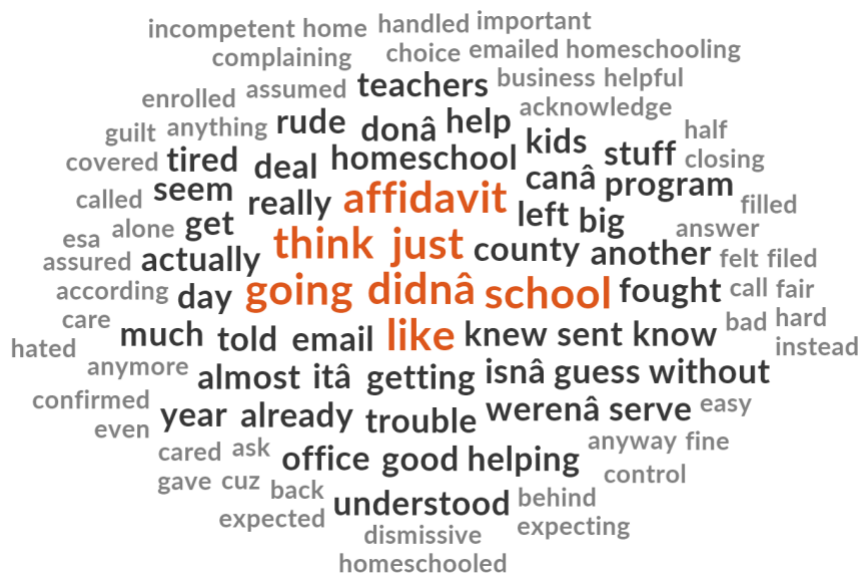
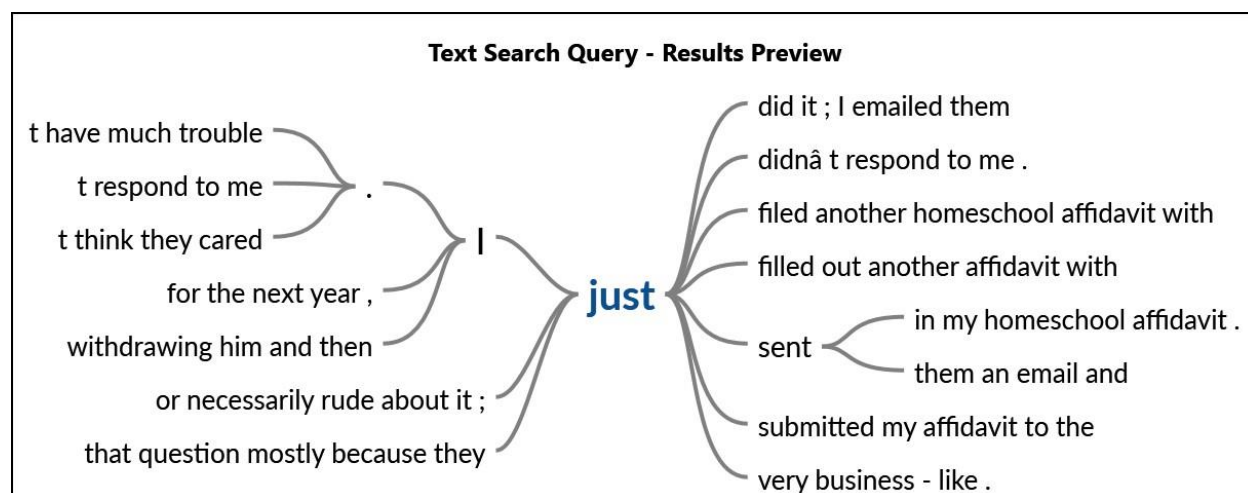


Figure 8

Question 3 Word Tree, ‘Just’

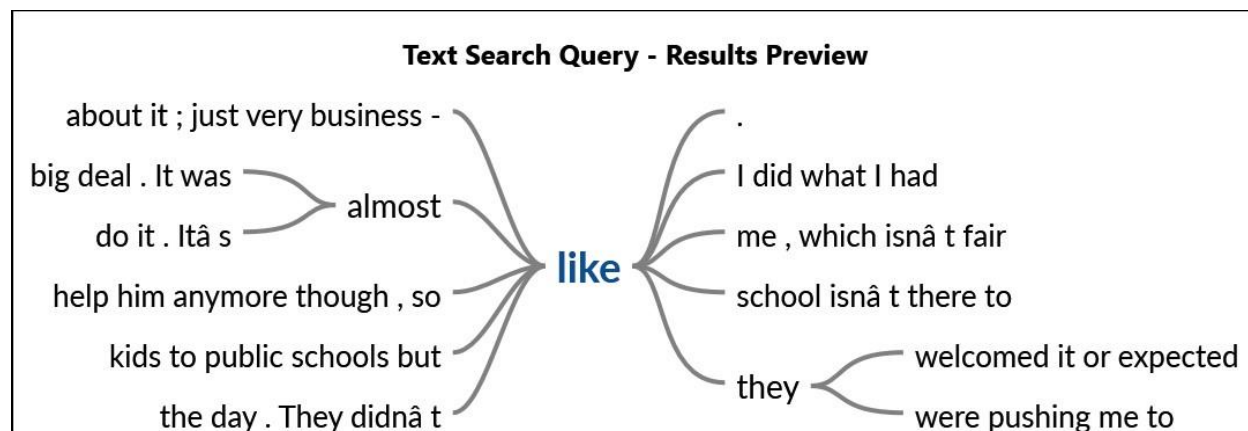


Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant did not have trouble withdrawing their child, they just sent an email.
2. The school did not seem to care; the participant just sent in a homeschool sworn statement after stating they were withdrawing their child.
3. The school did not respond to the participant's statement of withdrawing their child.
4. The school was not rude, just business-like.

Figure 9

Question 3 Word Tree, Like



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant did not have any trouble withdrawing their child from public school.

Question 4: What was your experience with your child as you transitioned from the public school system to the homeschool environment?

The 2 most frequently used terms in the fifteen responses for the fourth question were ‘lot’ and ‘know,’ used 10 and 7 times, respectively, as shown in the word cloud generated in Figure 10. Figures 11 and 12 show the word trees associated with these 2 terms.

Figure 10

Question 4 Word Cloud

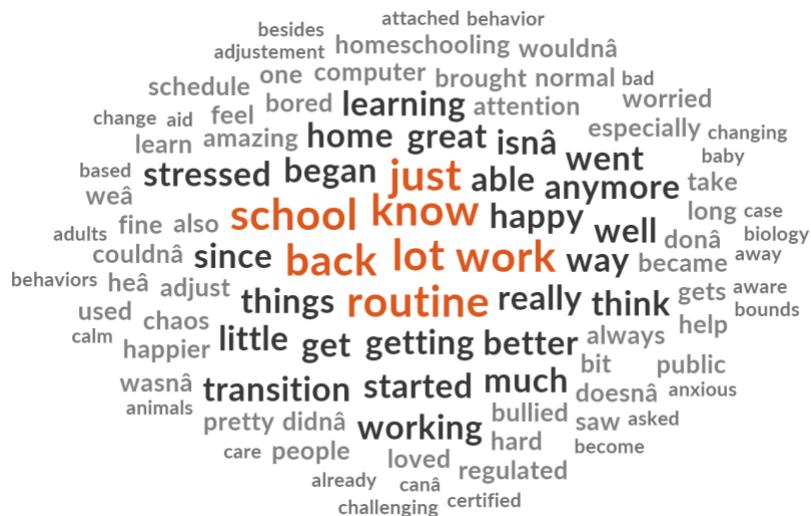
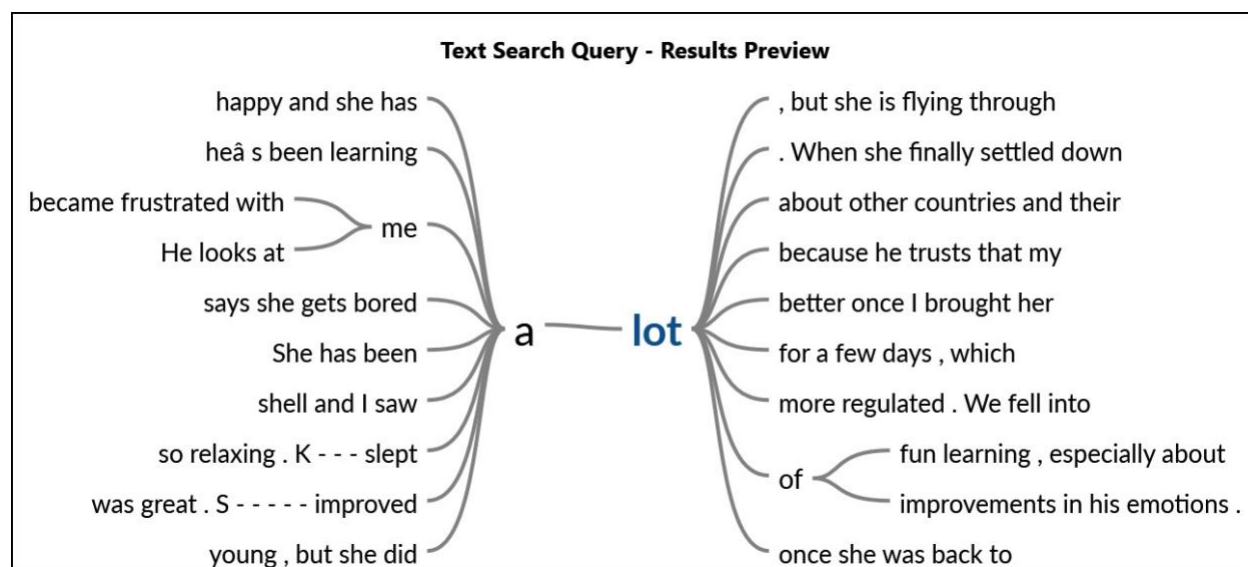


Figure 11

Question 4 Word Tree, 'Lot'

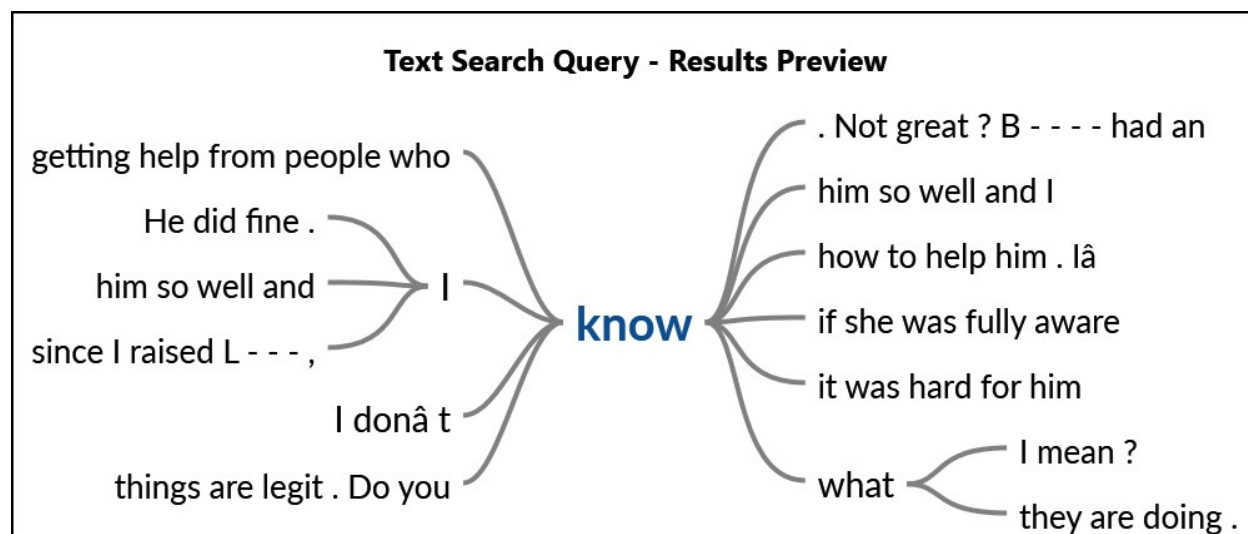


Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child was learning a lot and progressing through their curriculum quickly.
2. The participant's child was learning a lot after acclimating to the routine.
3. The participant's child was getting bored a lot.
4. The participant's child was improving since learning from home.
5. The participant's family and child were a lot more relaxed with homeschooling.
6. The participant's child was a lot more emotionally regulated with homeschooling.
7. The participant's child had a lot of fun learning, especially about topics of their own interest.

Figure 12

Question 4 Word Tree, 'Know'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child did well because the participant knew how to help them.

2. The transition was difficult for the participant's child, but the participant did not know why.
3. The participant's child did 'fine' because the participant knew the child so well.

Question 5: What were some of the benefits of public schooling for your 2e child?

The 2 most frequently used terms in the fifteen responses for the fifth question were 'think' and 'help' used 8 and 7 times, respectively, as shown in the word cloud generated in Figure 13. Figures 14 and 15 show the word trees associated with these 2 terms.

Figure 13

Question 5 Word Cloud

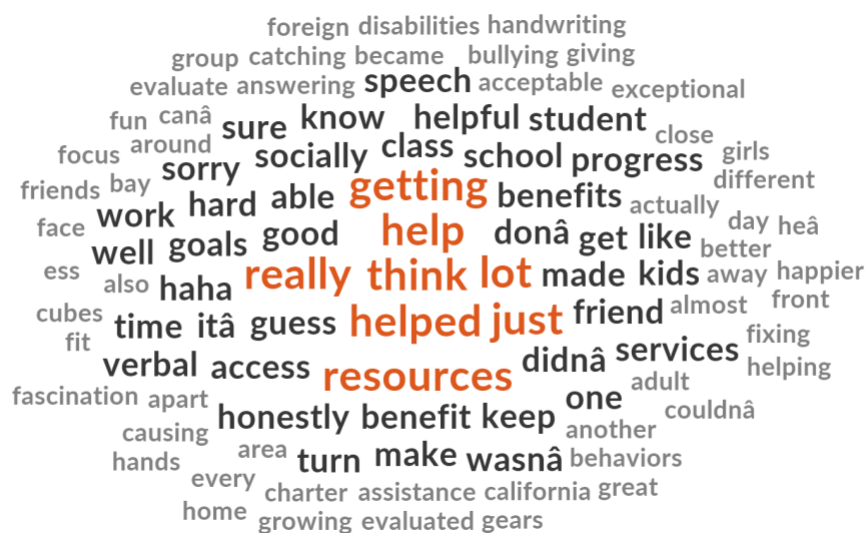
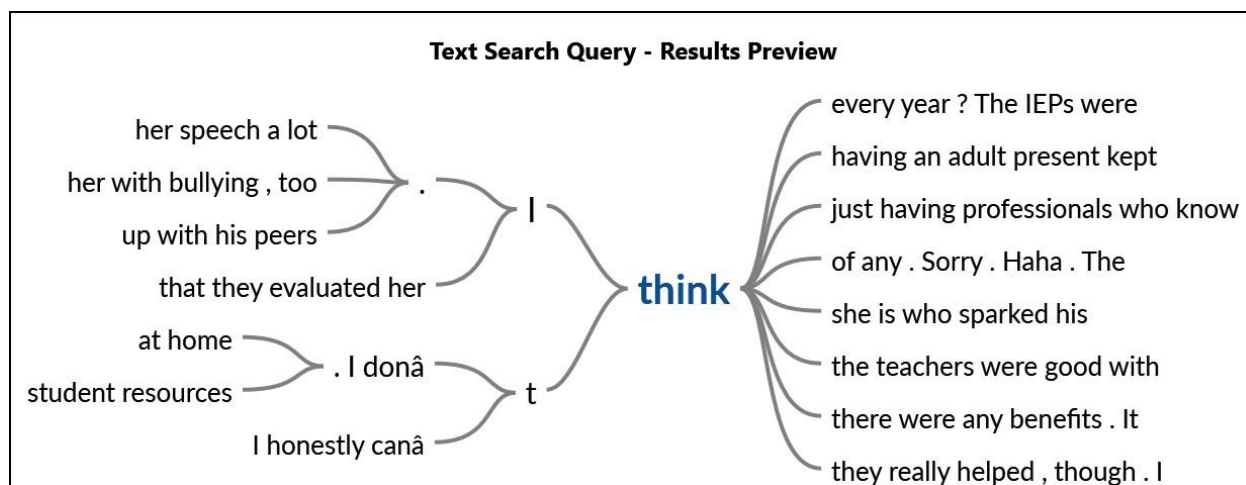


Figure 14

Question 5 Word Tree, 'Think'

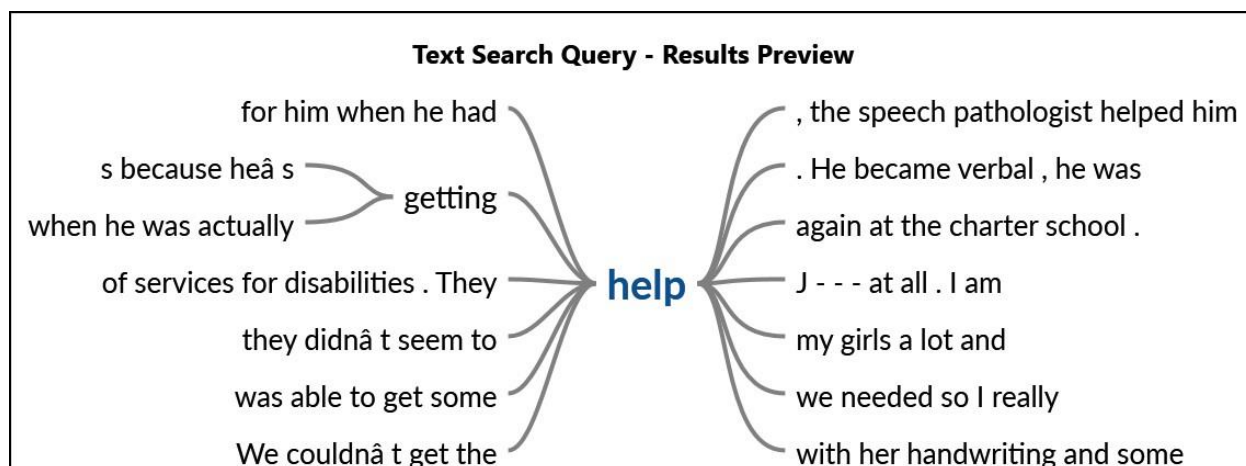


Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. Public schooling helped the participant's child with their speech skills.
2. The participant's child benefitted from the professionals in the public school system who knew what they were doing.
3. The participant could not think of any benefits from the public school system.
4. The participant's child accessed exceptional student resources in their public school.

Figure 15

Question 5 Word Tree, 'Help'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child received help from the school's speech pathologist.
2. The participant's child was able to receive some help that they had needed.
3. The participant's child received help with their handwriting.

Question 6: What were some of the challenges of public schooling for your 2e child?

The 2 most frequently used terms in the fifteen responses for the sixth question were 'help' and 'just' used 12 and 12 times, respectively, as shown in the word cloud generated in Figure 16. Figures 17 and 18 show the word trees associated with these 2 terms.

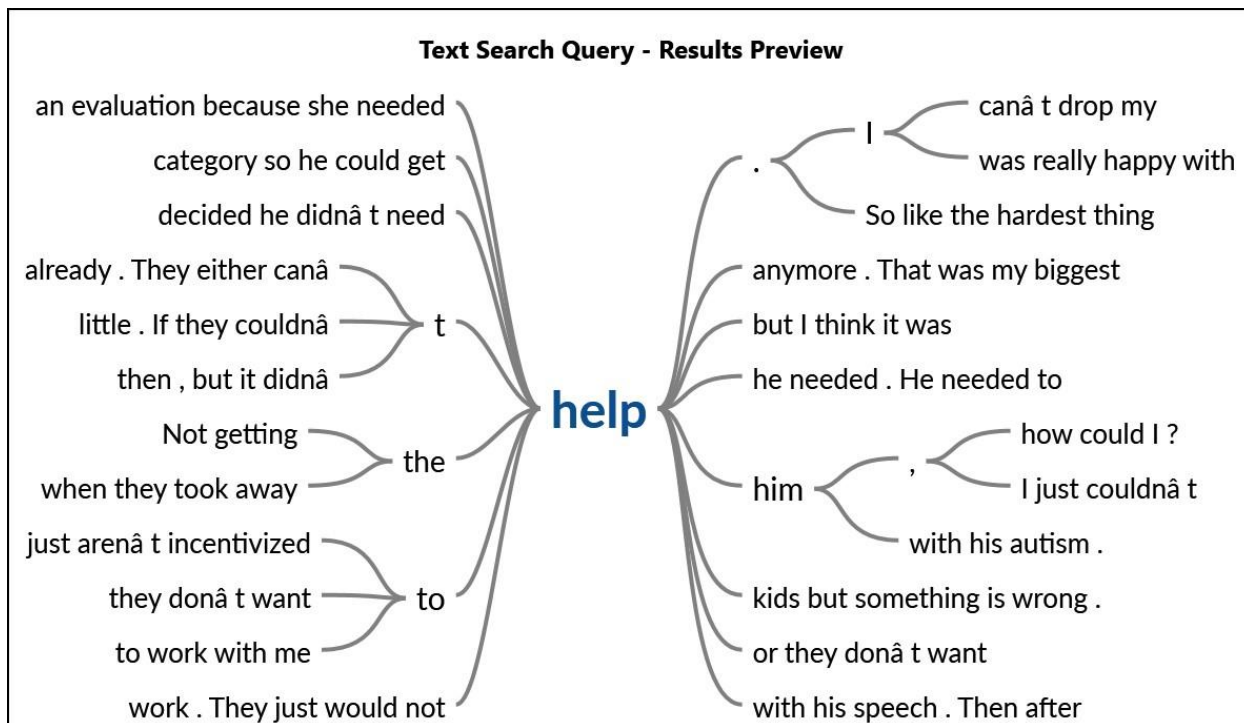
Figure 16

Question 6 Word Cloud



Figure 17

Question 6 Word Tree, 'Help'

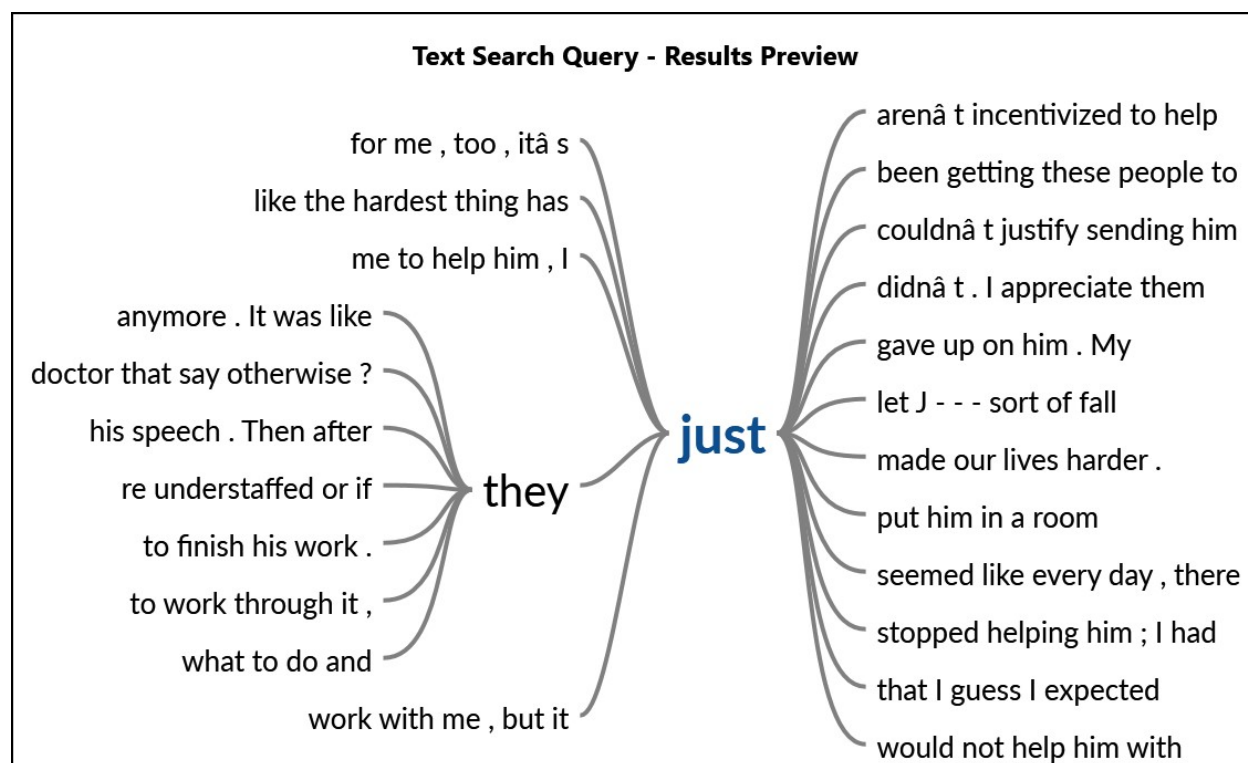


Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child could not receive an evaluation from the school.
2. The participant's child was refused the 'autism' category after evaluation.
3. The participant's child was not getting the help they needed.
4. The public school revoked the help they were administering to the participant's child.

Figure 18

Question 6 Word Tree, 'Just'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant believed the public school was not incentivized to help their child.
2. The participant believed the public school gave up on their child.
3. The public school stopped helping the participant's 2e child.

4. The public school did not acknowledge the participant’s child’s medical autism diagnosis.
5. The participant believed the public school allowed their child to ‘fall through the cracks.’

Question 7: What are/were some of the benefits of homeschooling your 2e child?

The 2 most frequently used terms in the fifteen responses for the sixth question were ‘school’ and ‘able’ used 10 and 8 times, respectively, as shown in the word cloud generated in Figure 19.

Figures 20 and 21 show the word trees associated with these 2 terms.

Figure 19

Question 7 Word Cloud

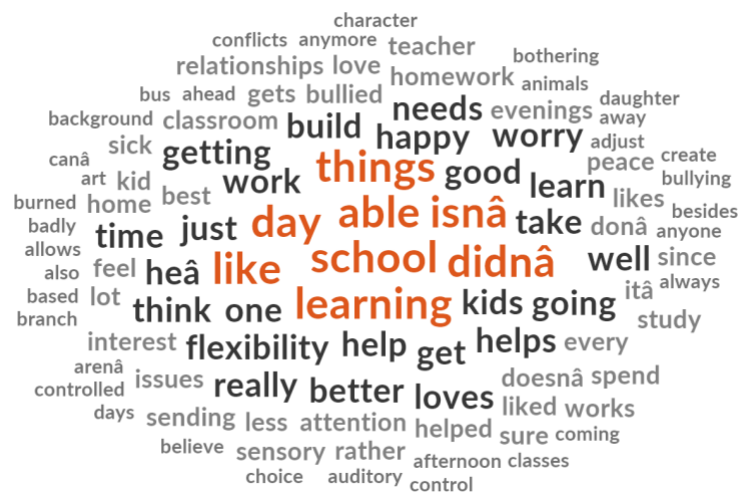
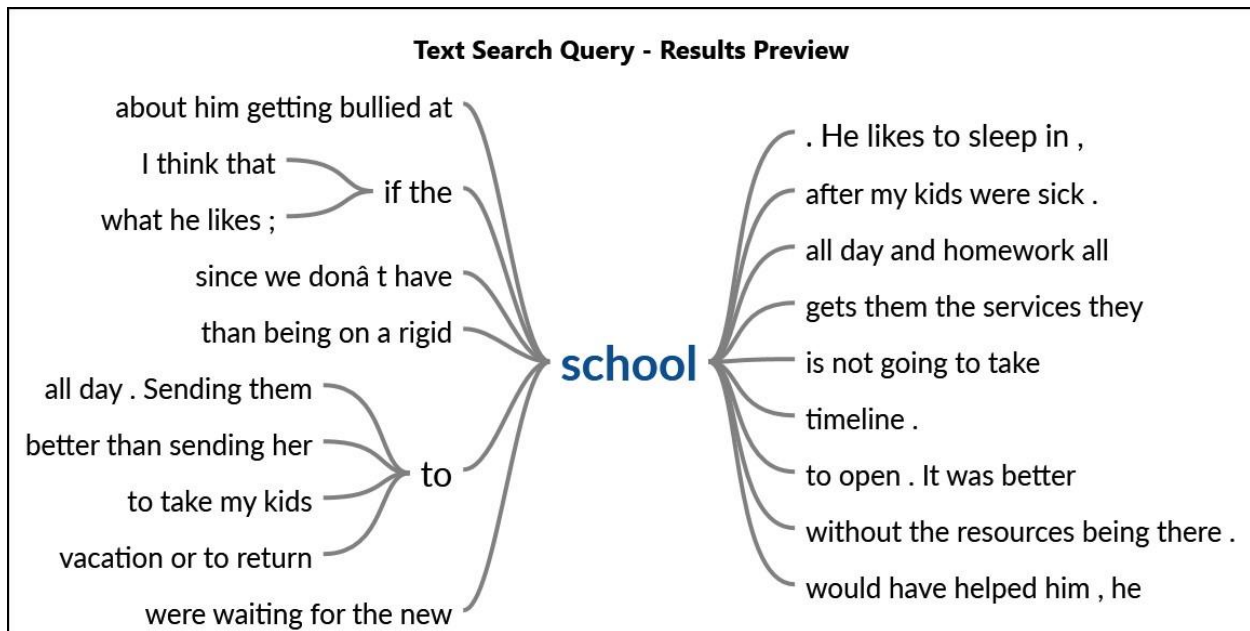


Figure 20

Question 7 Word Tree, 'School'

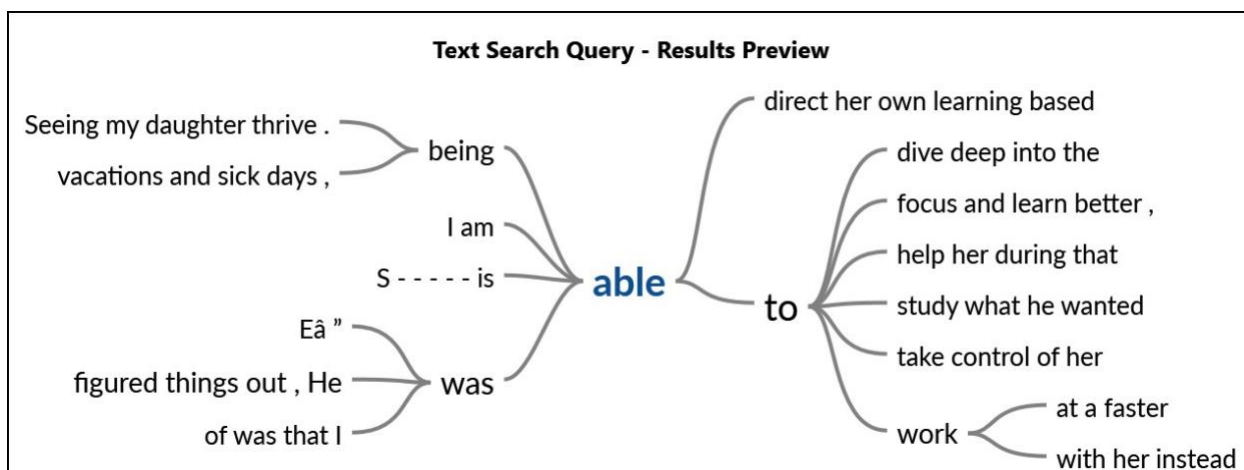


Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child was no longer bullied when they were homeschooled.
2. The participant's child had more freedom and less rigidity.
3. The participant's child did not have excessive homework assignments after being in school all day.

Figure 21

Question 7 Word Tree, 'Able'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant's child thrived in homeschool.
2. The participant's child was able to direct their own learning.
3. The participant's child was able to work at their own pace.
4. The participant's child was able to focus and learn better.

Question 8: What are/were some of the challenges of homeschooling your 2e child?

The 2 most frequently used terms in the fifteen responses for the sixth question were 'time' and 'work' used 9 and 9 times, respectively, as shown in the word cloud generated in Figure 22. Figures 23 and 24 show the word trees associated with these 2 terms.

Figure 22

Question 8 Word Cloud

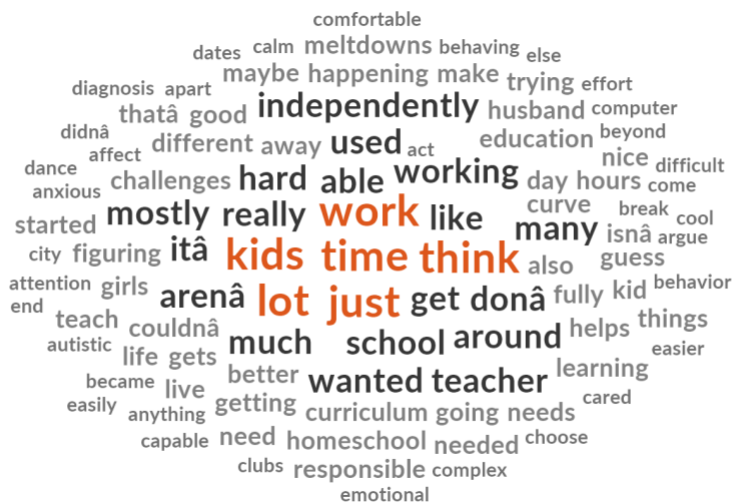
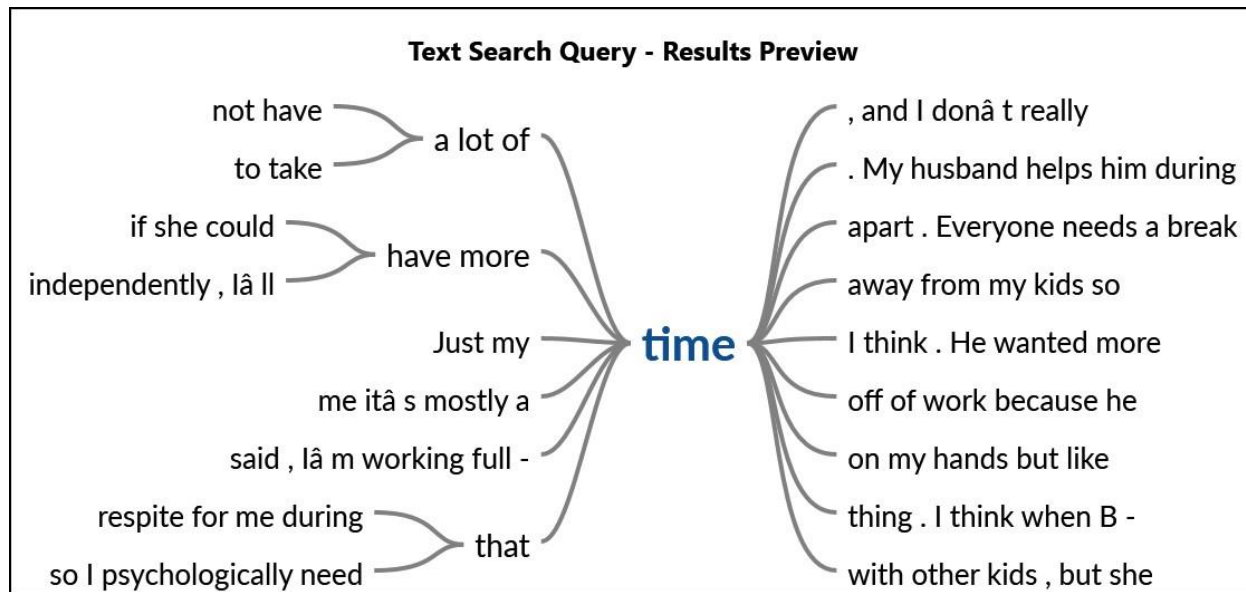


Figure 23

Question 8 Word Tree, 'Time'



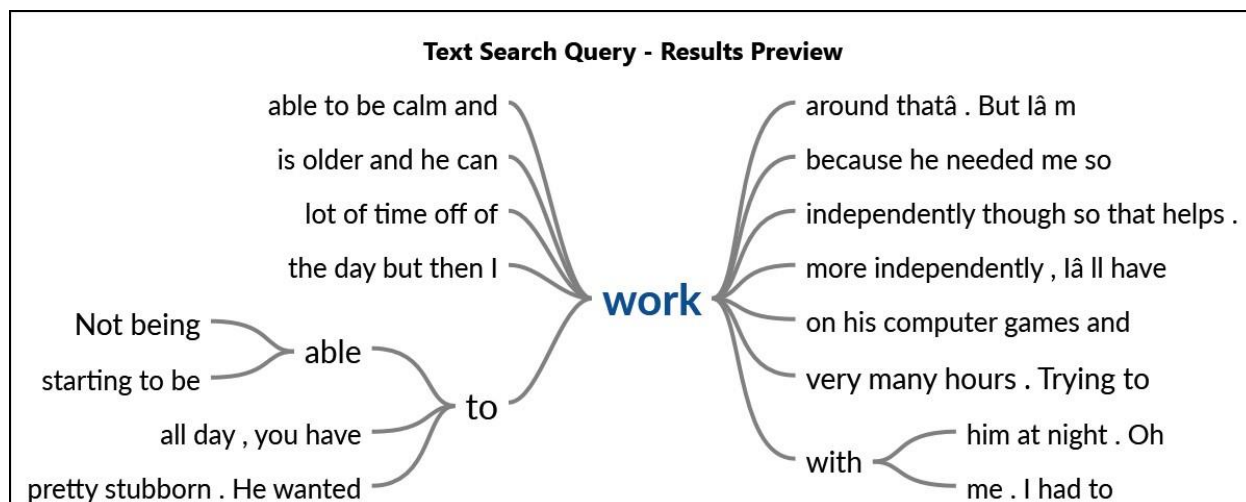
Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant was working full-time, and homeschooling their 2e child was difficult.

2. The participant needed a break/respite; homeschooling made it difficult to achieve.
3. The participant's child 'wanted more' than they were getting from being homeschooled.

Figure 24

Question 8 Word Tree, 'Work'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant was missing time from work/employment to homeschool their 2e child.
2. The participant's child was 'stubborn,' and it was challenging for the participant to direct the child's learning when the child desired to do other things such as work on computer games.

Question 9: What services (if any) did/does your 2e child receive in public school?

The 2 most frequently used terms in the fifteen responses for the sixth question were 'therapy' and 'speech' used 8 and 7 times, respectively, as shown in the word cloud generated in Figure 25. Figures 26 and 27 show the word trees associated with these 2 terms.

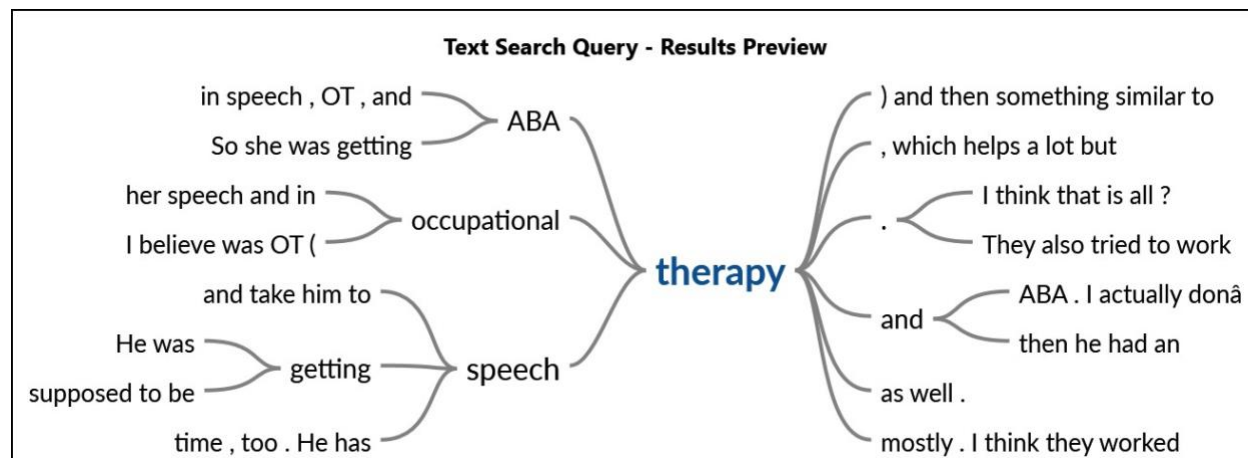
Figure 25

Question 9 Word Cloud



Figure 26

Question 9 Word Tree, ‘Therapy’



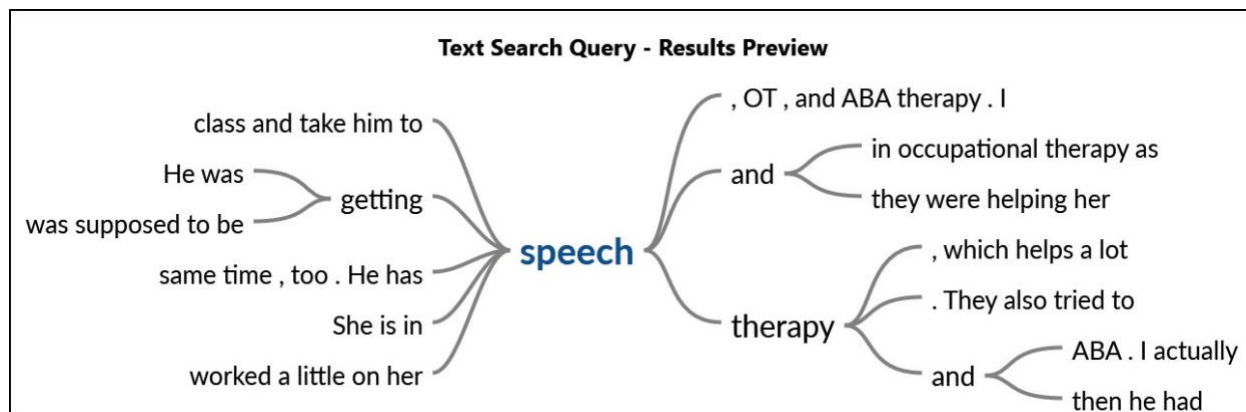
Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant’s child was receiving occupational therapy.
2. The participant’s child was receiving speech therapy.

- The participant's child was receiving applied behavioral analysis therapy.

Figure 27

Question 9 Word Cloud, 'Speech'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

- The participant's child was receiving speech therapy.

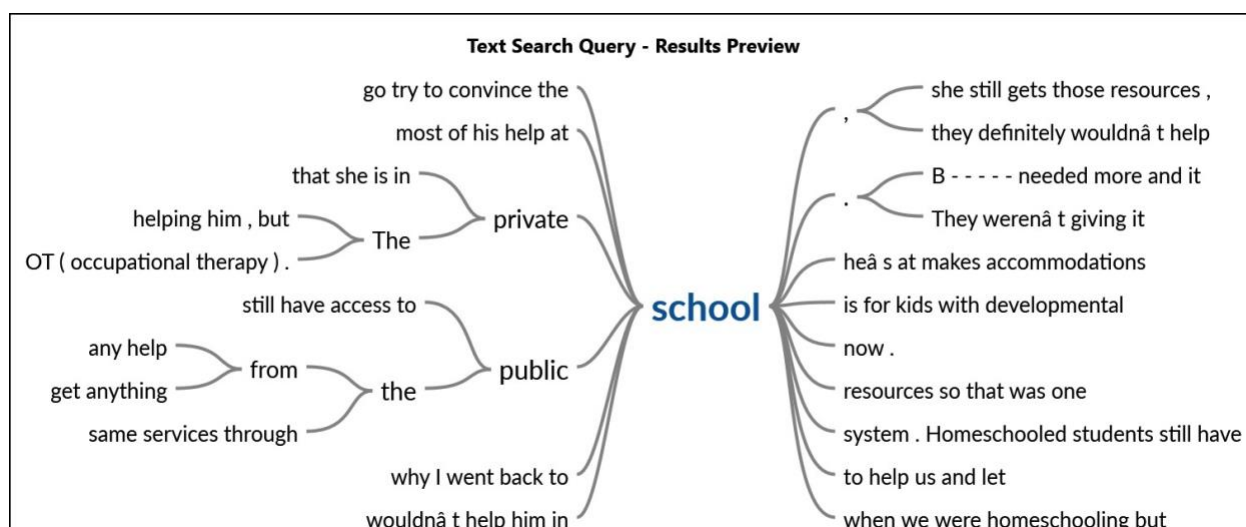
Question 10: What public services (if any) did/does your 2e child receive as a homeschooled student?

The 2 most frequently used terms in the fifteen responses for the sixth question were 'help' and 'school' used 11 and 11 times, respectively, as shown in the word cloud generated in Figure 28. Figures 29 and 30 show the word trees associated with these 2 terms.

1. The participant's child had returned to school and was receiving support there.
2. The participant's child received no public support as a homeschooled student.
3. The participant was supporting the child alone.
4. The public school system had 'dropped the ball' with respect to supporting the participant's child.
5. The participant believes the public school system would never help their homeschooled child.

Figure 30

Question 10 Word Tree, 'School'



Each of the linked phrases were compared with the interview answers for context, and the following responses were derived:

1. The participant went back to school to learn how to help their child because they were unable to get help through the public school system.
2. The participant stated they believed the public school system, 'definitely' would not provide support to their 2e child.

3. The participant had since moved their child to a private school where they received support.

Study Findings

Following NVivo™ analysis, the constant comparative method was used to derive theories from the data. Rooted in grounded theory, which is the discovery of theory from data, the constant comparative method is a thematic induction process and coding strategy. It was developed to make qualitative data quantifiable, to reduce researcher bias, to discover relationships/themes within the information collected, and to form theories. The constant comparative method is accomplished by separating the data into manageably-sized pieces so that similarities and differences can be identified. It allows researchers to find stories within the data. It compares data with data, data with codes, codes with codes, codes with categories, categories with categories, and categories with concepts. The constant comparative method is implemented in 4 stages of data comparison, culminating in the writing of a theory (Glaser & Strauss, 2017):

1. Coding - Comparing incidents applicable to each category
2. Integrating categories and their properties
3. Delimiting the theory
4. Writing the theory

Stage 1: Coding - Comparing Incidents Applicable to Each Category

Seventy-five codes in the data were identified from the initial NVivo™ analysis conducted. They are listed in Table 3, sectioned by their respective research questions, but listed in random order.

Table 3*Codes Identified from Nvivo™ Analysis*

Code	Research Question
The public school either closed or consolidated their special education department.	1
The child was returning home from school, frequently upset and/or dysregulated.	1
The school had revoked or would not recognize the child's autism classification.	1
The child was being bullied and the school would not intervene.	1
The school seemed to give up on the student and/or stopped helping them.	1
The child was not receiving the help they needed with both weaknesses and strengths.	1
The school would not help the child because they performed well academically.	1
The school was unable to help the child during times of distress.	1
The public school either closed or consolidated their special education department.	1
The public school did not help the participant's child with their disability because their test scores were high.	1
The public school would not help the participant's child despite the child having a medical diagnosis.	1
The participant's child could not get help from the public school like other students with autism.	1
The public school would not evaluate the participant's child for educational needs because the child's test scores were high.	1
The participant's child could not receive an evaluation from the school.	1

Table 3 (continued)

The participant's child was refused the 'autism' category after evaluation.	1
The participant's child was not getting the help they needed.	1
The public school revoked the help they were administering to the participant's child.	1
The participant believed the public school was not incentivized to help their child.	1
The participant believed the public school gave up on their child.	1
The public school stopped helping the participant's 2e child.	1
The public school did not acknowledge the participant's child's medical autism diagnosis.	1
The participant believed the public school allowed their child to 'fall through the cracks.'	1
The public school system had 'dropped the ball' with respect to supporting the participant's child.	1
The participant's child was learning a lot and progressing through their curriculum quickly.	2
The participant's child was learning a lot after acclimating to the routine.	2
The participant's child was getting bored a lot.	2
The participant's child was improving since learning from home.	2
The participant's family and child were a lot more relaxed with homeschooling.	2
The participant's child was a lot more emotionally regulated with homeschooling.	2
The participant's child had a lot of fun learning, especially about topics of their own interest.	2

Table 3 (continued)

The participant's child did well because the participant knew how to help them.	2
The transition was difficult for the participant's child, but the participant did not know why.	2
The participant's child did 'fine' because the participant knew the child so well.	2
The participant's child was no longer bullied when they were homeschooled.	2
The participant's child had more freedom and less rigidity.	2
The participant's child did not have excessive homework assignments after being in school all day.	2
The participant's child did not have excessive homework assignments after being in school all day.	2
The participant's child was able to direct their own learning.	2
The participant's child was able to work at their own pace.	2
The participant's child was able to focus and learn better.	2
The participant was working full-time and homeschooling their 2e child was difficult.	2
The participant needed a break/respite; homeschooling made it difficult to achieve.	2
The participant's child 'wanted more' than they were getting from being homeschooled.	2
The participant was missing time from work/employment to homeschool their 2e child.	2
The participant's child was 'stubborn,' and it was challenging for the participant to direct the child's learning when the child desired to do other things such as work on computer games.	2

Table 3 (continued)

The participant would re-enroll their child in school if they could find one that fits their needs.	Neither
The participant was unlikely to homeschool again because their children are happy with their new school.	Neither
The participant was unlikely to return to public school because their child was thriving as a homeschool student.	Neither
The participant was unlikely to return to public school because they were assigned too much homework	Neither
The participant was unlikely to return to public school because the school seemed to not care about their child.	Neither
The participant was unlikely to return to public school because the school refused to evaluate their child for an IEP.	Neither
The participant was unlikely to return to public school because their child had been bullied.	Neither
The participant was unlikely to return to public school without thoroughly investigating it.	Neither
The participant was unlikely to homeschool again because it conflicted with their work schedule.	Neither
The participant did not have trouble withdrawing their child, they just sent an email.	Neither
The school did not seem to care, the participant just sent in a homeschool sworn statement after stating they were withdrawing their child.	Neither
The school did not respond to the participant's statement of withdrawing their child.	Neither
The school was not rude, just business-like.	Neither
The participant did not have any trouble withdrawing their child from public school.	Neither

Public schooling helped the participant's child with their speech skills. Neither

Table 3 (continued)

The participant's child benefitted from the professionals in the public school system who knew what they were doing. Neither

The participant could not think of any benefits from the public school system. Neither

The participant's child accessed exceptional students resources in their public school. Neither

The participant's child received help from the school's speech pathologist. Neither

The participant's child was able to receive some help that they had needed. Neither

The participant's child received help with their handwriting. Neither

The participant's child was receiving occupational therapy. Neither

The participant's child was receiving speech therapy. Neither

The participant's child was receiving applied behavioral analysis therapy. Neither

The participant's child had returned to school and was receiving support there. Neither

The participant's child received no public support as a homeschooled student. Neither

The participant was supporting the child alone. Neither

The participant believes the public school system would never help their homeschooled child. Neither

The participant went back to school to learn how to help their child because they were unable to get help through the public school system. Neither

The participant stated they believed the public school system, 'definitely' would not provide support to their 2e child. Neither

Neither

The participant had since moved their child to a private school where they received support.

Stage 2: Integrating Categories and Their Properties

The 75 codes derived from the NVivo™ analysis used in stage 1 were coded and separated into one of three categories: Those applicable to research question 1, those applicable to research question 2, and those that did not apply to either research question. The grouping of the codes into their research question categories can be found in Table 3. They are listed in random order.

After the codes were sorted into the categories of applicability to research question 1, research question 2 or neither research question, themes were developed by consolidating similar codes. Themes were compared against the original transcripts for context, and represented the 5 main points of each category. The following themes emerged. In each category, themes are listed from most frequently occurring to least frequently occurring.

Themes applicable to the research question 1 category, ‘Why do parents of twice-exceptional autistic children choose to homeschool?’ were:

1. The participant’s child was not getting the help they needed (8 codes)
2. The school would not recognize the child’s autism diagnosis due to academic performance (7 codes)
3. The public school either closed or consolidated their special education department (2 codes)
4. The school had revoked the child’s autism classification (2 codes)
5. The child was being bullied and the school would not intervene (2 codes)

The following themes applied to the research question 2 category, ‘How do parents who homeschool their twice-exceptional autistic children describe their experiences as they transitioned from the public school environment to the home education environment?’:

1. The participant’s child was thriving academically (8 codes)
2. The participant’s child’s emotional regulation was improving since learning from home (7 codes)
3. The participant’s child was experiencing boredom or inattentiveness (4 codes)
4. The transition was difficult for the participant due to work and/or burnout (3 codes)

Themes applicable to neither research question were:

1. Public schooling resources helped the participant’s child with at least some needs (10 codes)
2. The public school provided no support for the participant’s child’s needs (7 codes)
3. The participant was unlikely to return to public school (6 codes)
4. The participant did not have trouble withdrawing their child, they just sent an email (4 codes)
5. The participant was unlikely to homeschool again (2 codes)
6. The public school was unhelpful with student withdrawal (1 code)
7. The participant was likely to return to public school (1 code)

Stage 3: Delimiting the Theory

The themes from each of the 3 categories were reduced to phrases in each category, listed from the most frequently occurring to the least frequently occurring.

Category 1, themes applicable to research question 1:

1. Child not getting the help they needed (8 codes)
2. School refused to evaluate or support autism diagnosis (7 codes)
3. Special education department closed (2 codes)
4. Autism classification revoked (2 codes)
5. Child bullied, no school intervention (2 codes)

Category 2, themes applicable to research question 2:

4. Child was thriving academically (8 codes)
5. Child's emotional regulation was improving (7 codes)
6. Experiencing boredom or inattentiveness (4 codes)
4. Difficult for the participant due to work and/or burnout (3 codes)

Category 3, themes applicable to neither research question

1. Participant's child received some public school support (10 codes)
2. Participant's child received no public school support (7 codes)
3. The participant was unlikely to return to public school (6 codes)
4. The participant did not have trouble withdrawing their child, they just sent an email (4 codes)
5. The participant was unlikely to homeschool again (2 codes)
6. The public school was unhelpful with student withdrawal (1 code)
7. The participant was likely to return to public school (1 code)

Stage 4: Writing the Theory(ies)

The following theories were derived following the analysis of the data:

Research question 1: Why do parents of twice-exceptional autistic children choose to homeschool?

Theory 1.

Parents of 2e autistic children choose to homeschool their children because public schools have, in some way(s), failed to meet their children's needs. Public schools sometimes refuse to evaluate 2e, autistic children for special education resources and accommodations, likely because 2e students can perform well academically. Unfortunately, public schools sometimes close or consolidate their special education departments, and they oftentimes do not recognize a child's formal autism medical diagnosis, and therefore refuse disability accommodations. Sadly, some parents of 2e students choose to homeschool their children because they are being bullied, and the schools are not intervening. In these ways, 2e children 'fall through the cracks' of the public education system, leaving families with the ultimate responsibility of addressing these issues themselves, and with few options to do so. One remedy that is often chosen is home education.

Research question 2: How do parents who homeschool their twice exceptional autistic children describe their experiences as they transitioned from the public school environment to the home education environment?

Theory 2.

Parents who homeschool their 2e autistic children describe their experiences as they transition from public schooling to homeschooling in different ways. Some parents report that their children thrive academically, possibly because their children are better able to self-direct their learning, have fewer distractions, and can take advantage of one-on-one time with their parent instructors. Some parents observe improvements in their students' ability to self-regulate and focus on their studies. On the other hand, there are 2e children who experience difficulty with the transition from the public system to the homeschool environment as they face boredom

and/or inattentiveness in the homeschool setting. Furthermore, there are parents who express difficulty with homeschooling as it conflicts with their work schedules and/or it does not allow them breaks, which leads to burnout.

In addition to theories corresponding to the research questions, other themes were found within the data. Some parents reported that their children did receive at least some type of disability accommodation or resource while in the public school setting, while others received none. Some parents stated they would re-enroll their students in public schools again, and others were strongly against doing so. Generally, the parents did not have difficulty withdrawing their children from school, and some parents were not interested in homeschooling in the future unless it was necessary. Finally, none of the participants' 2e children received public schooling support while they homeschooled, despite being eligible according to federal disability education laws (IDEA, 2004).

Summary

The qualitative analysis software, NVivo™, was used to produce cluster analyses of the transcribed interviews in order to identify codes objectively and thoroughly within the data. Seventy-five codes were found and used as stage 1 of the constant comparative method of analysis. In stage 2, categories were formed and in stage 3, themes were developed, all while continuously comparing outcomes with the original data from the interviews. In stage 4, theories relating to each research question were developed, and additional themes were presented.

The data indicated two likely theories. The first was that parents tend to choose to homeschool their 2e, autistic children because the public schools are in some way, not meeting their needs. The second theory was that transitions to homeschool were positive in some

households and challenging in others. Those experiencing positive transitions likely benefitted from self-directed learning, one-on-one time, and fewer distractions of home education.

Families who experienced difficulty typically had schedule conflicts (such as working parents), and the rigidity of the children was challenging to the parents, who tried to direct student learning.

CHAPTER 5: DISCUSSION

Overview

The purpose of this qualitative, phenomenological study was to explore the reasons why parents choose to homeschool their 2e autistic children and their experiences with transitioning to home education from the public school system. Additionally, the purpose was to identify any themes related to these topics and to contribute the voices of the parents to the body of knowledge. This chapter discusses the study findings, implications, limitations, and recommendations for future research.

Summary of Findings

After interviewing fifteen participants who were parents or legal guardians of 2e, autistic children, and an NVivo™ and constant comparative analysis of the data, 2 theories were derived.

Theory 1: Parents of 2e autistic children choose to homeschool their students because public schools have, in some way(s), failed to meet their children's needs. Public schools sometimes refuse to evaluate 2e, autistic children for special education resources and accommodations, likely because 2e students can perform well academically. Unfortunately, public schools sometimes close or consolidate their special education departments, and they oftentimes do not recognize a child's formal autism medical diagnosis, and therefore refuse disability accommodations. Sadly, some parents of 2e autistic children choose to homeschool their students because they are being bullied, and the schools are not intervening. In these ways, 2e children 'fall through the cracks' of the public education system, leaving families with the ultimate responsibility of addressing these issues themselves, and with few options to do so. One remedy that is often chosen is home education.

Theory 2: Parents who homeschool their 2e autistic children describe their experiences as they transition from public schooling to homeschooling in different ways. Some parents report that their children thrive academically, possibly because their children are better able to self-direct their learning, have fewer distractions, and can take advantage of one-on-one time with their parent instructors. Some parents observe improvements in their students' ability to self-regulate and focus on their studies. On the other hand, there are 2e children who experience difficulty with the transition from the public system to the homeschool environment as they face boredom and/or inattentiveness in the homeschool setting. Furthermore, there are parents who express difficulty with homeschooling as it conflicts with their work schedules and/or it does not allow them breaks, which leads to burnout.

In addition to theories corresponding to the research questions, other themes were found within the data. Some parents reported that their children did receive at least some type of disability accommodation or resource while in the public school setting, while others received none. Some parents stated they would re-enroll their students in public schools again, and others were strongly against doing so. Generally, the parents did not have difficulty withdrawing their children from school, and some parents were not interested in homeschooling in the future unless it was necessary. Finally, none of the participants' 2e children received public schooling support while they homeschooled, despite being eligible according to federal disability education laws (IDEA, 2004). Nevertheless, while some of the participants from the present study were vehemently against returning their children to public schools, there were also others who, after trialing homeschooling, chose to re-enroll their students in the public school system.

Discussion of Findings

In Blustain's (2019) article, she interviewed parents of 2e children in New York. She found that the parents generally complained of their children's needs not being met by the public school system. Despite having formal medical diagnoses and in some cases, professional advocates and teacher advocates, schools frequently refused to evaluate the children, even in defiance of federal education laws for disabled students (IDEA, 2004). Those who did receive evaluations were typically denied the autism classification, greatly limiting the funding and resources available to them. The literature reviewed in preparation for the current study found similar results. Kodak et al. (2020) explained how withholding such resources is detrimental to the children who needed support, because in their research, early intervention was key to helping children with autism to develop skills necessary for functioning independently in society as adults.

In addition to 2e children being particularly at a disadvantage because they need more academic support, but are typically not accommodated in gifted programs, there is also the issue of school bullying. Ochi et al. (2020) studied school refusal in students and found that children with autism were far more likely than their neurotypical peers to refuse to go to school because of the bullying they endured there.

The findings of the present study largely support those of the current literature. The parents in the current study chose to homeschool for reasons similar to the problems encountered by the parents who participated in other studies. Specific reasons given in this study were failure of the school to evaluate or grant an autism classification, failure of the school to mitigate bullying against their child, etc. When considering the reasons revealed in this and other studies, the common theme is that schools have failed to reasonably accommodate 2e children.

The parents' protective response to the inactions of the school system aligned with Biblical teachings. The Bible is direct with parents in that they bear the ultimate mantle of raising their children (Proverbs 22:6, *King James Bible*, 2022). When social systems are inadequate or are not serving the children, according to Biblical teachings, it is the duty of their parents to intervene and advocate for their students. Failure to recognize a child's disability, resulting in a failure to provide support, is likely to frustrate a child. In Ephesians, 6:4 (*King James Bible*, 2022), we are cautioned to not provoke or frustrate our children; we should nurture them so that they do not become discouraged. Twice-exceptional students who are not being properly accommodated may feel frustrated, distressed, and provoked, which does not align with Biblical teachings. "Children are a heritage of the Lord" (Psalm 127:3, *King James Bible*, 2022), and their parents have been entrusted with their wellbeing. It is of interest to note that were some participants in the current study who did not intend to homeschool in the future, but reasons given were that they were unable to do so because it conflicted with their work schedules, or that they never intended to homeschool at all, they had just done so for a short period of time because it was needed.

Implications

Twice-exceptional students' needs are not being reasonably met in the same ways as their peers. The current study and studies in the recent literature have all found this to be the case in the populations they investigated, and in this study it was a major consideration in the decision to homeschool for all fifteen participants.

Similar to Madaus et al.'s (2022) findings that 2e college students are succeeding in prestigious universities, the children in this study tended to focus and regulate better in

environments that were quiet, in which they could direct their own learning, and in which they had one-on-one time with their parent instructors. Schools could benefit from this information and utilize it to fund and design better methods of support for 2e children. Quiet sensory-reducing rooms and more opportunities for student-directed learning may be of assistance to these students.

The 2e community could be better served through teacher, administrator, and school psychologist training. Educating school personnel about what it means to be 2e and what this could look like in the classroom and on evaluations could help the 2e student population to not be easily overlooked. Teachers could be better adept at identifying and advocating for their 2e students with respect to evaluations and classroom support, and being well-informed about behavioral differences could result in faculty compassion and effective best practice responses rather than disciplinary action for the 2e student.

Finally, none of these changes can be achieved if the students' autism is not recognized. Federal education laws requiring public schools to evaluate all students suspected of having disabilities (IDEA, 2004). Parents should not have to take legal action for their children's rights to be upheld as in the cases mentioned in the Blustain (2012) article, and they should not have to resort to homeschooling to accommodate these needs unless it is a decision they would otherwise make. If evaluations and proper classifications are granted, support can then be accessed, and 2e students can enjoy the free appropriate public education to which they are entitled (IDEA, 2004).

Limitations

As with all qualitative research, particularly with respect to studies gathering data from participant interviews, there are inherent limitations related to participant and researcher bias.

Recollections of events are not always accurate. The participants in the current study were not only homeschool instructors, but advocates for their autistic children. It is unknown how elevated emotions could have affected the memories and experiences of the participants. Measures were taken to help mitigate bias such as designing interview questions that asked about the benefits and challenges of both schooling choices, keeping an ongoing audit trail, and using NVivo™ software to find codes within the data, against which all further analysis steps were compared.

The sample size studied in the current study was small, as it was phenomenological and it was not intended to produce externally generalizable results. The population from which to gather data was small as well; however, the goal was to develop theories based on the research questions. In order to generalize the findings, a study with a larger participant sample would be necessary to test the theories developed from this project.

Finally, all of the participants' qualifying data, including their children's diagnoses, and testing scores, were reported by the parent and not externally verified, so the results relied on parents' truthful reporting and also their understanding of evaluation results in order to be able to report them accurately.

Recommendations for Future Research

As a phenomenological, exploratory project, the current study developed theories and discovered themes related to 2e autism and homeschooling. As such, the intention was not to generalize the findings, but to uncover issues related to this topic that merited further future investigation. Therefore, future research should focus on testing the theories developed from the current study by studying larger populations of participants. Additional studies may benefit from

using the constant comparative method as well so that the qualitative data gathered can be quantified, and mixed-methods approaches can be taken moving forward.

The majority of the participants in the study (73%) chose to continue to homeschool their 2e children after withdrawing them from public schooling. Future studies should focus on investigating whether this is the case in the broader population and also whether decisions to continue to homeschool are best for the children or if they are mostly in reaction to the public schools failing to meet the needs of 2e children.

A theme regarding parents' decisions to return their children to the traditional school setting developed outside of the research questions. Four (27%) of the 15 participants chose to re-enroll their children in school (either public, charter, or private) after homeschooling, suggesting that homeschooling was not the best way to educate their 2e children. It is important to note that only 1 participant re-enrolled their child because homeschooling was too difficult/not working for their family. Another participant stated that their child was happy in their new school, so there was no need to homeschool, and the remaining 2 cited work conflicts as their reasons for no longer homeschooling. Considering the answers given by the participants, only 1 of the 15 reported re-enrolling their child in a public school because it was too difficult for the parent and the child, 2 did so out of necessity, and 1 indicated that the charter school better served their child than homeschooling. In this case, 7%-13% of the participants determined that formal schooling was best for their 2e child after trialing homeschooling, and 87%-93% found that homeschooling was better for their situations.

Again, the sample size in this study was not intended for quantitative analysis, but future research should investigate whether similar percentages of families in the general population also make these decisions. In addition, studying reasons why some families have positive

experiences with homeschooling while others have negative experiences could help to support (or not) the findings of this study and contribute to a better understanding of why an elevated number of students in the 2e population are homeschooled (Simmons & Campbell, 2019). Future research is needed to help public schools learn how to better serve 2e autistic children, and afford them access to the same free, quality education that is enjoyed by their peers.

Summary

Twice exceptional, autistic children are those who have autism along with intellectual giftedness. This population of students comprises approximately only 6% of those with disabilities. These disabilities can be difficult to identify because giftedness can obscure a disability and a disability can conceal giftedness (Baldwin et al., 2015). Current research has found that early detection and intervention, which are best begun before the age of 5 years, are a major predictor of whether symptoms will progress or even develop (Bejarano-Martín et al., 2020; Kodak, 2020; Lazaratou et al., 2017). Furthermore, early intervention can predict outcomes in adulthood (Kodak, 2020). Unfortunately, support services for 2e children can be difficult to secure, leading many parents, including those who participated in the current study, to choose to homeschool their children.

After transcribing the data from fifteen interviews for this study, an NVivo™ analysis was used to search for codes objectively and exhaustively in the data, which were then used in the constant comparative method. This analysis led to the development of 2 theories corresponding to the 2 research questions:

Theory 1: Parents of 2e autistic children choose to homeschool their students because public schools have, in some way(s), failed to meet their children's needs. Public schools

sometimes close or consolidate their special education departments, they sometimes do not recognize a child's formal autism medical diagnosis and therefore refuse disability accommodations, they sometimes do not address and correct bullying of 2e students, and they sometimes refuse to evaluate or support/accommodate the students' needs because 2e students can perform well academically. In these ways, 2e children 'fall through the cracks' of the public education system, leaving families with the ultimate responsibility of addressing these issues themselves, and with few options to do so. One remedy that is often chosen is home education.

Theory 2: Parents who homeschool their 2e autistic children describe their experiences as they transition from public schooling to homeschooling in different ways. Some parents observe improvements in their students' ability to self-regulate and focus as they benefit from self-directed learning. They may also benefit from fewer distractions and one-on-one time with their parent instructors. Other parents express difficulty with their transition from public schooling to homeschooling, particularly with respect to schedule and work conflicts. Some describe their 2e, autistic children to have difficulty with the transition as well, mainly related to student boredom and student rigidity, which can create conflict with the learning direction.

Biblical teachings are clear: we must be careful to not frustrate and discourage our children, and in this case, we should be especially sensitive as those children are uniquely vulnerable to heightened emotions (Ephesians 6:4, *King James Bible*, 2022). Raising up children is the responsibility of their parents (Proverbs 22:6, *King James Bible*, 2022), and when a system fails the children by refusing to support and accommodate them, homeschooling is one way for parents to follow the Word of God and perhaps it is why some feel called to do so. However, if public schools made positive changes to acknowledge and accommodate the needs of 2e children, they too, like their peers, could receive a free appropriate public education.

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APPENDIX A: RECRUITMENT LETTER

[Date]

Hello,

My name is Tiffany Hartman. I am a doctoral candidate in the department of Psychology at Liberty University. As part of my dissertation project, I am conducting a research study to learn more about why many parents choose to home educate their twice-exceptional (2e) children, and how they and their children experienced the transition from public schooling to homeschooling. Twice-exceptional, in this case, is defined as a child with autism who is also intellectually or academically gifted. Twice-exceptionality for this study will be defined as a child who is diagnosed with autism by a qualifying professional and has also been assessed to be performing above grade-level on an intelligence or academic achievement test in at least one area.

I am recruiting parents who are willing to speak with me about their experiences with their 2e children who have been enrolled in a public school and then subsequently homeschooled at some point in their Kindergarten – 12th grade years.

Participation time in the study will vary based on responses, but is expected to take approximately 30-60 minutes. If you would like to participate, I will ask that you:

1. Provide the names or facilities of the professionals who evaluated and diagnosed your child, along with the dates and diagnosis/scores.
2. Answer demographic questions about yourself and your 2e child.
3. Discuss your reasons for choosing to homeschool your 2e child.
4. Discuss your experiences with transitioning from public school to homeschool.

Participation is voluntary and there are no consequences for choosing to not participate, or for withdrawing from the study at any time. The confidentiality of all participants will be maintained; the data will be kept secure and password-protected. If it becomes necessary to use names, the researcher will protect the participants' identity by using aliases.

If you have questions, you may reach me, Tiffany Hartman, at [REDACTED] or [REDACTED]. If you would like to participate, please e-mail me!

Respectfully,

Tiffany Hartman
Doctoral candidate
Liberty University

[REDACTED]

APPENDIX B: SOCIAL MEDIA RECRUITMENT**Social Media Recruitment Announcement
(Facebook and BAND)**

ATTENTION GROUP MEMBERS: I am conducting research as part of the requirements for a Ph.D. in Psychology at Liberty University. The purpose of my research is to better understand why an elevated number of parents homeschool their twice-exceptional children. To participate, you must be 18 years of age and older and the parent or legal guardian of a twice-exceptional child (autism + intellectual gift) who has homeschooled your child following their enrollment in public school. Participants will be asked to participate in a virtual video interview, which should take about 30-45 minutes to complete. If you would like to participate and you meet the study criteria, please direct message me with your email address. A consent document and further information will be sent to you. Thank you!

APPENDIX C: VERBAL RECRUITMENT

Verbal Recruitment Script (Phone or In Person)

Hello [Name of Potential Participant],

As a graduate student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for a Ph.D. in Psychology degree. The purpose of my research is to better understand the reasons why an elevated number of parents choose to homeschool their twice-exceptional children, and if you meet my participation criteria and are interested, I would like to invite you to join my study.

Participants must be 18 years of age or older, the parent or legal guardian of a confirmed twice-exceptional child who has both autism and an intellectual gift, and they must have homeschooled their child at some point after the child was a public school student. The child must currently be between the ages of 5 and 17 years of age. Participants, if willing, will be asked to take part in one virtual video interview involving their experiences with homeschooling their twice-exceptional child. It should take approximately 30-45 minutes to complete the interview. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

Would you like to participate? [Yes] Great, may I have an email address so I can send you the consent form and information to proceed with setting up an interview? [No] I understand. Thank you for your time.

A consent document will be emailed to you along with some other information including a sign-up document to select an interview time and date that works for you. The consent document contains additional information about my research. If you choose to participate, you will need to sign the consent document and return it to me via email along with you selected interview time and date. Doing so will indicate that you have read the consent information and would like to take part in the study.

Thank you for your time. Do you have any questions?

APPENDIX D: INFORMED CONSENT LETTER

Consent

Title of the Project: Twice Exceptionality with Autism and Home Education: A Phenomenological Analysis

Principal Investigator: Tiffany Hartman, MA, MS, Liberty University

Research Committee: Brooke Snyder, PhD, Liberty University; Brittany Hernandez, PhD, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be at least 18 years of age and the parent or legal guardian of a child with Autism and giftedness, also known as twice-exceptional, or 2e. Your 2e child must be between the ages of 5 years and 17 years, and they must have attended a public school followed by a home school at some point during their kindergarten – 12th grade years. Additionally, you must be the person who homeschooled/homeschools the child. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to learn about why an elevated number parents and guardians of 2e children choose to homeschool, and how the transition from public school to the home is experienced. Furthermore, the study aims to give a voice to parents, since studies of this nature tend to be written from the perspectives of public school personnel.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. You will be asked to participate in an interview over video conferencing in which I will ask some brief background and demographic questions, as well as questions about your experiences with public schooling, home schooling, and the transition you experienced from the former to the latter. Depending on your answers, this is estimated to last between 30 and 60 minutes.

2. You will be asked for permission for the interview to be recorded for transcription purposes. Please keep in mind that measures will be taken to assure confidentiality, as explained in this document.
3. You will be asked to provide information about the name of the practitioner(s) and/or facility(ies) that/who diagnosed your child with autism and assessed them for intelligence and/or academic achievement. This will need to include dates, scores, and the name of the assessments used.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study. However, contributing to the body of knowledge on the topic of twice-exceptionality, public schooling, and homeschooling, could inform future policy changes. Additionally, participants will have the opportunity as parents/guardians to interject their voices into the academic literature, where they are currently lacking in representation.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a participant. Research records will be stored securely, and only the researchers will have access to them. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be kept confidential through the use of pseudonyms/codes.
Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

- Interviews will be recorded and transcribed. Recordings will be discarded after transcription, and transcriptions will be stored on a password-locked computer for three years before being discarded. Only the researcher will have access to the recordings and transcripts.
- Anonymity cannot be guaranteed, however, confidentiality will be observed. While the researcher can link individual participants to the data they provide, participant identities will not be disclosed.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Tiffany Hartman. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty sponsor, Brooke Snyder, PhD, at [REDACTED].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you agree to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio and video record me as part of my participation in this study.

Printed Subject Name

Signature & Date

APPENDIX E: PARTICIPANT LETTER

Screener Letter

Dear _____,

Thank you for your interest in this study, Twice Exceptionality and Home Education, A Phenomenological Analysis.

In order to qualify for participation, you must be the legal parent or guardian of a child with twice-exceptional autism. Please read the enclosed informed consent letter. If you wish to proceed, please sign and date it, and return it along with this form, to _____

My child was diagnosed with autism by (provider or facility): _____ on (date) _____.

My child was tested for intelligence or academic achievement by (provider or facility): _____ on (date) _____ using the (test used) _____ assessment. My child achieved a score of _____ in the area of _____.

Interviews are available Mondays through Saturdays between the hours of 8:00 am – 10:00 am and 12:00 pm – 6:00 pm Arizona time. Please indicate a day and time during which you would like to be interviewed in the space below. If the time is already reserved, you will be notified and asked to select a different time.

Requested interview date and time: _____

Please join the Zoom meeting at your scheduled time

Meeting ID: _____

Passcode: _____

An E-mail will be sent to you with a link to the meeting and this information prior to the meeting

Please remember to return this completed form, along with the informed consent letter, to _____ or _____ as soon as possible if you wish to participate in the study

APPENDIX F: INTERVIEW QUESTIONS

Demographic Questions

1. What is your age?
2. What is your ethnicity?
3. What is the highest degree or level of school you have completed?
4. What is your marital status?
5. How many children do you have living in your home?
6. What is your employment status?
7. What is your 2e child's age?
8. How long ago was your child diagnosed with autism?
9. In what way is your child gifted?
10. Are there any other related diagnoses you would like to share?
11. For how long have you home educated your 2e child? OR For how long did you home educate your 2e child?
12. For how long has your child been a public school student? OR For how long was your child a public school student?

Interview Questions

1. Why did you choose to home educate your twice-exceptional (2e) child?
2. Why would you or wouldn't you consider returning to public school (if still homeschooling)? OR Why would you or wouldn't you consider homeschooling again (if returned to public school)?
3. What was your experience with the public school system as you withdrew your child?

4. What was your experience with your child as you transitioned from the public school system to the homeschool environment?
5. What were some of the benefits of public schooling for your 2e child?
6. What were some of the challenges of public schooling for your 2e child?
7. What are/were some of the benefits of homeschooling your 2e child?
8. What are/were some of the challenges of homeschooling your 2e child?
9. What services (if any) did/does your 2e child receive in public school?
10. What public services (if any) did/does your 2e child receive as a homeschooled student?

APPENDIX G: AUDIT TRAIL

7/10/2022 – This audit trail is a detailed accounting of my feelings, actions, and personal opinions as I proceed with my study. The intention is to provide the reader with confirmability of the data I gather, as well as to help me remain aware of my personal biases so that when I interpret the results, I can be as objective as possible. I want to begin by acknowledging that I have a personal experience with the public school system and my 2e child. The system was designed to facilitate the education of all students, particularly those with disabilities. I was shocked when we were turned away despite all of the medical documentation that I provided to the school. I was speechless as I reviewed the law and realized my child had been denied her educational rights. I began to discuss my story with other parents of autistic children, only to learn that we were not alone; in fact, we were in good company. My goal is to uncover a potential phenomenon, then shine light on it so that other children can have access to resources and not be denied support just because they happen to be intelligent. I am biased. It is my opinion that the public school system is overwhelmed with a growing number of autism diagnoses, and they look for any reason to deny evaluations, classifications, and resources. Here in Arizona, we have the Empowerment Scholarship Account (ESA). In order to qualify (rules change September 2022), students must receive a public school evaluation and classification. If a student qualifies, and they receive the Autism classification, they receive roughly \$30,000/year from the state toward their educations, which is not surprisingly the precise amount of tuition that most private schools for Autism charge. The catch is that the funds come from what a public school would receive if the student were enrolled, so the student is not allowed to attend a public school if they are on the ESA scholarship. I see a situation in which the fox is guarding the henhouse; a student cannot get help without the school's permission, and the school is financially incentivized to not allow the child to get the help. I see this as a conflict of interest, and I see it as a form of discrimination, particularly to disabled students who are also intellectually gifted.

7/31/2022 – After reviewing my earlier statement, I can see that I need to be careful to not arrive at a conclusion before I have gathered, analyzed, and interpreted my data and even then, it will not be a proven fact but evidence of possible phenomena. My personal theory right now makes sense to me, and others (even some in the public school system) have shared similar thoughts, but theories are not necessarily facts. I am reminding myself of that right now and remembering that I need to allow the science, rather than my opinions, to direct me toward a likely conclusion.

11/21/2022 – At this time, the IRB is reviewing my research proposal. I am waiting for their decision before I can begin recruiting. I have mentioned my project to friends and family and I have been incredibly surprised by how many people have wanted to connect me to parents they know who might be interested in participating in the study once I have permission to begin. I have also heard that the struggles the 2e autism crowd experiences are also felt by children with 2e ADHD, which might eventually be a recommendation for future research. I have 2 reasons for recording my thoughts today. The first is that the advocate I spoke to in Phoenix said that most of the children she helps (in the neurodivergent group) are gifted in some way. This is in contrast to what I have read in the literature, where estimates vary, but on average agree that only 6% of autistics are gifted. Maybe the information from the advocate explains why there seems to be so many 2e autistic families out there. Secondly, I was connected to a woman whose child

was showing physical signs of abuse when he would come home from school. The woman asked about it and was told that these types of things happen in the special education department. The marks continued and became excessive, but rather than reporting the school, she moved her child to a private school. She said she was afraid to report the school because she knew someone who had, and the school, allegedly in order to shift the blame, reported the mother to child protective services for the marks on the child's body that were inflicted at school. This mother's child is not gifted and therefore, she is not eligible to participate in the eventual study, however, the story was exceedingly difficult to hear and thinking about it has caused me to once again, check my bias. I want to be clear that while this story confirmed my bias, I know that not every experience is like this one; there will always be outliers in any organization so while this was a tragic situation, I cannot assume that all schools are like this one.

12/12/22 – Today, I received word from the IRB that my study has been approved and I can begin to collect my data. I have posted my announcement to a relevant Facebook group and to my co-op group on BAND. I have also sent messages to those in my personal circles who I believe might qualify and might be willing to participate. If they are interested, I will call them and read the verbal recruitment script to them.

12/22/22 – The responses to my recruitment announcements have been encouraging. I have recruited many participants through word of mouth, and a few have responded in the Facebook group. Once I send out the screener letters, there seems to be a bit of a delay getting them back. I am assuming this could have something to do with people changing their minds. One participant told me she was looking for the paperwork, so I suspect that not all parents have the evaluations readily available. Also, I am getting a better response from people I know or people who were referred to me by people I know. I am guessing this is because people are probably more likely to share personal information with someone they know or feel they can trust, rather than an internet stranger posting in a Facebook group. I am filling participation slots on a first come, first serve basis to avoid any bias in selecting my sample.

1/7/23 – I conducted my first interview today over Zoom. I had an idea to use Google Voice to Text on a separate laptop during the interview to save time. Afterward, I listened to the recording of the interview and corrected any errors in the transcripts. I also cleaned it up a bit by removing excessive “ums” and transition words. Additionally, I removed my words beyond the questions since the raw data uploaded to NVivo™ will be the participants' answers and I am trying to be as efficient as possible. Once this was finished, I saved the document in the participant's file. I've also decided to write summaries in additional documents after each interview as a reference for myself once I begin analysis. The information from this interview was remarkably interesting. This woman lives in the Midwest and much of what she said about the system in general was familiar with what I have heard from parents here in the Southwest. My next 2 interviews are scheduled to take place on Monday, January 9th.

1/16/23 – After conducting more interviews, I am finding that my summaries are redundant and they are wasting time; when I work on my analysis, it is going to be more efficient to look back at the separate questions in the transcripts rather than scanning through long narratives, so I have stopped writing them. As of this date, I have completed 9 interviews. I have worked through the Christmas/winter break so that I can spend this semester on my analysis rather than on data

gathering. I believe I have recruited the rest of my target sample of 15, and I have backups if necessary. I am surprised to have found so many 2e families; however, with the help of the social media groups, I have been able to reach a broader group of people. Additionally, a couple of my participants are involved in the educational psychology community, and they have mentioned that based on their experience, twice exceptionality is not extremely uncommon.

I am learning a lot. Much of it confirms my bias. I have been told a few stories that are a bit upsetting to hear, and I have to remind myself that my job is to be as objective as possible because I want my results to be solid so that my work can help in some way. I have also had discussions with my participants in which I have learned information that is contrary to my opinions; some parents speak favorably of their children's public schools. Much of their experiences seem to depend on the resources available in the schools, and what I am able to gather, the budgets given to their exceptional students programs. I have more interviews this week and hope to be finished collecting my data soon.

2/4/23 – I finished my interviews last week and I am beginning my analysis. I have decided to use tables to show the demographics of the participants as well as the main facts about their children. I will also use the summaries (after all) that I was writing in the beginning of my interview process. Following the NVivo™ analysis I will be working with this coming week in order to discover common terms and phrases. Afterward, I will begin the constant comparative method to analyze my data.

2/10/23 – I happened to have a coincidental discussion with someone in my church today who oversees the special education department at a local public school. He is remarkably familiar with twice exceptionality. We spoke for about 2 hours. He is well aware that the population is small and that 2e students are in need of support. He assured me that his school is on the forefront of making improvements to all of their disability programs and that 2e students are included. This gave me hope for these children of the participants I interviewed. I hope very much that these changes will pick up momentum and that the voices of the participants in this study will be able to be heard. I will be sharing a copy of my completed project with this person, as he is in a position to enact positive change for 2e students. I feel very blessed to have made this connection.

2/15/23 – I have finished the summaries of the interviews in this manuscript and I have completed the NVivo™ analysis of the raw text data. Since my main method of analysis is the constant comparative method, NVivo™ is only being used as a tool to reduce researcher bias and objectively and exhaustively find frequently used terms and themes. I am currently working on the write up, incorporating NVivo™ reports into my analysis as I am discussing in chapter 4. I hope to have chapter 4 completed by the end of the week.

Reading these conversations over and over can feel heavy sometimes. I do have faith that good things are coming, but what has been done has already been done. I worry about the kids who fell through and are falling through the cracks. I read studies about how well they are able to perform well academically if small accommodations are made. It doesn't take much. It concerns me that these kids and our society in general might not reach their potentials because they have been products of the current system their whole lives. It would be a terrible tragedy if

human beings were not able to thrive because a few changes hadn't been made in their earlier years. It is difficult to not feel somewhat angry about this. I am going to put things away for today and start up again soon. I do not want my feelings to affect the way I ultimately interpret the data.

3/7/23 – Today, I finished writing the first draft of this project, and I am heartened. While much of my bias has been confirmed, I am hopeful that this work can, in some way, reach those who are in the positions to make positive changes. It is my prayer that they will hear the words of these loving parents who labor tirelessly to support their children in every way and that through these parents, the needs of the children will be met so that 2e children can receive the same free appropriate public education that their peers enjoy.