HOMESCHOOL DECISION MAKING AND EVIDENCE-BASED PRACTICE FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

by

CHRISTINA ANNE SIMMONS

(Under the Direction of Jonathan M. Campbell)

ABSTRACT

Homeschooling children with autism spectrum disorder (ASD) has increased in popularity and is an educational option considered by parents. Interviews were conducted with 9 families homeschooling children with ASD in order to systematically characterize the reasons parents provide for their decision to homeschool and the educational experiences parents are providing. Five distinct themes emerged regarding reasons parents decided to homeschool children with ASD. Parents began homeschooling at a mean grade of 4.33 and their decisions were characterized by a long-term process or following one catalyst event. Results suggest that parents are largely not implementing evidence-based practices or are utilizing methods that directly contradict best practice standards. The majority of homeschool programming described did not meet the minimum educational requirements of amount of daily instruction and content areas covered, and social opportunities were limited. Results indicate clear areas where education professionals can improve service delivery for families of children with ASD.

INDEX WORDS: Autism spectrum disorder, homeschool, education, evidence-based practice

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# CHAPTER 1

## INTRODUCTION

Children with autism spectrum disorder (ASD) present with unique challenges within a traditional educational environment and may require services from a variety of professionals. The most recent prevalence estimate for ASD indicates that 1 in 88 children are affected by this disorder (Centers for Disease Control and Prevention, 2012), representing an increase from previous reports. When parent-report is considered, estimates of the prevalence rate of ASD may be as high as 1 in 50 children (Blumberg et al., 2013). With increased numbers of children identified, approximately 30-40% of students with ASD in public elementary and middle school settings will receive some part of their instruction in the general education environment (Sanford, Levine, & Blackorby, 2008).

The Individuals with Disabilities Education Act (IDEA, 1997) requires parental involvement in the education of children with disabilities. Unfortunately, interactions between parents of children with ASD and education professionals are often marked by confusion, frustration, tension, and lack of cooperation that hinder the effectiveness of service delivery (Lake & Billingsley, 2000). Parents report being dismissed by professionals and repeatedly needing to request referrals and battle for services which leads to their reduced trust in the education system and increased trust in their own instincts (Stoner et al., 2005). Dominique, Cutler, and McTarnaghan (2000) emphasized that parents' trust is based on the ability of education professionals to effectively meet the needs of their children with ASD.

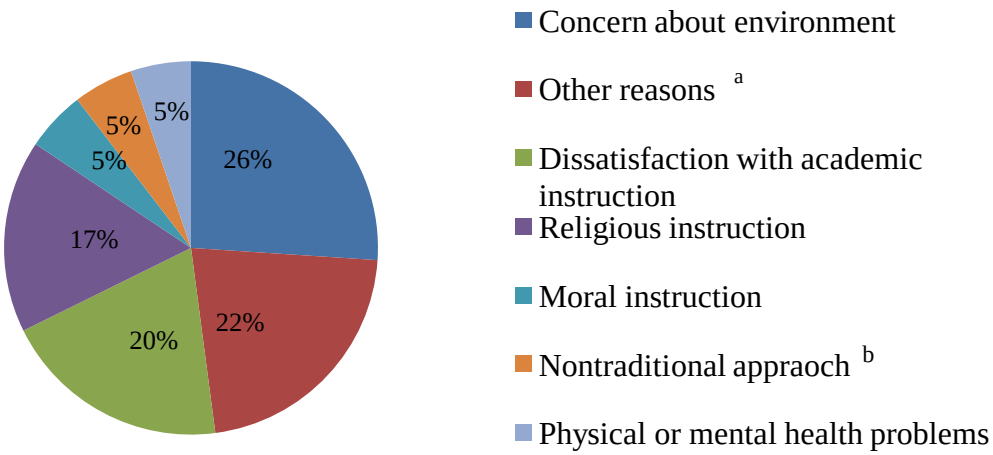
Anecdotal reports from lay literature (e.g., Dowty & Cowlishaw, 2002; Harnett, 2004;

Pyles, 2004; Schetter & Lighthall, 2009) suggest that the number of families choosing to homeschool their children with ASD has increased over the past decade. Pyles (2004) estimated that there are 3,300 to 5,000 homeschooled children on the autism spectrum in the United States; however, it is unclear how this prevalence rate was obtained. The most recent report from the National Center for Education Statistics (NCES) indicates that, in the United States, approximately 1,770,000 students are homeschooled, representing 3.4% of the school-age population (Noel, Stark, Redford, & Zuckerberg, 2013). Assuming equal prevalence of ASD in the homeschool population, taking estimates of 1 in 88 and 1 in 50 school-aged children with ASD might suggest that approximately 20,113 to 35,400 children with ASD are being educated at home.

**Reasons Parents Choose to Homeschool**

On a national survey, parents were asked to indicate their most salient reason for homeschooling their child from a list of several options: (a) to provide religious instruction; (b) to provide moral instruction; (c) concern about school environment (e.g., safety, drugs, negative peer pressure); (d) dissatisfaction with academic instruction; (e) to provide a nontraditional approach to education; (f) due to child's special needs that were not being met by the school; (g) due to child's physical or mental issue; and (h) other reasons (Noel et al., 2013). The most frequently cited reasons for homeschooling were concern about the environment (25%), dissatisfaction with academic instruction (19%), desire to provide religious instruction (16%), and a variety of other reasons (21%; e.g., family time, travel, finances, distance). Parents' reported reasons are presented in Figure 1. Of note, when the survey was last conducted in 2007, 3.6% of parents surveyed indicated that their most salient reason for homeschooling was their child's special needs (Bielick, 2008).

Figure 1. Percent of school-age children who were homeschooled, by reasons parents gave as most important for homeschooling: 2011-2012




*Note*. Information adapted from U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2012

[a] Parents gave a variety of "other reasons" for their decision to homeschool (e.g., family time, finances, travel, and distance)

[b] Reporting standards were not met for this domain

A comprehensive review of the research literature conducted by the author (i.e., ERIC, PsycINFO, Social Sciences Citation Index), however, yielded no experimental research focused on the homeschooling experiences of students with ASD. One qualitative study was identified in which nine families homeschooling children with ASD were interviewed and their experiences and perceptions were qualitatively described (Hurlbutt, 2011). Hurlbutt (2011) identified four themes of experiences: (a) parents are involved and knowledgeable about ASD, (b) parents are implementing a variety of individualized programs, (c) parents have different opinions than public school teachers about what should be addressed, and (d) parents believe that both parents should be in agreement about the homeschool decision. Hurlbutt noted that, although parents felt that schools were not best suited for their children with ASD, parents generally did not make negative comments regarding the school system. The overarching theme identified in this study

was that parents homeschooling children with ASD believe they have identified a feasible treatment plan and that the school is either unwilling and/or unable to effectively provide that treatment.

Although only anecdotal reports exist about homeschooling children with ASD, several studies have explored the reasons cited for homeschooling children with other disabilities. For example, Princiotta and Bielick (2006) reported that the main reasons cited for homeschooling children with disabilities are: dissatisfaction with academic instruction, safety concerns, and concerns about the learning environment. In a study conducted in the United Kingdom, Parsons and Lewis (2010) reported applicable school, child, and parent factors that led to homeschooling a child with special needs, including ASD. Parents indicated disappointment with formal education and the school's failure to accommodate their child's needs; child's lack of happiness at school and bullying experiences; and parents' desire to provide the best for their child.

**Educating Children with ASD in the Traditional Education System**

Though general areas of deficits for children with ASD exist, a diagnosis does not lead to specific individualized education program (IEP) objectives, teaching strategies, or classroom placements (Ruble & Dalrymple, 2002). Educating children with ASD is complicated by the lack of one catch-all intervention or clear area on which to focus intervention. Furthermore, there exists a clear gap in the translation of research to practice. No Child Left Behind (NCLB, 2001) and the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) mandate that educational interventions are research-based; however, research suggests that less than 10% of educators of children with ASD employ evidence-based practices (Hess, Morrier, Heflin, & Ivey, 2011).

Children with ASD present with a spectrum of impairment, ranging from mild to severe; the developmental disability can impact cognitive, sensory, social, communicative, and motor development (Ruble & Dalrymple, 2002). Further complications arise from high comorbidity, with approximately 76% of individuals with ASD presenting with at least one comorbid disorder and 41% with two or more (e.g., intellectual disability, anxiety disorder, attention-deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), epilepsy; Mannion, Leader, & Healy, 2013; Simonoff et al., 2008). Greater identification of children with ASD directly affects school personnel by increasing the need for professionals with specialized skills and knowledge in order to facilitate collaborative and individualized education programs. Furthermore, with the increase in students identified with ASD, the majority of these students will receive education in mainstream classrooms where teachers often lack training and experience working with children on the autism spectrum (Myles & Simpson, 2002). Research suggests that there is a lack of school professionals trained to develop collaborative and specialized programs for children with autism (Hendricks, 2011; Morrier, Hess, & Heflin, 2011). This is especially problematic as diagnostic improvements lead to children increasingly being diagnosed and at younger ages, resulting in professionals without adequate training in ASD providing educational services for this population.

Furthermore, individuals with developmental disabilities often engage in aberrant behavior of varying topographies, including aggression, self-injurious behavior, disruption, property destruction, elopement, negative vocalizations, pica, and stereotypy (*DSM*-5; American Psychiatric Association (APA), 2013; Hanley, Iwata, & McCord, 2003). Managing problem behavior within the educational environment and developing behavioral interventions add

another element of complication to educating children with ASD in the traditional education system.

As students with ASD are increasingly educated in general education settings, many students with ASD will interact with typically developing peers while at school (Campbell, Morton, Roulston, & Barger, 2011). Children with ASD frequently struggle with peer interactions with evidence suggesting that they engage in peer interactions about half as often as peers and report higher rates of loneliness than peers (Bauminger, Shulman, & Agam, 2003). Chamberlain, Kasari, and Rotheram-Fuller (2007) suggest that children with ASD experience less social acceptance, companionship, and reciprocity as compared to peers. Students with ASD are frequently selected last for teams and socially isolated while at school, for example sitting alone at lunchtime. Research suggests that approximately 30% of children with ASD experience social victimization while at school (van Roekel, Scholte, & Didden, 2010) and bullying is a reported concern for children with ASD (Heinrichs, 2003). Several studies have found that elementary and middle school students have minimal prior knowledge of ASD beyond a cursory understanding of autism as a disability (Campbell, Ferguson, Herzinger, Jackson, & Marino, 2004; Campbell & Barger, 2011; Campbell et al., 2011)

**Homeschooling Children with Other Special Needs**

Research with other special needs populations (i.e., ADHD, learning disabilities) has found that homeschooled students with special needs exceeded gains in reading, spelling, and math as compared to peers served in traditional special education (Duvall, Delquadri, & Ward, 2004; Duvall, Ward, Delquadri, & Greenwood, 1997). Furthermore, research has shown that the academic engaged time (AET) of homeschooled students with ADHD and learning disabilities

was twice that of their peers educated in traditional special education programs (e.g., Duvall et al., 2004; Duvall et al., 1997).

Research has shown that children make greater educational gains when they are actively engaged in academic tasks (Delquadri, Greenwood, Stretton, & Hall, 1983). The role of AET is also critical for homeschooled children. For example, Duvall et al. (2004) found that children with ADHD received 5.5 times as much one-to-one instruction during homeschooling when compared to traditional schooling, and that AET resulted in less competing behaviors (e.g., inappropriate talk). Research has demonstrated that increasing AET improves the academic performance of students with learning disabilities (Delquadri, Greenwood, Whorton, Carta, & Hall, 1986; Duvall, Delquadri, Elliott, & Hall, 1992; Duvall et al., 1997; Greenwood, Delquadri, & Hall, 1984), emotional disturbances (Ysseldyke, Thurlow & Christenson, & McVicar, 1988), and hearing impairments (Otis-Wilborn, 1984). Academic responding, a component of AET, also applies to increasing the academic performance of children with autism (Kamps, Leonard, Dugan, Boland, & Greenwood, 1991).

Duvall et al. (1997) found that parents homeschooling children with learning disabilities engaged in the same teaching behaviors as special education teachers in public schools. Results showed that parents and public school teachers used the same expository teaching format to present information and students participated in discussions and worked independently on assignments; however, public school teachers used more strategies (e.g., peer tutoring) to academically engage students. Duvall et al. reported that, despite parents' lack of formal training, they engaged students at higher rates than special education teachers.

Research suggests that a small percentage of homeschooling parents subscribe to the philosophy of unschooling or self-directed learning without teachers, textbooks, or formal

instruction (Martin-Chang, Gould, & Meuse, 2011; Ray, 2010; Taylor-Hough, 2010). The unschooling philosophy was first espoused by Holt (1964) as a viable educational approach to reform traditional schooling or as a method of homeschooling. The unschool philosophy is one of several suggested approaches by a number of parent self-help books on homeschooling children with ASD (e.g., Dowty & Cowlishaw, 2002; Hartnett, 2004; Pyles, 2004; Schetter & Lighthall, 2009). The unschool educational philosophy stands in direct contrast to the literature on best practices for educating children with ASD. For example, it is well documented that intensive and highly controlled learning situations are frequently effective for students with ASD and that instruction is most effective when delivered in short intervals. Generalization and maintenance of treatment effects must be actively addressed. The National Professional Development Center on ASD (NPDC) provides a list of 27 evidence-based practices for education programming and strategies for promoting accurate and effective implementation of these practices (Wong et al., 2014). The National Autism Center's National Standards Project (NSP; 2009) identifies 11 evidence-based treatment packages for individuals with ASD under which all of the NPDC standards fall. Characteristics of these evidence-based practices largely include high levels of structure and multiple practice opportunities (Wong et al., 2014).

In addition, guidelines have been established for creating a classroom environment that supports the learning needs of students with ASD. The environment should clearly establish expectations and contingencies and support the unique learning characteristics of students with ASD through structuring physical and temporal components of the learning environment, using visual/concrete systems, and creating a climate of reinforcement (Earles, Carlson & Bock, 1998; Heflin & Alberto, 2001).

In addition to the philosophy of unschooling, there are other aspects of homeschooling that may be detrimental to students with ASD. For example, arguments that have been cited against home instruction for both typical peers and students with special needs include: limited opportunities for socialization and lack of adequate teacher training (Duvall et al., 1997). Education of children with ASD alongside typically developing peers has several potential social benefits including fostering learning of appropriate social behaviors modeled by classmates, promoting social acceptance, and decreasing stigmatization of students with disabilities (Frederickson, 2010). If specific social opportunities are not programmed into homeschooling, children with ASD may exhibit further deficits in social communicative behaviors without the opportunity for peer models and practice of social interchanges.

Parents' success in improving academic performance of students with learning disabilities, as well as low-achieving students, when directly involved in interventions has been documented in the literature (Broden, Beasley, & Hall, 1978; Duvall et al., 1992; Gang & Poche, 1982; Greenwood et al., 1984; Thurston & Dasta, 1990). Academic achievement has been shown to be a function of the amount of time students are actively engaged in academic responses to the curriculum (Greenwood et al., 1984) and homeschooling provides an opportunity for increasing AET; however, parents do not appear to implement strategies used by special education teachers to increase AET (Duvall et al., 1997) or are using practices, such as unschooling, that research has shown to be less effective (Martin-Chang et al., 2011).

**Homeschool Legislation**

State laws differ regarding requirements of home study programs, ranging from high regulation to no requirements. In states with high levels of regulation, parents may be required to provide notice of intent to homeschool, meet minimum teacher qualifications, provide test scores

and/or professional evaluation of progress, have curriculum approved by the state, or be subject to home visits by state officials. On the opposite end of the continuum, other states have no requirements upon withdrawal from school. Parents are required to abide by the home education law of the state in which they are physically present when homeschooling, irrespective of their state of legal residency.

In the state of Georgia, where all participants resided, under Georgia law (O.C.G.A. § 20-2-690), parents or guardians intending to educate their children in a home study program must submit a declaration of intent to the Georgia Department of Education by September 1 or within 30 days of beginning a program. In order to provide instruction, parents are required to possess a minimum of a high school diploma or general equivalency diploma (GED). Parents are also permitted to employ an educator who possesses these minimum credentials. The homeschool program must include instruction in reading, language arts, mathematics, social studies, and science. In addition, the school year must consist of the equivalent of 180 days with a minimum of 4.5 hours of instruction per day; however, attendance records are not required. Instructors provide an annual progress report for each required content area. Students must participate in national standardized testing at least every three years from the end of third grade (O.C.G.A. § 20-2-690). In terms of special education and related services, under IDEA, students meeting the requirements for services should be considered private school students and provided with the same special education and related services **(**O.C.G.A. § 20-2-159).

**Significance of the Present Study**

Currently, no empirical studies have systematically addressed reasons parents decide to homeschool children with ASD or focused on quantifying the homeschooling experiences of children with ASD, despite an apparent interest and increase in parents choosing to homeschool

children with ASD. The present study aimed to build upon anecdotal reports to systematically describe parents' reasons for choosing to homeschool and the evidence-based programming they are providing. Perceived inadequacies in the education system that give rise to parents' decisions to homeschool their children with ASD are worthwhile to identify and potentially remediate. Given the stress placed on home educators and the documented negative effects of stress on parent mental health and family functioning (Abelson, 1999), research describing parent support needs and available resources is also important. Although there is a small body of literature examining the utility of homeschooling with children with ADHD and learning disabilities, children with ASD represent a unique population with different characteristics and educational needs. Given that teachers of students with ASD largely do not implement evidence-based strategies (Morrier et al., 2011), it is important to identify the amount of evidence-based practice being implemented in homeschool environments. Finally, social deficits are a core feature of ASD and an identified limitation with homeschooling (Duvall et al., 1997). Investigating the quality and quantity of social interaction that homeschooled students with ASD are receiving may identify areas to improve homeschooling practice. It should be noted that the author is not advocating for or against homeschooling children with ASD. The intent of this research is to describe the educational experiences of this population.

The purpose of this study is to answer the following questions regarding the educational experiences of children with ASD:

1. What reasons do parents provide for their decision to homeschool?
2. What educational experiences are homeschool parents providing?

# CHAPTER 2

# METHOD

## Participants

Parents with school-age children between 5 and 18 years of age with a current ASD diagnosis were recruited from across the state of Georgia to participate in the current study. Recruitment occurred through presentations at a large state homeschool conference and through contact with local and state homeschool groups and organizations serving children with disabilities. Diagnostic categories from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR; i.e., Autistic Disorder, Asperger's Disorder, Pervasive Developmental Disorder – Not Otherwise Specified) were employed as all participants received diagnoses under the diagnostic system utilized at the time of data collection. Due to the variety of educational experiences provided by parents, for the purposes of this study, homeschooling is defined as those families who submit a letter of intent to homeschool to the state. The non-homeschooling group is defined as those families whose children currently attend traditional school (e.g., public school, private school).

Participants include 20 parents of children with ASD, describing nine homeschooled children and nine children who attend traditional school. All homeschool participants were female and only one parent was interviewed per child. For the non-homeschool group, two sets of mother-father pairs were interviewed. The remaining seven individual parents include 6 females and 1 male. Participants' self-reported race is as follows: White, 17 (94.4%) and Asian, 1 (5.6%). Educational background (i.e., ranging from high school diploma to doctoral degree)

and parental occupation (e.g., teacher, service industry, graduate student, unemployed) suggest that parents represent an economically diverse group. Location of residence (i.e., rural, city, suburb) suggests that parents represent a geographically diverse group within the state of Georgia. In addition, various school districts are represented.

Of the homeschool parents ($n$ = 9), two parents possess certification or a degree in teaching and one parent indicated teaching experience while in graduate school (i.e., 33.33% of parents had teaching experience). Two of the nine homeschool participants (22.22%) indicated that they had formal training related to autism (i.e., Applied Behavior Analysis (ABA); Relationship Development Intervention (RDI); and training in self-regulation).

Three of the nine homeschooled children discussed (33%) were female, with a mean age of 11.89 years (range = 9-15 years). Parents identified seven of the nine children (77.78%) as having Asperger's Disorder, while the remaining two children (22.23%) were identified as having Autistic Disorder. Of note, one parent chose to not accept a professionally rendered diagnosis of an ASD, stating that the diagnosis was unnecessary given that her daughter would not return to public school and thus have a need for the services that a diagnosis provides. One participant who is included in the homeschool group changed status from traditional school to homeschool over the course of data collection. Specifically, this participant independently contacted the researchers upon deciding to homeschool and was re-interviewed to gather further information regarding her decision to homeschool and the homeschool program being implemented. Demographic information of homeschooled children is presented in Table 1. All children attended public school prior to the decision to homeschool, with five children served in general education, three in a collaborative setting, and one in a self-contained classroom.

Table 1. *Demographic Information of Homeschooled Children with ASD*

| Child No. | Gender | Race | Age | Diagnosis |
|---|---|---|---|---|
| 1 | Male | White | 12 | Autistic Disorder |
| 2 | Male | White | 13 | Asperger's Disorder |
| 3 | Male | White | 11 | Asperger's Disorder |
| 4 | Male | White | 11 | Asperger's Disorder |
| 5 | Male | Bi-racial (African American/ White) | 11 | Asperger's Disorder[a] |
| 6 | Male | White | 15 | Asperger's Disorder |
| 7 | Female | White | 14 | Autistic Disorder |
| 8 | Female | Bi-racial (Hispanic/White) | 9 | Asperger's Disorder[b] |
| 9 | Female | White | 11 | Asperger's Disorder |

*Note.* [a] Participant changed status from non-homeschool to homeschool over the course of the study

[b] Parents chose to not accept professionally rendered diagnosis

**Procedures**

This study was approved by the University of Georgia Institutional Review Board. Parents who homeschool children with ASD were recruited through state homeschooling organizations and homeschool groups; non-homeschooling parents of children with ASD were recruited through organizations serving children with disabilities throughout the state. Consent was obtained from each participant prior to the start of focus groups and individual interviews. Each participant received $10 for their participation.

Focus groups and individual interviews were conducted by the author with nine parents who homeschool children with ASD to elicit a description of educational experiences as well as homeschool experiences. Eleven parents whose children attend traditional school were interviewed to elicit a description of experiences with the traditional education system. The author aimed to conduct focus groups with all participants due to the potential benefits of parents building upon each others' experiences and sharing resources. However, due to scheduling

conflicts, last minute rescheduling, and desire to interview participants shortly after contact was first established, the majority of participants were individually interviewed.

A set of interview topics and guiding questions was developed prior to the start of data collection to address both research questions. The NPDC's list of evidence-based practices, The National Autism Center – NSP's list of evidence-based treatments, and the National Research Council (2001)'s best practice standards for educating children with ASD were considered in developing topics related to evidence-based practice. The interviewer asked open-ended questions allowing parents to describe their experiences and followed up on any topics or questions that did not emerge within the participants' narratives. Discussion topics for homeschool and non-homeschool participants are presented in Appendix A and Appendix B, respectively. Interviews ranged in duration from approximately 50 minutes to 3 hours.

**Qualitative analysis of interview data.** Interviews were audio recorded and transcribed verbatim by the author. The constant comparative method (CCM) of qualitative data analysis was employed to analyze the data. CCM allows for explicit coding and analysis of both individual and focus group interviews in order to systematically generate theory, allowing themes to develop from the research questions and participant narratives (Glaser & Strauss, 1967). CCM was selected as the author aimed to discover themes that emerged from participant narratives, rather than for provisional hypothesis testing. Glaser and Strauss (1967), the developers of the CCM, indicated that it allows for development of a theory that is "integrated, consistent, plausible, close to the data (p. 103)." Furthermore, Glaser and Strauss noted that themes are operationalized in a clear manner that allows for testing in qualitative research. CCM falls under the broad classification of grounded theory in that conclusions are grounded in the data, not speculative.

The constant comparative method consists of the following four stages (Glaser & Strauss, 1967):

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

Analysis occurred concurrently with data collection. Each participant's transcript was coded into as many categories of analysis as possible. Coding consisted of underlining relevant text and noting categories in the margins of the transcript. Categories were added as they emerged and data were fit to existing categories. As subsequent transcripts were coded, each incident of a category was compared with previous incidents of that category within that participant's transcript as well as within other transcripts. To ensure the systematic coding and analysis of data, subthemes of each category were listed as they emerged to ensure an accurate operationalization of each category. When incidents could potentially be coded in multiple categories, specific rules and exclusionary criteria were established to both facilitate further coding and to increase the likelihood that an independent analyst would approach the data in a similar manner. Categories and their respective properties, to the extent possible, were drawn from the language used by research participants, but were supplemented with language that the author employed to synthesize categories.

With CCM, modifications become fewer as specific incidents fall into the categories and subcategories delineated. Theoretical saturation occurs when all new incidents fit within existing categories and no new categories emerge. Essentially, the theory solidifies as coding is

completed. Once the data have been coded, the researcher enumerates the theory, providing a thorough description of the categories coded (Glaser & Strauss, 1967).

Departing from typical conventions of the CCM, all data were coded even within well-established categories in order to determine a measure of salience within and across participants. The number of incidents of each coded category was summed for each participant and a total sum obtained across participants for each category. Coded data were interpreted in terms of frequency of incidents of each category, both within and across participants to rank order the salience of themes.

**Inter-rater reliability**. The author met with an additional coder (i.e., a doctoral student in Educational Psychology) to review coding definitions and subject the five established themes and codes for level of structure to a round of reliability coding. See Appendix C and Appendix D for coding instructions. The second coder coded a randomly selected sample of 40% of the total interview time. Results of the reliability coding revealed acceptable agreement for overall accuracy (i.e., percent agreement = 96.99%) and accuracy within each of the five domains (i.e., percent agreement = 86.44% -100%). See Table 2 for reliability by domain. Overall agreement for level of structure was 100%.

Table 2. *Inter-rater reliability of coding, by theme.*

| **Theme** | **Percent Agreement** |
|---|---|
| 1 | 100 |
| 2 | 98.41 |
| 3 | 90.77 |
| 4 | 86.96 |
| 5 | 86.44 |
| Overall: | **96.99** |

**Descriptive analysis.** To address the research question of what educational experiences parents are providing when homeschooling, descriptive analyses were conducted to examine homeschool parents' responses to interview topics (e.g., the mean and range of amount of hours child received instruction, amount of time spent in social activities; the mode of who provides homeschooling instruction, the homeschooling model used). When a participant provided a range of time (e.g., amount of hours child received instruction), the median was determined and used in overall calculations.

# CHAPTER 3

# RESULTS

## Decision to Homeschool

The mean grade parents reported beginning to homeschool children with ASD was 4.33 (median grade = 5; mode grade = 5; range = 1-9). Of note, all parents reported beginning to homeschool prior to the start of high school (i.e., grade 9), with eight of nine parents (88.89%) beginning to homeschool prior to the start of middle school (i.e., grade 6). Parents' decisions to homeschool were characterized by two unique trajectories: (a) a long and carefully thought-out process and (b) following one particular catalyst event. A long-term decision was defined as considering homeschooling and researching homeschool options for several months to years before making the decision to begin homeschooling. Five of nine parents (55.56%) indicated that their decision was part of a long-term process, while the remaining four parents (44.44%) described a particular catalyst event. These catalyst events generally encompassed a compromise in the child's safety and social-emotional well-being and concomitant negative interactions with education professionals (e.g., discovering that the consequences for problem behavior resulted in the child's seclusion). At the time of interview, parents had been homeschooling for a mean of 2.44 years (range = 0 – 5 years). All nine participants indicated that the school could not adequately provide an education for their child. Information regarding parents' decisions to homeschool is presented in Table 3.

All participants indicated that they consulted with outside recourses, in some capacity, prior to making the decision to homeschool and/or immediately following their decision. Of the

Table 3. *Information on decision to homeschool, by child*

| Child No. | Grade Started Homeschooling | No. of Years Homeschooling | Type of Decision | Resources Consulted |
|---|---|---|---|---|
| 1 | 5 | 2 | Catalyst event | Internet (education websites) |
| 3 | 5 | 3 | Catalyst event | Internet (education websites) |
| 3 | 2 | 4 | Long decision | Internet (education websites); television (educational channels) |
| 4 | 5 | 1 | Long decision | Internet (unschool websites), books (re: autism); other parents; social-media (Facebook groups) |
| 5 | 5 | 0 | Long decision | Other parents, internet, books |
| 6 | 9 | 1 | Long decision | Other parents |
| 7 | 4 | 5 | Long decision | Other parents; autism groups |
| 8 | 1 | 3 | Catalyst event | Internet; books (re: education); other parents |
| 9 | 3 | 3 | Catalyst event | Books (re: homeschooling and unschooling); documentaries (re: autism) |

resources mentioned, seven of the nine participants (77.78%) relied on the internet (i.e., education and unschool websites); six (66.67%) consulted with other parents; five (55.56%) read books (i.e., on autism and education); two (22.22%) joined autism groups, in person and online; and two (22.22%) consulted forms of media (i.e., television and documentaries).

Five themes emerged across homeschool parents regarding reasons cited for their decision to homeschool children with ASD. Themes are ranked by their frequency of mention across parents and within individual participant narratives:

1. Dissatisfaction with educational placement.
2. Negative interactions with education professionals.
3. Social-emotional responses of children to traditional school.
4. Safety of child.
5. Stress placed on the family.

Overall coding is presented in Table 4. From the frequency of the five themes discussed by each

Table 4. *Percentage and number of times five different themes were mentioned by parents*

| **Child No.** | **Theme 1** | **Theme 2** | **Theme 3** | **Theme 4** | **Theme 5** |
|---|---|---|---|---|---|
| 1 | 44.80 (56) | 20.80 (26) | 15.20 (19) | 10.40 (13) | 8.80 (11) |
| 2 | 37.36 (34) | 23.08 (21) | 19.78 (18) | 16.48 (15) | 3.30 (3) |
| 3 | 30. 61 (15) | 22.45 (11) | 26.53 (13) | 14.29 (7) | 6.12 (3) |
| 4 | 31.17 (24) | 50.65 (39) | 6.49 (5) | 5.19 (4) | 6.49 (5) |
| 5 | 29.18 (82) | 22.42 (63) | 18.15 (51) | 19.57 (55) | 10.68 (30) |
| 6 | 46.39 (45) | 8.25 (8) | 26.80 (26) | 6.19 (6) | 12.27 (12) |
| 7 | 51.16 (66) | 27.91 (36) | 0 (0) | 6.20 (8) | 14.73 (19) |
| 8 | 44.00 (33) | 22.67 (17) | 14.67 (11) | 10.67 (8) | 8.00 (6) |
| 9 | 30.38 (48) | 25.95 (41) | 17.09 (27) | 5.06 (8) | 21.52 (34) |
| Total: | **38.34 (403)** | **24.91 (262)** | **16.08 (170)** | **10.45 (124)** | **10.21 (123)** |

*Note.* Percentage of overall themes is presented first, with the frequency reported in parentheses. Theme 1 = Dissatisfaction with educational placement; Theme 2 = Negative Interactions with education professionals; Theme 3 = Social-emotional responses of children to traditional school; Theme 4 = Safety of child; Theme 5 = Stress placed on the family

participant, the percentage corresponding with each theme was calculated. Calculating percentage controls for external variables that may have affected the interview duration (e.g., shyness, time constraints). Themes were rank ordered by the total percentage of times each theme was mentioned across all parents. The order of themes for each participant was considered to control for elevations in one domain for select participants that might skew results (e.g., had one participant mentioned dissatisfaction with educational placement 403 times and this theme was not mentioned by other participants, it would not have been appropriate for it to be ranked as first). In general, when the exact order of themes for a participant was not consistent with the overall order of themes, only one substitution in the order of themes was found (e.g., theme 2 was ranked first and theme 1 was ranked second). For each theme, the majority of participants corroborated its position in the sequence (e.g., Theme 1 was ranked as first for 8 of 9 participants).

Specifically, parents reported dissatisfaction with educational placement and negative interactions beginning in early elementary school; significant concerns regarding their children's safety and social-emotional functioning appeared to mount with increasing grade level, while family stress levels remained high throughout.

**Dissatisfaction with educational placement**. From parents' perspectives, dissatisfaction with educational placement encompassed dissatisfaction with the following subthemes: (a) classroom placement, (b) educational program, (c) resources received, (d) implementation of educational placement/program, (e) classroom support, (f) characteristics of school, and (g) characteristics of professionals. For example:

> P: He didn't meet the educational guidelines for autism. So he was actually under [Other Health Impaired] and [Emotional Behavior Disorder] and then when the speech thing came up, he was under Speech. He was serviced under three categories of the IDEA and we never got anywhere.
>
> P: I said, "Can you tell me how my son's education got altered to that point without my knowledge or permission?" because it came out that he was basically spending the majority of the day in the special ed. classroom… and his placement was mainstream not special ed.
>
> P: There was no support. There was no one-on-one. There was no anything.
>
> P: I felt like school was a waste of time for him. And I could do so much more in a small enough time than they were doing in 8 hours. It's like, if they're going to expect me to teach him anyways when he comes home from school, I'll just keep him home from school. What's the point?
>
> P: We don't particularly like what they're learning in the schools. I don't like that it's being taught to the test. I don't think that they're developing any kind of critical thinking skills. I think when they are critical, they're punished for it.

Overall, this sense of dissatisfaction with educational placement was reported by parents as pervasive throughout their child's education in the traditional educational system and encompassing a range of different aspects of the educational environment. Dissatisfaction extended beyond the specific educational program and its subsequent implementation to include

discontent with characteristics of the physical environment and the professionals themselves. Of note, dissatisfaction with characteristics of the school environment frequently centered around specific transition periods (i.e., to middle school and high school) and the increased demands that such a transition would present (e.g., changing classes, use of a locker). For more specific examples of subthemes see Appendix C.

**Negative interactions with education professionals**. Participants also described a variety of negative interactions with different education professionals (e.g., teachers, paraprofessionals, administrators, school staff). Subthemes of negative interactions with education professionals included: (a) negative educational meetings, (b) battling for services, (c) verbal arguments, and (d) lack of cooperation. For example:

> P: We had this IEP meeting with all these people in it and… they wouldn't listen to me. There was [*sic*] like 30 people sitting there… we banged heads with them for hours over every IEP and never got anywhere.
>
> P: They don't want you to know what your options are… they want you to listen to them and they want you to do what they tell you to do and that's it.
>
> P: They tried to get out of stuff as much as they could.
>
> P: At a certain point, you just get tired of arguing with the school.
>
> P: I felt like they had met up beforehand and were like, "This is what we're going to tell her so we don't have another one on our list."
>
> P: My experience is that rules will be changed to suit the people and the administration.
>
> P: She just blatantly said in an IEP meeting that, you know, she really didn't feel comfortable having her in her class.

The negative experiences described by parents were present from early in their child's education and largely centered around a perceived disconnect between parents and professionals. This reported lack of collaboration and consideration of parents' perspectives was most often noted during educational meetings at which the child's educational program was determined.

Furthermore, parents described these meetings as overwhelming and adversarial in the number of professionals present, the educational jargon used, and the predetermined decisions. Further examples of subthemes are presented in Appendix C.

**Social-emotional responses of children to traditional school**. Parents reported concerns regarding the social-emotional responses of their children to traditional school, falling under the following subthemes: (a) anxiety, (b) depression, (c) need for psychotropic medication, (d) emotional outbursts, (e) diminished self-confidence, and (f) compromised health. For example:

> P: At school, what I found out is that the older he gets, the more anxious he gets. He needs more medicine. He's getting more anxious, the less he's able to do.
>
> P: He used to be a happy kid, but two years in public school like almost destroyed him, I mean really. And um I've worried about kids like him… you worry about suicidal tendencies.
>
> P: By the end of his 8th grade year he was unhappy as a person. I mean, completely a shift from my very happy easy-go-lucky go with the flow child.
>
> P: They just wanted her to be quiet and they wanted us to give her medicine and to make her sit there like a zombie.
>
> P: So here you've got a kid who has an IQ of 138 who when he puts everything he has into being in that room, he can be in that room. We may see the effects for the next 3 days. He may not sleep or he may not wake up for 3 days but he can do it because he's got it within him to do it.
>
> P: When he's been at school for 8 hours and and [*sic*] overloaded sensory-wise, he comes home and he just has a meltdown

Parents reported increasing concerns regarding social-emotional functioning coinciding with their child's continuation in the traditional education system. Parents attributed these concerns specifically to the educational environment and described changes in their child's social-emotional functioning over time, corresponding with increased educational demands and negative peer interactions. A further description of subthemes can be found in Appendix C.

**Safety of child**. Parents' concerns extended to the safety of their child at school or directly related to school. Subthemes regarding safety concerns included: (a) school staff's ability to manage student's behavior, (b) supervision of child, (c) peer victimization, and (d) inappropriate consequences for problem behavior. For example:

> P: I want him in school… If I knew that I could take him into school and not take him out in a bodybag, he would be in there.
>
> P: They put him in a lock-up room… a little bitty closet with nothing in it. They put him in there and locked the door.
>
> P: He tried to stab pencils in his legs because he was so frustrated 'cause he couldn't draw something perfect. He couldn't use his words to explain to us.
>
> P: I was worried because of her being a runner that something bad was going to happen.
>
> P: The kids weren't being supervised on the playground, so they were crossing a fairly busy street to get to school. The kids were very callous to each other… she was picked on a little bit.
>
> P: There wasn't a lot of safety. The kids beat up on each other and I found out later that it had become a sort of dumping ground for the kids who weren't making it in the system.
>
> P: There was a lot of manipulation…Then he got in trouble. And all he did was what he was told. He didn't understand what he did wrong.

Parents reported concerns with their child's safety as mounting with increased time in the education system. The safety concerns described were often precipitated by specific events that compromised the child's safety (e.g., elopement from school property, physical fights with peers, seclusion as a consequence of problem behavior) and the perceived inability or unwillingness of staff to remediate such concerns. For more examples of subthemes see Appendix C.

**Stress placed on the family**. The final theme of stress placed on the family captured stress not directly related to one of the first four themes. Stress on the family included the following subthemes: (a) frequency of school visits, (b) frequency of communication with school, (c) completing schoolwork with child, (d) need to contact district level professionals,

(e) considering of legal avenues, (f) sense of frustration, (g) need for persistence, and (h) disruption in routine.

For example:

> P: I am scared to death actually about him being in school.
>
> P: They called me a lot…probably about 3 times a week…to come and get her or sometimes to ask questions.
>
> P: I just got to where I was... every day I would drop him off and kind of dread the phone ringing.
>
> P: I'm doing the homework with my son… I'm spending so much time at the school… It's a whole other fulltime job… between the IEP, then seeing that the IEP is being instituted, the meds.
>
> P: Sixth grade wore me out. Time to get him settled at [school] and dealing with the teachers and I would check his grades like every day and, you know, what is this that's missing, what is this that's missing, and it just wore me out.
>
> P: It was unbelievable stress. It was every night trying to fight. I mean, to get her to do this work. This homework. I mean, kindergarten they had homework. Umm she'd be in tears. By the end of the night, I'd be in tears and frustrated. Frustrated with her and frustrated with the school.

Parents reported high levels of stress throughout their child's education in the traditional education system. Overall, parents described the sheer amount of time spent surrounding their child's education, whether through being at the school or communicating with the school, working directly with their child, or due to the time spent advocating for their child's education, as a greater response effort than taking their child out of school to homeschool. Additional examples of subthemes are presented in Appendix C.

**Educational Experiences Provided by Parents**

The philosophy of unschooling was reported as an educational approach by five of nine parents (55.56%) homeschooling children with ASD. Parents reported varying degrees of unschooling, ranging from their entire education program to an approach employed several days

per week. For example, a parent described the unschool approach for her family:

> P: We did absolutely nothing. We did… we went and we played. Or we watched cartoons or we went to see a movie or we went to Goodwill or we colored or just whatever she wanted to do we did. We didn't have any curriculum… we didn't read, unless it was something she wanted to do. We went to the aquarium.

The majority of the learning environments described by parents homeschooling children with ASD were characterized as having only low to moderate structure (i.e., six of nine; 66.67%). Structure was defined as: (a) a predictable schedule, (b) clearly presented expectations, (c) direct provision of instruction, (d) an instructional workspace, (e) multiple opportunities to respond, and (f) performance feedback. Level of structure was categorized by the number of applicable indictors of structure reported by parents, as follows: Low = 0-2; Moderate = 3-4; and High = 5-6.

Homeschooling parents reported that their child with ASD received instruction from 0.8 to 8.4 hours per day (mean = 4 hours; 4-42 hours per week). Of these parents, five of nine (55.56%) did not meet the minimum legal requirement of 4.5 hours of instruction per day and six of nine children (66.67%) did not receive instruction in all required content areas. The majority of families (i.e., eight of nine; 88.89%) relied on an outside individual with teaching credentials to provide some part of the homeschool programming. Information regarding homeschool programming is presented in Table 5.

Parents provided a range of different social activities for their children (e.g., scouts, youth group, play groups, sports, art classes). Children participated in social activities for a mean of 2.56 hours per week (range = 0-7 hours). Four of the nine children (44.44%) received what parents described as ancillary services (i.e., talk therapy, occupational therapy, physical therapy, speech therapy, and massage therapy). See Table 6 for information on social activities and ancillary services.

Table 5. *Homeschool programming*

| Child No. | Homeschool Method | Level of Structure | No. of Hr. Instruction/ Week | No. of Hr. Instruction/ Day | Subjects | Curriculum Used | Who Provides Homeschool Instruction |
|---|---|---|---|---|---|---|---|
| 1 | In-home instruction | Low | 42 | 8.4 | Life skills | None | Mother |
| 3 | Unschool/ Online Academy | Moderate | 12 | 2.4 | Math, science | Math U-See; online classes | Teacher/Mother |
| 3 | Unschool/ Online Academy | Moderate | 12 | 2.4 | Math, history | Math U-See; online classes | Teacher/Mother |
| 4 | Unschool | Low | 22.5 | 4.5 | Math | Math U-See | Teacher/Mother/ Babysitter |
| 5 | Specialized school | High | 22.5 | 4.5 | Math, reading, LA, science, history | Calvert | Special education teacher |
| 6 | Specialized school | High | 19 | 3.8 | Math, reading, LA, science, history | Calvert | Special education teacher |
| 7 | In-home ABA | High | 40 | 8 | Math, reading, LA, science, history | Lindamood Bell | Special education teacher/Child's older brother |
| 8 | Unschool | Low | 6 | 1.2 | History, math | None | Teacher/Mother |
| 9 | Unschool | Low | 4 | 0.8 | Math | Math U-See | Teacher |

*Note.* LA = Language arts

Math-U-See is a K-12 mastery-based math curriculum for homeschool and small groups. Calvert is an accredited K-9 homeschool curriculum with daily lesson plans combining textbook and online learning. Lindamood-Bell is a learning program for children and adults that focuses on assessing and improving the underlying skills of reading.

Table 6. *Social activities and ancillary services, by child*

| Child No. | Social Activities | No. of Hr. Social Activities/Week | Ancillary Services |
|---|---|---|---|
| 1 | Youth group, play group, summer camps | 2 | None |
| 3 | None | 0 | Talk therapy |
| 3 | Gymnastics, horseback riding, cake decorating class | 3 | OT, PT, Speech therapy[a] |
| 4 | None | 0 | None |
| 5 | Play group, summer camps | 3 | OT, Talk/play therapy |
| 6 | Youth group | 3 | None |
| 7 | Pioneer class, art class, horseback riding, play group, piano lessons | 7 | Speech therapy, massage therapy |
| 8 | Girl Scouts, park day, field trips, religious education | 4 | None |
| 9 | Trapeze | 1 | None |
| | Mean: | **2.56** | |

*Note.* OT = Occupational therapy; PT = Physical therapy

[a]Ancillary services were paid for by the school district.

**Reported Benefits and Challenges**

Parents reported a variety of benefits that homeschooling provided to their child and family. Cited benefits related to each of the five identified themes for parents' decision to homeschool. For example:

> P: We enrolled him in two of these high school classes and suddenly he's getting the intellectual stimulation which he loves, but he's not required to socially fit in with a group of kids.
>
> P: It's completely individualized and he has total attention. If he was [*sic*] in a classroom with 40 other kids, 30 other kids, 20 other kids, he wouldn't get what he's getting.
>
> P: I would say his social emotional growth that first year was huge.
>
> P: She opened up. She was calm, she wasn't um constantly uh in a state of anxiety. She was just happy. She was happy, like she was in the summertime.
>
> P: They don't go to school every day and have to deal with the racial slurs and have to deal with people making fun of them because they're different or strange.
>
> P: It's like he's the same, but he's like a different kid. He's not so stressed out because he's not so confused.

> P: I would say that was the biggest change when we pulled her out… like it changed the dynamic of our family. It changed [sibling]'s life. It changed our lives. We didn't… it wasn't a battle every night. It wasn't stress every night.

Parents also reported a variety of challenges to homeschooling. They indicated areas where support was needed and ways that they might benefit from parent training. Challenges and resources needed are presented in Table 7. For example:

> P: I'm not a teacher. I don't know what the heck I'm doing.
>
> P: I'm mommy and I'm 24-7.
>
> P: I don't know how to do those standard testings… I don't know how to know if I'm even coming anywhere near the mark.
>
> P: The world 'aint bubble wrapped. And home is the safe zone. So home is bubble wrapped. And the world's not.
>
> P: The stress level for me has increased because I work Saturday and Sunday 12 hour shifts and then I do this during the week… I have no time for myself. I have no life.
>
> P: You know, because I have to make it work because I'm the teacher now. You know, even though he still goes to a school there's hours that I have to make up the difference for what's required by law and um so it's kind of daunting.
>
> P: Really my drawback to homeschool is not really having social skills, you know, having social problems anyway… he's not getting the normal kid social. That's probably the area he's lacking the most is having like normal social setting kind of stuff because he doesn't really get that anywhere.

One particular salient concern expressed by parents, particularly those providing instruction within the home, was amount of on-task time and independent work completion. Parents, especially those employed from home, indicated that they are unable to engage in their own tasks due to the need for prompting their child to remain on-task. The following were noted as areas where parents needed assistance: (a) information regarding applicable laws, benchmarks, and standardized testing; (b) additional services (e.g., autism services, behavioral therapy, social skills training); (c) parent support (e.g., parent groups, parent mentors);

Table 7. *Challenges of homeschooling and resources needed*

| Child No. | Homeschool Groups | Benefit from Parent Training | Challenges to Homeschooling | Resources Needed | Plans to put back in school |
|---|---|---|---|---|---|
| 1 | No | Yes | Lack of teaching experience; knowing benchmarks; limited social opportunities; parent responsibilities; finances | Autism services; knowledge of benchmarks; knowledge about standardized testing | Maybe |
| 2 | Yes | Yes | Online teachers not understanding child's disability | None specified | No |
| 3 | Yes | Yes | Lack of teaching experience; increased stress, time constraints | Behavioral therapy | No |
| 4 | No | Yes | Finances; ensuring compliance; time constraints | Explanation of laws; coaching how to keep on grade level; secular homeschool group; group for parents homeschooling children with disabilities | Yes |
| 5 | No | Yes | Finances; increased worry | Social skills training | No |
| 6 | No | Yes | Social opportunities; finances | Social skills training | No |
| 7 | No | No | Staffing education program; exhaustion/burnout; boundary between mother and teacher; not enough academic instruction; increased stress | Social skills opportunities | Maybe |
| 8 | Yes | No | Time constraints | Public schools to allow homeschool children to attend for specials/offer therapy, "community bridge" between homeschool parents-teachers, "parent mentors" for homeschoolers | No |
| 9 | Yes | No | Finances; giving up career | Parent group of parents homeschooling high functioning children with ASD; professionals with whom to consult | No |

homeschooling groups (e.g., secular group); (e) professionals with whom to consult; and (f) a collaborative partnership between parents and traditional school professionals.

For example:

> P: I would have loved a parent training program because I had no idea what I was doing.
>
> P: What the laws and rules are for home schooling. I mean I did research this and know like how many hours per week he had to be in school and what we had to do.
>
> P: Classes that would help you know how to keep him on grade level.
>
> P: Maybe having parents who are in the… who have gone through the process more… who can share with the new parents… to give us kind of a roadmap. Or just, you know, sticking together and talking about things a lot times. And I think if the school is leading that, they're going to lead the parents into, "This is what you need to do."

Considering the longitudinal possibility of homeschooling, six of nine parents (66.67%) indicated that they are not currently considering having their child return to the traditional education system; two (22.22%) said that they may consider returning to traditional school; and one parent has plans for their child to return to school.

# CHAPTER 4

# DISCUSSION

The author analyzed interviews with parents homeschooling children with ASD in order to characterize the reasons parents provide for their decision to homeschool and the educational experiences parents are providing through homeschool programming. The overarching goal of this study was to initiate systematic inquiry into homeschooling children with ASD to guide implementation of evidence-based practice, both within the traditional education system and within homeschools. A brief summary of findings is presented, then potential implications for practice within the traditional education system and interventions for improving homeschool programming are discussed. Limitations and areas of future investigation within this domain are outlined.

## Summary of Findings

Overall, five distinct themes emerged from participant narratives regarding reasons parents provide for their decision to homeschool children with ASD. Themes, ranked by their frequency of mention across parents and within individual participant narratives, include: (a) dissatisfaction with educational placement, (b) negative interactions with education professionals, (c) social-emotional responses of children to traditional school, (d) safety of child, and (e) stress placed on family.

Parents began homeschooling at a mean grade of 4.33 and many expressed concerns regarding their child's transition to middle and high school. Parents' decision was characterized

as either following a long-term process or after one catalyst event. All parents consulted with a variety of resources in decision-making and planning.

Results showed that parents are largely not implementing evidence-based practices or are utilizing methods (e.g., unschooling) that do not adhere to best practice standards for educating children with ASD. Most homeschool programs described had only low to moderate levels of structure (six of nine). The majority of homeschool programming described by parents did not meet the minimum educational requirements of amount of instruction per day and content areas covered (i.e., five of nine and six of nine, respectively). Nearly all participants received some part of their instruction from an outside individual with teaching credentials. Social activities were only provided for an average of 2.56 hours per week. Several children received ancillary services, with only one child's services funded by the school district. Parents reported numerous benefits of homeschooling directly related to each of the five themes for their decision to homeschool. Parents also expressed challenges in their current programming and the majority (six of nine) indicated that they would benefit from a parent training program.

**Implications for Practice within Traditional Schools**

Results indicate clear areas where education professionals can improve service delivery for families of children with ASD. As parents express dissatisfaction with educational placement and negative school interactions beginning in early elementary school, efforts should be directed to ameliorating these concerns from the outset. Consultation and collaboration with parents of children with ASD, coinciding with initial educational concerns, has the potential to foster positive relationships and educational placement more closely aligned with parents' expectations. Ruble and Dalrymple (2002) conceptualized consultation as the bridge between parents and education professionals needed to develop effective programming.

The most widely reported reason parents provide for homeschooling children with ASD is dissatisfaction with educational placement. Specifically, due to the constellation of presenting symptoms, children are often serviced under multiple categories of IDEA (e.g., Speech or Language Impairment, Emotional Disturbance) rather than under the Autism category. Legislation also dictates that students are serviced in the least restrictive environment, resulting in many students with ASD receiving services predominately within general education settings. Gutkin (1996) reported that collaborative coordination of student support services facilitates the service of students with learning and behavior problems in the least restrictive environment and may serve to address some of parents' salient concerns.

According to Gresham and Lopez (1996), social validity encompasses socially significant goals, acceptability of the procedures to meet those goals, and the social importance of the effects. Not only is it important that parents determine socially significant objectives for their children, but teachers are more likely to implement objectives when they consider them to be socially valid. Particularly in general education classrooms, teachers may not be versed in evidence-based practice for children with ASD. Thus, collaborative consultation with both parents and teachers is needed to ensure socially significant objectives that are likely to be implemented by teachers.

Another relevant teaching practice specific to ASD is the need for consistency in teaching strategies (Koegel, Koegel, & Carter, 1999). Children with ASD often struggle with cognitive flexibility and require a highly structured environment (Schreibman, 2000). Children with ASD frequently work with multiple teachers, therapists, and professionals across the school day; therefore, it is likely that different approaches are concurrently implemented. Coordinating

services across a child's education team would allow those involved in the student's educational programming to agree upon an approach to implement across settings.

Education professionals trained in evidence-based intervention are needed to assist teachers in applying best practices. Despite the increasing number of children identified with ASD, there is a national shortage of professionals trained in evidence-based intervention (Croen, Grether, Hoogstrate, & Selvin, 2002) which speaks to the need to incorporate academic and behavioral intervention coursework into educational training programs and for trained professionals to work more closely with teachers. Much of classroom teacher training on working with students with ASD is currently provided through brief conferences and workshops. Teachers require individualized direct support models to be successful at implementing research-based interventions in their classrooms (Odom, 2009).

Thus, practice implications to address parents' reported dissatisfaction with their child's educational placement include: (a) considering the heterogeneity within ASD and whether services under the Autism category best fit the child's needs; (b) communicating the rationale for classroom placement and program with parents; (c) involving parents in planning of educational programs; (d) ensuring that educational programs are implemented with fidelity and consistently across professionals; (e) considering greater classroom support, especially surrounding increased expectations; (f) providing teachers with direct support to implement evidence-based programs for children with ASD; (g) providing parents with concrete strategies to supplement classroom instruction at home; and (h) updating parents on plan implementation and progress monitoring.

Furthermore, revisiting the IDEA requirement of parental involvement in the education of children with disabilities, education professionals should strive to foster a collaborative exchange and to build positive relationships with parents where they feel their perspectives are considered.

To address parents' second concern of negative interactions with education professionals, implications for practice include: (a) avoiding educational jargon and confusing terminology, (b) checking with parents to insure clarity of communication, (c) listening to parents' perspectives and suggestions, (d) maintaining a calm professional demeanor when interacting with parents, (e) making parents aware of educational options, and (f) recommending available ASD advocates and community resources.

Parents reported direct concerns with their child's social-emotional functioning related to school. Greater identification of children with ASD and service increasingly provided within general education settings result in education professionals working with children with ASD with comorbid symptoms, including anxiety, depression, attention difficulties, and problem behavior. Not all teachers, general and special education alike, will be experts on the heterogeneity of ASD or the manifestation of comorbid symptoms. As such, trained professionals with specialized skills and knowledge have an important role to meet this growing need.

To address parents' concerns with the social-emotional functioning of their child, implications for practice include: (a) trained professionals working with educators to recognize symptoms of social-emotional difficulties and to develop intervention plans, (b) increased professional development opportunities regarding the social-emotional functioning of children with ASD, (c) considering modifications to the environment to reduce stress placed on students, and (d) considering behavioral interventions as an alternative to psychotropic medications.

Parents' safety concerns largely relate to negative peer interactions (e.g., bullying, fighting, manipulation). Research suggests strategies that may be implemented to improve peer relationships with children with ASD. The effectiveness of using peers within general education environments to facilitate acceptance through strategies such as peer modeling, peer buddies, and

peer tutoring has been documented (Chan et al., 2009). Also, direct peer education is a research supported strategy for improving the acceptance of students with ASD (Rao, Holtz, Ziegert, Brown, & Fenichel, 2003). Campbell et al. (2004) indicated the benefit of explaining causes of autism to elementary school students.

A further safety concern is related to management of children's problem behavior. Children with ASD are more likely to engage in problem behavior that may cause harm to themselves or others. IDEA (1997) requires that education professionals conduct a functional behavioral assessment when a student's problem behavior impedes learning of oneself or others and/or presents a danger to oneself or others. The educational team must then consider behavioral intervention strategies to address problem behavior based on the hypothesized function of behavior. As such, professionals with an understanding of functional behavioral assessment and behavioral intervention for problem behavior should work with educators to facilitate the implementation of appropriate assessment and intervention strategies.

To address parents' concerns with safety of their child, implications for practice include: (a) working with parents to create a behavior plan to appropriately manage problem behavior, (b) ensuring adequate supervision of students on school property and in transit to school, (c) educating peers on ASD and implementing anti-bullying programming, (d) ensuring appropriate consequences for bullying/harassment, and (e) considering manifestation of a child's disability when determining consequences for problem behavior.

Parenting a child with a disability is accompanied by added stresses within the home environment. Additional requirements will be necessary related to a child's education, such as educational meetings and additional homework support. When coding parents' concerns with their child's education, stress was only coded when it did not directly relate to one of the other

areas (i.e., educational placement, interactions with education professionals, social-emotional functioning of child, and safety of child). As such, stress is likely to be more salient of a concern than is reflected by its rank of fifth in the themes. If issues in these aforementioned areas are remediated, stress will likely simultaneously decrease. Implications for practice to directly address stress on the family include establishing contact procedures with parents from the outset to decrease the frequency of communication while their child is at school and offering support options for families and siblings to manage stress.

**Implications for Homeschool Programming**

Professionals have the ability to impact homeschooling practice from two different perspectives: consulting with parents as they make the decision to homeschool and assisting parents already homeschooling to implement evidence-based practices.

Training parents to deliver educational interventions has the potential for improved academic and behavioral outcomes. Research suggests that children often receive services or interventions are implemented in the home that do not have an established empirical basis (e.g., animal therapy, dance therapy, massage therapy; Green et al., 2006), which was reflected in this study. Not only is collaboration with the family important to ensure that parents are informed of evidence-based practice, but to identify feasible intervention options and increase their sense of confidence in education provision (Ruble & Dalrymple, 2002).

Results indicate that the majority of parents are implementing educational strategies that lack an empirical basis or directly contradict best practices for educating children with ASD. The number of parents subscribing to the philosophy of unschooling is concerning given its lack of structure and inherent lack of instructional opportunities. Furthermore, one parent equated homeschooling with naturalistic teaching, citing evidence of its effectiveness. Although research

supports the efficacy of naturalistic teaching (Wong et al., 2014), this empirically supported strategy fundamentally differs from the unschooling approach. Professionals should keep this distinction in mind should this misconception arise from other homeschooling parents.

Cited concerns for homeschooled students with special needs (i.e., limited opportunities for socialization and lack of adequate teacher training; Duvall et al., 1997) are relevant for the ASD population sampled here. Based upon the present study, homeschooled children with ASD appear to have limited opportunities for social interaction within their current programming and several parents reported increasing social opportunities and developing social skills as current needs. Of note, a third of parents reported that social opportunities were with other children with disabilities, thereby limiting the child's opportunity for appropriate peer models. Professionals may work with parents to identify available social opportunities in the community and may consider offering social opportunities through the traditional school system.

Interestingly, although most parents did not have teacher training, only one of the nine parents delivered all home instruction to their child. The decision to seek out teachers to provide programming, whether at a specialized school, physical unschool, or through online classes may be explained by parents' lack of educational background or the difficulty of addressing the unique educational needs of a child with ASD. The most frequently reported reasons parents of children with ASD do not consider homeschooling include a lack of adequate teacher training and need for parent's income. Furthermore, the one parent who indicated plans for her child to return to school noted financial concerns as the impetus for the decision. Consultation with parents, including training in intervention strategies and information regarding evidence-based strategies has the potential to provide parents with the tools and guidance to deliver more

effective instruction within the home, thereby decreasing the financial burden of employing outside educators.

In terms of ancillary services, only one of the nine children described received services funded through the school district. Education professionals should make parents aware of how services may continue to be acquired through the school system when they make the decision to homeschool.

The majority of participants included in this study were diagnosed with Asperger's Disorder. Although results are based on a small sample size, this finding might suggest that parents are more likely to homeschool a higher functioning child with ASD, due to the ability to manage educational needs outside of the school environment.

**Limitations and Directions for Future Research**

Due to the heterogeneity of the population of homeschooled children with ASD and the fact that not all homeschooling families register with local governments or school boards, a random sample is unlikely to be obtained. Conclusions are also based on a small sample size and are limited to the state of Georgia, thereby affecting generalization. Quantification of reasons parents choose to homeschool is currently being conducted through survey methodology disseminated nationally. Survey measures were developed from themes identified in this study and information provided by parents regarding their educational experiences. A nationally representative sample will also allow for more definitive characterization of homeschooled children with ASD (e.g., level of functioning).

In addition, this study only presents the results of interviews with parents currently homeschooling; other parents of children with ASD may have similar negative experiences, but choose not to homeschool due to other variables. Future studies should compare the educational

experiences of families homeschooling and families whose children with ASD attend traditional school to determine if a statistically significant difference in experiences exists and/or to identify variables that prevent families from homeschooling.

Furthermore, inclusion in this study relied on parents' self-report of their child's diagnostic information; no assessment was conducted to confirm the veracity of each child presenting with ASD. Perhaps the most significant limitation is that information regarding educational experiences provided by parents is subject to their perceptions rather than systematic observation. There may be a negative bias as parents have chosen to homeschool and may have skewed perceptions of the traditional education system. Similarly, descriptions of current educational practices are also reliant on parent report. Parents who are aware of homeschool legislation (e.g., number of hours of instruction required, subjects that must be covered) or evidence-based practice may falsely report engaging in these practices or omit details about their current programming that may be viewed negatively. Future research should directly observe homeschool environments to determine amount of evidence-based practice being implemented. Finally, this study focuses on current homeschool practices and does not address outcomes for this group. Future studies should longitudinally follow families and determine academic outcomes and quantify the percent of students who return to the traditional education system.

Given the needs reported by parents and areas where parents would benefit from parent training, best practices of educating individuals with ASD should be used to develop a training program to meet the needs of parents who homeschool children with ASD. A pilot evaluation should be conducted to determine if parent training results in an increase in evidence-based practice implemented in homeschools.

## Conclusion

Results of this study may be useful to education professionals as the results provide insight into areas that could potentially be remediated to increase parents' trust in the education system and topics to address in consulting with parents making the decision to homeschool children with ASD. This research represents a step within a larger research agenda that seeks to assist parents with educating their children with ASD and ensure implementation of evidence-based practice.

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APPENDIX A

## Discussion Topics for Homeschooling Parents

### Part 1

*Demographic Variables*

- Age child was diagnosed with ASD/ who presented initial concern
- Type of placement child was in prior to homeschool
- Services child received while in traditional school
- Length of time child was enrolled in traditional school before started homeschooling
- Behavior problems while in school
- Parents' formal training in education/training on working with children with autism

*Satisfaction with Educational Programming*

- Interactions with education professionals
- Description of child's teachers
- Experience at initial IEP meeting (e.g., any confusion during IEP/special education transition)
- What the school system did well in educating child
- Extent felt the need to fight for services within the school
- Administrators' and teachers' understanding of child and his/her educational needs
- Confidence that the school could provide an adequate education for child
- Confidence in ability to provide an adequate education for child at home
- Added stress on family as a result of child in traditional school

*Ancillary Services*

- Types of outside services child receives
- Number of hours per week child receives additional services
- Services child continues to receive through the public school
- Services child received while in traditional school that wish he/she were receiving now

*Extracurricular and Social Activities*

- Types of social activities (e.g., organized sports, music lessons, play dates) in which child participates
- Number of hours per week child spends in social activities
- Frequency with which child spontaneously interacts with peers
- Frequency with which child is around only adults

*Bullying Experiences*

- Interactions between child and his/her peers while at traditional school (e.g., bullying experienced)
- Change in interactions with peers since homeschooling began
- Worry about child's safety while he/she was at school
- Child's fear of attending school
- Consequences of problem behavior (e.g., if child ever reprimanded or punished because of a mistaken intent of his/her behavior)

*Homeschooling Experiences*

- What factors contributed to decision to homeschool
- Who provides homeschooling instruction to child
- Perceived preparation to teach child/what did to prepare
- Number of hours per week estimate that child is receiving instruction
- Adherence to particular homeschooling model (e.g., school-at-home, unit studies, eclectic approach, unschooling, other model)
- Focus in educating child (e.g., functional skills, communication, academics, others)
- Instruction that occurs in the community (when and where)
- Extent of child-directed instruction
- Teaching materials/resources
- Participation in homeschooling groups
- Change in academic engagement since homeschooling began
- Reduction of problem behaviors while teaching at home
- Change in overall family functioning
- Perceived benefits of homeschooling for child and family
- Challenges of homeschooling child with ASD
- Perception of child's opinion on homeschooling

***Break***

**Part 2**

- Resources found helpful in making the decision to homeschool
- Information/resources that would have been helpful to have had when making the decision
- What would help to be more effective at homeschooling child with ASD
- Perceived benefit from a parent-training program
- What would like to see incorporated into a parent-training program
- Any other comments about homeschooling experience

APPENDIX B

## Discussion Topics for Non-Homeschooling Parents

### Part 1

*Demographic Variables*

- Age child was diagnosed with ASD/ who presented initial concern
- Type of placement child is currently in
- Services child receives through the school
- Behavior problems while at school
- Parents' formal training in education/training on working with children with autism

*Satisfaction with Current Educational Programming*

- Interactions with education professionals
- Description of child's teachers
- Experience at initial IEP meeting (e.g., any confusion during IEP/special education transition)
- What the school system does well in educating child
- Extent feel the need to fight for services within the school
- Administrators' and teachers' understanding of child and his/her educational needs
- Confidence that the school can provide an adequate education for child
- Confidence in ability to provide an adequate education for child at home
- Added stress on family as a result of child in traditional school

*Ancillary Services*

- Types of outside services child receives
- Number of hours per week child receives additional services
- Additional services from which child could benefit

*Extracurricular and Social Activities*

- Types of social activities (e.g., organized sports, music lessons, play dates) in which child participates
- Number of hours per week child spends in social activities
- Frequency with which child spontaneously interacts with peers
- Frequency with which child is around only adults

*Bullying Experiences*

- Interactions between child and his/her peers while at school (e.g., bullying experienced)
- Worry about child's safety while he/she is at school
- Child's fear of attending school

- Consequences of problem behavior (e.g., if child ever reprimanded or punished because of a mistaken intent of his/her behavior)

*Educational Experiences*

- Number of hours per week estimate that child is receiving instruction
- Frequency of communication with child's teacher(s)/school psychologist/other school personnel
- Teaching of any content or skills at home
- Perception of whether child is grasping the material taught in school
- Help with homework process
- Perceived need to reteach material that child learned in school in order to complete homework
- Perception of child's opinion on school

***Break***

**Part 2**

- Consideration of homeschooling/ factors that deterred from pursuing that option
- Know other parents homeschooling children with ASD/ how they describe their experience
- What feel would improve child's education
- Changes would like to see in the education system
- Any other comments about educational experience

APPENDIX C

**Coding Instructions for "Why do parents choose to homeschool?"**

I. Read entirety of coding sheet and familiarize self with coding categories.

II. Review verbatim response.

II. Code response for content. Responses may be coded for various aspects of content.

Code as a separate instance each time a point is repeated following a change in topic, even if it occurs in the same participant statement or monologue. If the interviewer asks a question directly related to one of the following codes and the participant responds affirmatively, code this as one response. Examples should be coded as one separate point. Narrated dialogues fitting one of the following codes should be counted as one instance.

Content is coded for the presence of the following:

1. **Dissatisfaction with educational placement**
2. **Negative interactions with education professionals**
3. **Safety of child**
4. **Social-emotional functioning of child**
5. **Stress placed on family**

III. Underline the portion of text used in making coding decision.

IV. Write the number of the designated code (i.e., 1-5) in the margin of the transcript directly next to the corresponding statement.

V. Proceed through entirety of transcript.

*The following should be considered in coding:*

- Experiences must be directly related to school (e.g., safety of child *at school*)
- Experiences must be directly related to grades K-12.
- Instances that occur outside of the school building may be coded if they are directly related to school (e.g., insomnia due to anxiety *about school*).
- For focus groups, assign a symbol (e.g., circle, square) to each participate and denote each assigned code according to the corresponding participant (e.g., all codes for participant 1 are circled, all codes for participant 2 are inside of a square).
- Multiple codes may be assigned for a single sentence or response.

    - e.g., “The class sizes were so big and he had to change classes” would be coded as two instances of (1) Dissatisfaction with educational placement.
- Multiple mentions of the same point without a change in topic should be considered as one instance of that code.
    - e.g., “The class sizes were so big. There were so many children in his class. There were like 30 students in the class” would be coded as one instance of (1) Dissatisfaction with educational placement.
- Repetition of the same point following a change in topic should be considered as two instance of that code.
    - e.g., “The class sizes were so big and he was bullied during class. The class sizes were so big.” would be coded as two instances of (1) Dissatisfaction with educational placement and one instance of (3) Safety of child.
- An example following mention of one of the codes should be considered a second code.
    - e.g., “I felt like she wasn’t safe at school. One time she ran out of the building and was almost hit by a car” would be coded as two instances of (3) Safety of child.
- Evidence of stress on family related to themes 1-4 should be coded as one of these themes and not coded separately as stress; for a code of 5, stress must be independent of the other areas
    - e.g., “The meetings were always stressful because the teachers wouldn’t listen to my concerns” would be coded as (2) Negative interactions with education professionals.

*The following should be excluded in coding:*

- Description of core features of autism (e.g., texture sensitivity, repetitive behaviors, lack of reciprocal social interaction with peers, perseveration on certain topics).
- Anything related to preschool or daycare prior to the start of kindergarten.
- Any school experiences related to other children (e.g., siblings, relatives, neighbors).
- Statements about current homeschool programming from which inferences could be made about school (e.g., “I like that we have control over what they learn,” “She feels okay to be who she is.”)
- Things that *might* occur at school (“She might have been bullied if she stayed in school longer.”)
- Things about a particular area in which the family resides (e.g., “The South is racist”) unless it directly relates to the school.
- General statements that do not directly explain one of the codes (e.g., “The school was terrible,” “It was hard”).
- When a participant responds to interviewer question both affirmatively and negatively (e.g., “yes and no.”)

*Each code is described as follows:*

**1. Dissatisfaction with educational placement**

*Educational placement refers to all characteristics of the child’s education, not simply the classroom environment in which education is delivered.*

*Subthemes:*

a. Classroom placement
b. Educational program
c. Resources received
d. Implementation of educational placement/program
e. Classroom support
f. Characteristics of school
g. Characteristics of professionals

a) Classroom placement

- Child didn't meet educational guidelines for autism; served under another less-appropriate category
- Child served in a more restrictive environment (e.g., self-contained vs. inclusion)
- No typical peer interaction within placement
- Issues with other children in placement (e.g., different ages/different severity/problem behavior)
- Placement determined arbitrarily
- Frequency with which child was pulled out of the classroom (must specify frequency and not be related to a child's accommodation – e.g., individual testing)

b) Educational program

- Educational content (e.g., stifling creativity, school perpetuating capitalism)
- Materials/expectations not appropriately matched to child's level
- Mindless work (e.g., worksheets, workbook checks)
- Arbitrary academic requirements (e.g., foreign language)
- Inappropriateness of homework (e.g., quantity, content)
- Preparation for standardized testing
- Prescribed conventions for how work should be done
- Not providing building blocks/foundational skills
- School not having an appropriate program available
- Providing instruction for shortened school day
- Not providing an IEP or 504 Plan

c) Resources child is receiving

- No additional services (e.g., OT, PT, speech, behavioral intervention)
- Insufficient services (e.g., only 30 min/week)
- IQ/functional level used to determine services
- Not addressing problem behavior
- Prevented from accessing afterschool services
- Family paying for additional services at school

d) Implementation of education placement/program

- No education being provided
- No progress being made
- Not collecting educational data or numbers appear invalid
- Inconsistent implementation of programming
- Not upholding IEP/504 Plan
- Not implementing appropriate medical protocol (e.g., seizure protocol)
- Not providing any material or support when child on hospital homebound
- Individual who is supposed to be teaching isn't actually teaching
- Too much time spent in administrative work versus instruction
- Child being secluded from other children in the classroom (excluding for accommodations – e.g., individual testing)
- Work coming home incomplete
- Parents required to complete instruction at home
- Not providing clear expectations and following through (e.g., saying no to child)

e) Classroom support

- Insufficient/improper support services
- No one-to-one attention
- School can't provide a nurse for afterschool/fieldtrips
- School not knowing how to handle medical concerns (e.g., seizures)
- Untrained staff dispensing medications

f) Characteristics of school

- School not what family expected (e.g., charter school not art focused)
- Issues with the structure of the school itself (e.g., hours, what school reinforces politically, siblings separated, sitting at a desk, lecture format, class sizes, lack of space, no fun)
- Distraction of other students
- Child's classroom separated from the rest of the school
- Lack of resources/financial issues (e.g., no media center)
- Constraints of educational mandates/politics
- Constraints of district's requirements
- Faculty/staff turnover
- Tracking (e.g., academic or vocational)
- Tests determine if can move forward
- Middle school/high school characteristics (e.g., longer day, more responsibilities, more tests, more homework, transition between classes, different expectations from different teachers)
- Gang violence issues at the school

g) Characteristics of professionals

- Lack of adequate training
- Lack of understanding of child's disability
- Uncomfortable with child/not wanting child in classroom
- Professionals used to working with more severe children
- Mistreating child (e.g., yelling at child, cruel to child, rough with child)
- Ridiculing/laughing at child
- Making child feel inadequate
- Professionals gossiping
- Professionals not getting along
- Trying to make child quiet
- Easily frustrated/impatient
- Overwhelmed/stressed
- Teachers can only do so much
- Substitute teachers don't know how to work with special education students

**2. Negative interactions with education professionals**

*Directly related to the interactions parents have with the education professionals. Concerns with characteristics of the education professionals (e.g., lack of adequate training), observed behavior of professionals (e.g., laughing at child), and implementation of programming by education professionals should all be coded as (1) Dissatisfaction with educational placement.*

*Subthemes:*

a. Negative educational meetings
b. Battling for services
c. Verbal arguments
d. Lack of cooperation

a) Negative educational meetings (e.g., IEP, 504, SST)

- Education professionals assume parent doesn't know their rights/options
- Professionals want parents to just blindly listen
- Professionals had private meeting before parents arrived
- Professionals presenting mixed messages
- Not treating parent with respect (e.g., condescending attitude, rolling eyes)
- Judgmental comments about the family (e.g., child is disobedient, defiant, spoiled; parents are belligerent)
- Professionals haven't read IEP
- Professionals not prepared for meeting/not present
- Professionals treating meeting like an obligation

- Scheduled meeting just to tell parents what they did rather than plan ahead
- Teacher wouldn't do what parent requested
- Meeting tense/stressful/overwhelming
- Lots of people at meetings
- Parents feeling forced/pressured into making a decision (e.g., tracking, retaining)
- Giving ultimatums (e.g., child goes to other school or he's expelled)
- Need to bring an advocate to meetings
- Professionals more responsive when others (e.g., advocate, husband) are present
- Refusing to have meeting if parent brought a professional
- Information only provided off the record
- Professionals trying to appease parent by saying that they understand/know how hard it is
- Making promises without plan to follow through
- Downplaying severity of child's disability
- Misrepresenting child's progress
- Parent feeling like they're being manipulated by the school
- Teacher directly telling parent doesn't want child in the class
- Not appropriately writing behavior plan

b) Battle for services

- Professionals making excuses why child can't receive services
- Trying to get out of providing services
- Unwilling to try to assess child for services
- Professionals telling parents that because grades are fine/child is smart, child does not require services
- Not wanting to bring in professionals to develop a behavior plan
- Not wanting to make modifications/accommodations for student
- Professionals telling parent that child has to keep failing before can receive services

c) Verbal arguments

- Reference to arguments/fights/altercations/banging heads
- Taking out frustration with parent on child
- Professionals visibly angry
- Professionals making interactions personal with parent, rather than about the child
- Professionals making accusations of parent (e.g., parent trying to outsmart professionals)
- Professionals engaging in denial or deceit

d) Lack of cooperation

- No contact with administrators
- Dismissive of parents' concerns/not receptive to parents' suggestions
- Blaming others/making parents feel guilty/making excuses instead of taking responsibility

- Deliberately defying parents' wishes
- Professionals not responding to parents' attempts to communicate
- Not communicating with parent (e.g., not telling that child was eloping)
- Professionals not providing any information unless asked
- Not asking parent if they'd be willing to do things to help child
- Administrators not standing up to other professionals
- Not accepting outside testing/resources from parents
- Professionals under the control of the administration
- Rules changing to suit people and administration/preserve reputation of school
- Professionals expressing that it isn't their job to make child comfortable
- Passing child along (e.g., sending to a different school)
- Professionals trying to cover up wrongdoing
- Professionals telling parents they aren't going to follow through with plan
- Professionals telling family that they're choosing for their child not to succeed

**3. Safety of child**

*Subthemes:*

a. School staff's ability to manage student's behavior
b. Supervision of child
c. Peer victimization
d. Inappropriate consequences for problem behavior

a) <u>School staff's ability to manage student's behavior</u>

- Worry that child would get injured or hurt at school
- Child engaging in self-injurious behavior as a result of school
- Not appropriately handling instances of problem behavior that put child at risk of injury
- Not appropriately staffed to safely manage behavior

b) <u>Supervision of child</u>

- Child unsupervised/safety compromised (e.g., crossing busy street, outside alone in hallway)
- Professionals not preventing child from eloping/losing child when child elopes
- Professionals not knowing where child is when parent arrives
- Professionals not seeing bullying/peer aggression

c) <u>Peer victimization</u>

- Child being bullied/picked on/harassed/teased
- Behavior issues with other peers (e.g., fights, altercations, child getting beat up)

- Other children provoking child (e.g., whispering things to child, making noises until child reacts)
- Peer manipulation
- Easy target for gangs at school
- Other children teasing child for accommodations

d) Inappropriate consequences for problem behavior

- Consequences jeopardized student's safety (e.g., lock-up room, isolation)
- Child potentially getting arrested for problem behavior
- Professionals being forceful with child (e.g., grabbing, holding, restraining)
- Inappropriate consequences/mistaken intent of child's behavior

**4. Social-emotional functioning of child**

*Excluding general social-emotional functioning or related problem behavior; parent must indicate that these behaviors are specifically related to school. Also excluding child's "difficulty" with school" (e.g., "it was a hard transition to middle school").*

*Subthemes:*

a. Anxiety
b. Depression
c. Need for psychotropic medication
d. Emotional outbursts
e. Diminished self-confidence
f. Compromised health

a) Anxiety

- Any display of anxiety/worry related to school (e.g., anxiety attack because of school, anxious at school, testing anxiety)
- Violent tendencies when anxious/scared regarding school
- Insomnia related to school

b) Depression

- Any display of depression (e.g., crying about tests, sad at school, crying about peer interactions at school)
- Child becoming withdrawn (must imply a change in behavior)

c) Need for psychotropic medication

- Need for medication to function in classroom
- Need for increased dosage of medication while in school

- Education professionals suggested medication
- Pressure from education professionals to medicate

d) Emotional outbursts

- Tantrums/meltdowns/violent outbursts upon leaving school
- Keeping emotions inside, then having an outburst
- Emotional reactions about behavior of other students (e.g., other student clicking tongue)
- Child putting all cognitive resources into functioning in school, then see the effects
- Emotional reactions (e.g., nervous breakdowns, rages, exploding) related to school
- Emotional reaction resulting in impaired functioning (e.g., can't walk or talk)
- Child's increased stress related to school (e.g., overwhelmed)

e) Diminished self-confidence

- Lack of self-confidence related to school (e.g., saying that not smart enough)
- School highlighting that child is different
- Child compromising identity to try to be "normal" or like peers
- Child blaming self for actions of others
- Child saying that hates school/need to drag child into school
- Child lacking confidence to transition to middle/high school

f) Compromised health

- School jeopardizing child's health
- Body systems reacting to events related to school
- Child's stress levels resulting in bodily effects (e.g., oxygen levels drop/body break down)
- PTSD from school experience
- Child sitting in fetal position/rocking
- Sensory overload/over-stimulated
- Child feigning illness

**5. Stress placed on family**

*Stress on family members directly related to child being in traditional school, independent of stress related to themes 1-4.*

*Subthemes:*

a. Frequency of school visits
b. Frequency of communication with school
c. Completing schoolwork with child
d. Need to contact district level professionals

e. Considering of legal avenues
f. Sense of frustration
g. Need for persistence
h. Disruption in routine

a) Frequency of school visits

- Parent needing to go to child's school (e.g., for meetings, to handle discipline referrals, to pick child up early, transport child for shortened day)
- Parent spending time at school to oversee that educational program being implemented
- Excessive number of meetings
- Parent needing to go on field trips
- Calling spouse to come to school to assist with issues
- Time spent at school is like a full time job

b) Frequency of communication with school

- Frequent phone calls (e.g., asking questions, requesting that pick up child)
- Parent constantly scheduling meetings/badgering the school

c) Completing schoolwork with child

- Struggles over homework with child
- Parent needing to sit and complete homework with child

d) Need to contact district level professionals

- Parent contacting district level professionals (e.g., superintendent)

e) Consideration of legal avenues

- Parent considering getting calling a lawyer/seeking legal help

f) Sense of Frustration

- Hopelessness (e.g., can't do anything to make it better, impossible situation, situation too hard)
- Parent feeling like not strong enough to handle the situation
- Parent fed up with school
- Parent exhausted/worn out from the education process
- Parent feeling pressure that if don't help child, nobody will
- Parent feeling sense of responsibility for child's learning
- Parent concerned that need to give child educational tools because not going to be around forever
- Parent feeling guilty sending child to school

- Parent feeling like can't continue to put child through what school is doing
- Sibling feeling responsible for helping child while at school
- Sibling feeling guilty for being successful at school while child struggles

g) Need for Persistence

- Pursuing loopholes and avenues
- Trying to figure out how to navigate the education system
- Persisting/not giving up trying to help child
- Protective of child in relation to school

h) Disruption of Routine

- Stress of getting child up and ready for school
- Family considering moving residence for better services
- Coordinating medications for school
- Trying everything to get child to be able to function in school
- Dealing with all the school issues
- Frequency of checking grades

APPENDIX D

**Coding Instructions for "Level of structure in homeschool programming"**

I. Read entirety of coding sheet and familiarize self with coding categories.

II. Read through transcript.

III. When one of the six codes is applicable to the participant's description of their homeschool programming, underline the relevant text and circle the corresponding letter. One mention is sufficient to satisfy the criterion and further underling for that code is unnecessary.

IV. Count the number of codes circled (i.e., 0-6) and select the corresponding level of structure.

Content is coded for the presence of the following:

(a) a predictable schedule

(b) clearly presented expectations (e.g., child knows what work needs to be completed that day)

(c) direct provision of instruction (e.g., lectures, modeling)

(d) an instructional workspace

(e) multiple opportunities to respond (e.g., multiple trials, different modalities)

(f) performance feedback (e.g., report cards, corrected papers)

Level of structure:

Low = 0-2

Moderate = 3-4

High = 5-6