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Stress Levels of Parents of Homeschooled Versus Public-Schooled Special Needs Children

Lorraine Ann Wehrmann
Walden University

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Walden University

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Lorraine Wehrmann

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Walden University
2015

Abstract

Stress Levels of Parents of Homeschooled Versus Public-Schooled Special Needs
Children

by

Lorraine Ann Wehrmann

MS, Saint Bonaventure University, 2005

BS, Hilbert College, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Educational Psychology

Walden University

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Abstract

Although all families in the United States experience stress, families of children with special needs frequently experience prolonged periods of stress. Prolonged exposure to stressful circumstances increases their vulnerability to financial, physical, and social strain. With the continuing increase in the prevalence of children who have special needs, it is vital to examine the efficacy of different educational approaches on parental stress. It is unclear whether there are differences in stress levels for families of homeschooled versus public-schooled children with special needs. Using the family adjustment and adaptation response model, the purpose of this quantitative, ex post facto study was to investigate the degree to which parental stress reported by parents of a school-aged child with special needs could be predicted by school approach and severity of learning disability. Seventy parents of children participating in either public special education or homeschooling completed self-administered questionnaires, including the Family Impact of Childhood Disability Scale, the Educational Stress Survey, the Cognitive Processing Inventory, and demographic questions. Results from the descriptive analysis and multiple regression analyses indicated that the severity of the learning disability significantly predicted both overall parental stress as well as stress contributed by schooling. However, the type of special education setting did not significantly predict parental stress. The results from this study can promote positive social change by increasing parental awareness so that parents can make informed decisions about schooling for their children with special needs. It can also provide valuable information about additional stress related to special education programming services based on the severity of the child's learning disability.

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Dedication

First and foremost, I would like to dedicate my doctoral work to my sister and best friend, Bernadette, whom I lost suddenly and tragically while working on my dissertation. As I move forward into the future, I will carry her in both my heart and my mind to keep her a part of everything I do. She will be forever loved and greatly missed.

I would also like to dedicate my work to my Aunt Cheri, whom I also lost to breast cancer during this time. She was a strong woman who was a great inspiration to everyone around her. She would give me the courage and strength to carry on when things got tough. During the times when I was feeling overwhelmed or defeated, I would remember her battle and realize how small my problems were in comparison to what she was going through. She had a way of making everyone else feel better, even though she was feeling so sick. She was also a tremendous loss for my family and will be forever loved and missed.

To Kali and Christopher, your love and support got me through this long, stressful journey. I am truly lucky to have such loving and supportive children. I love you both very much!

To both of my children, Kali and Christopher, my nephews Adam and Zachary, and my nieces Samantha and Leah, and my sweetheart Lexi, I hope my hard work and time has shown each of you that you can accomplish anything you desire. This quote by Ken Venturi (n.d.) explains exactly how I feel: "I don't believe you have to be better than everybody else, but I do believe you have to be better than you ever thought you could be." I truly love and appreciate each and every one of you!

To my wonderful parents, who have always supported and encouraged me to reach for the stars. If it wasn't for your love and encouragement, I would not be the person I am today. You always believed I could earn my degree and because of both of you, I have! I love you both very much and hope I can give my children what you have given to me.

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Chapter 1: Introduction

Introduction

Although all families in the United States experience stress from time to time, families of children with special needs frequently experience additional stressors. Life for families with a special needs child is stressful and prolonged elevated stress levels have a negative impact on family life (Sung & Park, 2012). Furthermore, parenting a child with a disability often requires special educational services during the child's school-age years, which introduces more stress. Once a child reaches school age, parents face the additional demands of negotiating educational services to fit their child's needs.

Parents must either adapt to the rules and policies of their child's school or arrange for homeschooling. This process of adapting causes additional stress that results in family members becoming even more susceptible to mental and physical health problems (Sung & Park, 2012). Prolonged exposure to stressful circumstances become overwhelming for parents and increases their vulnerability to financial, physical, and social strain (Sung & Park, 2012); however, it is unclear whether there are differences in stress levels for families of homeschooled versus public-schooled children with special needs.

The purpose of this dissertation study was to examine the degree of stress reported by parents with a school-age child with special needs or a learning disability. I specifically sought to determine whether parents' emotional stress could be predicted by two variables: the type of schooling approach and the severity of the child's disability. Parents' emotional stress included both overall stress and stress contributed by schooling

approach. The two types of schooling examined in this study were public school special education programs and homeschooling.

The remaining sections of this chapter provide information about the background of the problem, problem statement, research questions, and hypotheses, theoretical framework for the study, nature of the study, definitions, assumptions, scope and delimitations, limitations, significance, and a summary.

Background

Severity of a Disability

Stress levels reported by parents of children with disabilities have been found to vary with the severity of the child's disability. However, there is limited empirical evidence on this topic, and most research has been conducted on children with autism disorders. When compared with parents of children developing within the normal standards of development, parents of children with autism spectrum disorder (ASD), as well as parents of children with Down syndrome, typically report higher levels of parenting stress (Phetrasuwan & Miles, 2009). Researchers have demonstrated a strong predictor of parental stress is the severity of a child's symptoms and behaviors (Lecavalier, Leone, & Wiltz, 2006). However, the question remains whether parental stress is the consequence of the symptoms of a disability or the behavioral issues (Lecavalier et al., 2006).

Although prior researchers in the United States have established that a child's behavioral problems directly affect parental stress, other scholars have indicated that difficulties specific to each diagnosis tend to be more stress inducing (Obeng, 2010).

Phetrasuwan and Miles (2009) conducted a study on ASD in Greece and determined that the severity of autism as opposed to level of functioning contributed to high parental stress levels. Based on these mixed results and the paucity of empirical evidence on this topic, additional research needs to be conducted to determine whether severity of a disability can predict parental stress, especially in a special needs elementary education population.

Public Education and Children With Special Needs

Special needs children attending a public school in the United States are serviced through special education programs. For children to receive special educational services in the United States, they must meet the criteria specified by the Individuals With Disabilities Education Act (IDEA) for any form of learning problems a child may have or any difficulty they may have using certain skills (U.S. Department of Education, 2011). Students with learning disabilities most often have skill deficits in math, listening, reading, writing, speaking, memory, and reasoning. Over the past decade, special education programs have become a standard in schools across the United States. Most classrooms now include students with some form of learning disability, allowing the student to spend a portion of their school day in a general education classroom (National Education Association, n.d.).

Learning deficits are caused by differences and inadequacies in brain processing and learning, causing deficiencies in different academic areas (U.S. Department of Education, 2011). Proper diagnoses and assessments are essential, so appropriate remedial services can be tailored to the individual needs of each student. Students with

learning disabilities can be average or above average intellectually and may still require additional educational assistance, because of information processing differences (U.S. Department of Education, 2011). Children with learning disabilities must be taught alternative ways to learn and process information, so their learning disability does not affect their academic performance (U.S. Department of Education, 2011). Although there is no cure for a learning disability, researchers agree, with the right academic help and support the majority of children with learning disabilities can do well academically.

Once a student attending a public school in the United States with a learning disability is identified and diagnosed, the school's special education teachers assists in developing an individualized education program (IEP) for the student (*Special Education News*, n.d.-a). Curriculum modifications are made through the IEP, which gives the special education teachers the ability to provide academic materials in a format tailored to the child's specific needs, abilities, learning difficulties, and disabilities (*Special Education News*, n.d.-a).

Parental Involvement

Parents are encouraged to participate in the public education of their child, and special education programs have made parental involvement an important element for both the federal government and the school systems. Several laws have been passed to augment the parents' role in the educational process and now mandate parental attendance in specialized meetings (Noel, Stark, & Redford, 2013). School districts have adopted strategies to encourage and nurture parental involvement by making them important members in the educational process. They are given the opportunity to

participate in Committee on Special Education (CSE) meetings, make decisions about their child's education, and are given vital information to be kept informed and involved in the special education process. As a consequence, parents of children with learning disabilities may experience additional pressures due to this augmented role and the required coordination of special education services for their children (Noel et al., 2013).

Researchers have demonstrated that parental involvement in special education programs can be a source of stress. Karande, Kumbhare, Kulkarni, and Shah (2009) reported that the majority of parents with a child with a learning disability attending a public school scored above the 85th percentile on a stress inventory questionnaire. Parents also reported feelings of helplessness with school issues they found to be the most stressful and worrisome. The most stressful issue reported by parents was their child's poor school performance and chronic low grades. This issue was reportedly most stressful because, although the parents saw their child working hard, they still had low academic achievement scores and poor grades (Karande et al., 2009).

Noel et al. (2013) found that attending specialized meetings, such as an annual review, can also be a source of stress and pressure for parents of children with learning disabilities. Parents reported that the formality and structure of the meetings hindered their participation, making them unlikely to participate and share their views. The parents also maintained that this situation created feelings of confusion or inferiority (Noel et al., 2013). Not all parents of children with disabilities decide to educate their children through the public education system. As an alternative, some parents arrange for homeschooling.

Homeschooling and Children With Special Needs

More parents today are choosing homeschooling for their special needs child as an alternative to the public school's special educational service (Noel et al., 2013). The choice to homeschool can be stressful, because most school districts oppose homeschooling arrangements for children with special needs (Noel et al., 2013). Schools receive supplementary funding for children requiring interventional services, so they may make parents feel as if they are not qualified to homeschool their child or make it difficult for parents to demonstrate the educational progress their child has made (Noel et al., 2013). A parent's choice to homeschool takes dedication, patience, and unconditional love (Noel et al., 2013).

Although homeschooling a special needs child takes great sacrifice from parents, homeschooling is on the rise and has proven to be quite successful (Noel et al., 2013). Once parents establish a homeschooling program, they may encounter less stress, because the curriculum is not set by the school system. The parent also does not have to contend with special educational meetings, special education committees, or complex terminology associated with special educational services (Noel et al., 2013). Homeschooling parents have the freedom to choose an appropriate curriculum or combine curricula based on the needs of their individual child (Noel et al., 2013). The U.S. Department of Education, National Center for Education Statistics (NCES) reported in 2015 that approximately 3% of children between the ages of 5 through 17 living in the United States are now being homeschooled. There has also been an increase in the number of children with special

needs being homeschooled, indicating that more parents are choosing this form of education as opposed to public education (U.S. Department of Education, NCES, 2015).

Homeschooling is now a viable option for families educating a child with special needs. Parents know their child's strengths and weaknesses, which gives them a tremendous advantage when choosing a successful educational program (Noel et al., 2013). Once the educational plan is in place, the parents can tailor the educational planning and individual lessons to meet the cognitive needs of their child. Being at home, parents also have the ability to accommodate their child's physical restriction, as well as their emotional needs (Noel et al., 2013).

Nonetheless, for parents who choose homeschooling for their child with special needs, stress and doubt can be a daily occurrence (Lois, 2010). One of the concerns reported by homeschooling parents is the potential to fail as their child's teacher. Parents may also question their own abilities if they continue to battle low motivation or lack of progress. In addition, a role conflict must also be addressed, which reflects a struggle between being both a parent and a teacher. At times, the role conflict can put additional strain and pressure on family relationships (Lois, 2010).

For homeschooling parents, another problem that can develop is a feeling of being overcommitted. Homeschooling may take all day long, leaving little time to accomplish much else. Once a parent begins to feel overwhelmed and overextended for a prolonged period, burnout usually follows (Lois, 2010). The research on the effects of homeschooling on parents is in its early stages and is mixed. Although homeschooling can be stressful, other researchers have indicated that homeschooling a child is rewarding

and can result in positive feelings. There is even less research on the impact of homeschooling children with learning disabilities on parental stress. The current research adds to the literature on this topic.

Problem Statement

With the continuing increase in the prevalence of children with special needs in the general society, it is vital to examine the effects of different educational approaches on parental stress. However, there is a paucity of research on the effects of different educational approaches on overall stress levels of parents of children with special needs, and there is no information on the effects of stress contributed by schooling on parents of children with special needs. To date, no researcher has compared parental stress levels of families who opt for homeschooling over public education for their children with learning disabilities. It is unclear whether there are unique advantages (e.g., lower parental stress) associated with one approach over the other. Without such information, parents of children with special needs may continue to experience significant stress associated with the educational system (Karande et al., 2009).

Life for families raising a child with special needs can be very stressful. The family members have the stress of everyday life coupled with the additional stress of contending with the disability of their child. Each family member is exposed to prolonged elevated levels of stress, which can negatively influence resilience and their individual ability to cope with the changes and new responsibilities within their family (Benzies et al., 2010). Understanding and accurately identifying additional stressors in exceedingly strained families becomes a vital issue for the preservation of families,

especially as the number of children with disabilities continues to climb (Halfon, Houtrow, Larson, & Newacheck, 2012).

In addition to family stress, parents must also contend with the additional stressors contributed by educating a child with special needs, which makes already strained family life even more difficult. Excessive stress makes parents more vulnerable to mental health issues and increases a child's vulnerability to abuse and neglect (Phetrasuwan & Miles, 2009).

When parents choose to send their special needs child to a public school system, they encounter the unique stressors associated with a public school special education system (Esquivel et al., 2008; Karande et al., 2009). Parents dealing with the public special education system may have increased parental stress levels because they have the continual pressure of negotiating with the school in order to obtain adequate educational support for their child (Tzang, 2009). The pressures and negotiations continue throughout the child's education, keeping parental stress levels consistently high and unwavering during this time period (Tzang, 2009). Karanade et al. (2009) explained that some parents find that the formal meetings required as part of the public special education program are stressful and feel the formality and structure of the meetings impede their involvement. Other parents report stress caused by their child's chronic poor academic performance and chronic low grades in spite of working hard (Karande et al., 2009).

It is unclear whether the severity of a child's disability predicts parental stress, especially in learning disabled/special needs populations other than autism. The results

of this line of research are mixed (Herring et al., 2006; Konstantareas & Papageorgiou, 2006; Lecavalier et al., 2006), and additional information is needed so researchers and practitioners can provide adequate care to vulnerable populations. Although having a child with special needs is stressful, possibly depending on severity of the disability, and participation in the special education system is stressful for parents, there is a dearth of research comparing groups that participate in alternative educational approaches such as homeschooling. Parents who choose homeschooling for their child with special needs might experience less overall stress or stress exacerbated by schooling because most of the previously identified public school stressors can be minimized; however, there is no empirical evidence to support this claim. In the current investigation parental stress levels (overall stress and stress exacerbated by schooling) from two educational approaches, public special education and homeschooling, were compared to determine whether participating in the public education sector predicted more stress than participating in a homeschooling program. Although homeschooling parents have the stress of family life and the pressure of educating their child, the homeschooling approach still seems to provoke less stress for parents than participating in traditional special education programs (Snyder & Dillow, 2012). This information may be informative for public schools with special education programs and for parents of children with special needs.

Purpose of the Study

The purpose of the current research was to examine how the criterion variable, degree of parental stress (overall stress and stress exacerbated by schooling) reported by

parents of a school-aged special needs child, could be predicted by two predictor variables, school approach (homeschool versus public) and severity of disability. An objective of this research was to explore the possibility that educational programs, particularly those associated with a public school system, placed additional stress on families with children with special needs. Another objective was to investigate whether parents experienced increased stress levels that could be associated with educating a child with special needs and whether schooling methods (homeschooling versus public school) and the severity of the child's disability predicted increased parental stress levels. The goal of the study was to provide information on how the schooling approach and disability severity were related to parent's overall stress and stress contributed to by type of schooling of special needs children. The results of this study can help inform parents of children with disabilities in their schooling decisions.

Research Questions and Hypotheses

Two research questions about parental stress guided the current investigation. Although both questions focused on parental stress, one question was related to general parental stress associated with raising a child with a disability and the other question related to parental stress exacerbated by schooling specifically.

Research Question 1

Can the degree of parent's emotional stress, as measured by the Educational Stress Survey (ESS), be predicted by the severity the child's disability or the choice of schooling (public school special education program or homeschooling)?

H₀1. The parent's stress, as measured by scores on the ESS, cannot be significantly predicted by the severity of the child's disability and choice of schooling.

H_a1. The parent's stress, as measured by scores on the ESS, can be significantly predicted by the severity of the child's disability and choice of schooling.

Research Question 2

Can the degree of parent's emotional stress, as measured by the Family Impact of Childhood Disability Scale (FICD-20; Trute, Hiebert-Murphy, and Levine, 2007), be predicted by the severity the child's disability or the choice of schooling (public school special education program or homeschooling)?

H₀2. The parent's stress, as measured by scores on the FICD-20, cannot be significantly predicted by the severity of the child's disability and choice of schooling.

H_a2. The parent's stress, as measured by scores on the FICD-20, can be significantly predicted by the severity of the child's disability and choice of schooling.

Theoretical Framework for the Study

The theory used to inform the current research was the family adjustment and adaptation response model (FAAR) developed by Patterson in 1988. This model is used to explain the effects of high stress levels on families raising a child with a chronic illness or a disability. The model also accounts for how the family unit strives to maintain equilibrium by using the resources and coping strategies they possess. In the model, adaptation is emphasized as the key outcome, making this similar to the current research because one goal is to determine whether emotional stress can be predicted by the

severity of a child's disability. The current research adds to the FAAR theoretical literature.

In the FAAR model, each family member's perception of his or her situation is considered critical for achieving balance and normal functioning. When a family crisis occurs, the demands put on the family begin to exceed their coping capabilities. As a consequence, family members must try to restore their equilibrium by acquiring new strategies and seeking new support systems in order to reach a more positive family environment and outlook (Patterson, 1988).

Demands and Coping

According to the FAAR theory, a demand is the phase that requires a family to make changes in order to maintain normal functioning. As the family equilibrium becomes threatened, stress levels and pressures are elevated. Thus, the family members must use their coping skills and resources to navigate through this difficult time and try to reduce the number of demands set upon them, while also managing stress (Patterson, 1988). As a part of this framework, a family's coping capabilities are evaluated on three different levels, which include the individual, the family unit, and the community (Patterson, 1988). Analyzing capabilities at the individual level involves assessing the knowledge and skills each individual family member acquired through education, training, and past experiences. At the family level, significant family relationships and interactions are evaluated while also trying to improve communication and compassion within the family unit (Patterson, 1988). Finally, community evaluation involves assessing the resources available to the family, such as significant individuals, local

organizations, and institutions, some, or all of which can be used as sources of family support in the future (Patterson, 1988).

Strain and Stressors

Strain, as defined by the FAAR theory, is the tension experienced by an individual or family that desires to make changes in their daily life. A buildup of unresolved issues and pressures can cause excessive strain on a family, prompting their desire for change (Patterson, 1988). *Stressors*, however, are specific events that have the potential to cause a significant disruption in a family's daily life. They can occur either gradually or abruptly, causing turmoil for individual family members or the entire family (Patterson, 1988).

Research Using Family Adjustment and Adaptation Response Model

The FAAR model has been used in research as a tool to assess families in crises. The model determines how well the family implements strategies and utilizes resources to regain a family equilibrium through adaptation (Patterson, 1988). For example, Bayat (2007) used the FAAR model to investigate the resilience in families that have a child with autism. Bayat determined how parents perceived and created meaning of their child's disability and whether they were able to use resources to balance the family's demands against the family stressors of having a child with a disability.

The FAAR model was also used to explain the effects of high stress levels on families with a chronically ill member. For example, Zhi (2008) used the FAAR model to assess families in crisis when one or more family member (parent or child) had AIDS. The model was used to determine the family's ability to be resilient, handle the changes,

and to assess parental stress related to discrimination against people with AIDS. Zhi reported that the communication skill level of the family, the level of the disease related knowledge, and the dysfunctional processing among the family members were all significant predictors of functioning. The model proved effective for assessing and understanding family dysfunction and when helping families develop a plan for positive adaptation (Zhi, 2008).

Within the FAAR model, the emphasis is on the perceptions of each family member because individual perceptions can affect the living environment and attitudes of the entire family. This theory mentions three levels of meaning when a family faces stressors (Patterson, 1988). The first level describes how family interactions and communication help members assign meaning. The second level addresses individual perceptions of family life and how each element influences individual identity and family stability. The third level focuses on how family members see themselves relating to the outside world (Patterson, 1988). Currie and Kahn (2012) focused on the second level of the model. They investigated family stress when caring for a family member (child or parent) with a special educational or medical need. Most families reported significant stress associated with the demands of caregiving. Two phases of the model, adjustment and adaptation, were used to highlight the process experienced by families following a stressful event. The model was also used to evaluate family functioning preinjury. Currie and Kahn (2012) demonstrated the model could also be used as an effective predictor 3 years postinjury to ensure proper strategies could be implemented to assist

families in recovery. Additional information about the FAAR, its use in research in this topic area and how it can be applied to the current research, is presented in Chapter 2.

Nature of the Study

A quantitative approach and ex post facto design was used in this study. The sample consisted of 70 primary caretakers of school-aged children with special needs. Of the selected participants, 37 parents used a homeschooling approach and the other 33 used a public special education approach. An initial 100 e-mails were sent to several organizations, schools, and electronic mailing lists, asking if they would consider posting information about the study and providing contact information for interested parents.

The 79 respondents completed four instrument that had been already published and validated: the self-administered demographic questionnaire FICD-20, developed by Trute et al. (2007) to assess overall parental stress levels; the ESS, which includes 15 additional questions I created to assess specific parental stress contributed by schooling special needs children; the Cognitive Processing Inventory (CPI), developed by Crouse (2011) to assess severity of disability; and a researcher-created demographic questionnaire to determine whether the families participate in a homeschool or public special education program. A regression analysis was conducted to determine whether the predictor variables of type of educational approach and severity of the child's disability significantly predicted parental stress. Additional information on the study methodology is presented in Chapter 3.

Definitions

Attention deficit hyperactivity disorder (ADHD): A neurological condition caused by the malfunctioning of the brain's circuitry that manages self-control and inhibition, making it difficult for a person to sit still, control behavior, and pay attention (Ter-Stepanian, Grizenko, Zappitelli, & Joobar, 2010).

Autism spectrum disorder (ASD): A neurodevelopment disorder usually characterized by social impairments, developmental disabilities, communication difficulties, or stereotypical patterns of behavior (Autism Society, 2011).

Committee on Special Education (CSE): A committee made up of specific members from a given school for special education meetings (*Special Education News*, n.d.-b).

Homeschooling: Students being schooled at home instead of at a public or private school (U.S. Department of Education, 2011).

Individualized education program (IEP): Curriculum modifications plans, which allows special education teacher the ability to provide material in a format tailored for each individual student's specific needs, abilities, learning difficulties, and disabilities (*Special Education News*, n.d.-a).

Individuals With Disabilities Education Act (IDEA): A law that ensures that children with disabilities receive the services they require throughout the United States. It also regulates the early intervention services and special education services provided by states and agencies (U.S. Department of Education, 2011).

Mental retardation: A limitation in communicating, mental functioning, social skills, or self-care (U.S. Department of Education, 2011).

Other health impairments: Chronic or acute conditions that limit a child's strength, vitality, or alertness causing an adverse affect on his or her academic performance (U.S. Department of Education, 2011).

Speech or language impairments: Communication disorders that adversely affect a child's ability to perform academically (U.S. Department of Education, 2011).

Assumptions

In this study, it was assumed that participants answered questions honestly and accurately. In order to encourage honest participation, participation was completely voluntary and anonymous. It was also assumed that the questionnaires used accurately, measure the constructs being investigated. Finally, it was assumed that respondents provided accurate responses to demographic questions inquiring about their school-aged child.

Scope and Delimitations

The study was delimited to learning disabled/special needs children in the school-age range. The results of the study may only be generalized to similar populations. In this study, I used quantitative data obtained through self-administered questionnaires. Another delimitation of the study stems from the fact that the questionnaires included a Likert scale, which limited the scope of each participant's answers and potential conclusions that could have been reached.

Limitations

A limitation of this study was that participation was completely voluntary and, therefore, it might have been biased toward parents who have had problems with the school system in the past. This bias may have limited accuracy and validity of the data collected. Accordingly, attempts were made to invite participants regardless of past experiences, and information on response biases was considered and discussed after data collection. A self-administered questionnaire also depends on the honesty of each participant, the level of understanding of the questions, and the willingness to disclose private information. In order to encourage honest responding, participants were informed that their honest responses were anonymous, confidential, and important to the successful implementation of the study. In addition, based on the convenience sampling strategy, the results of the current investigation were not generalized to the larger target population. No attempts were made to determine aspects about homeschooling approach, such as curriculum differences, as the goal of the study was to determine whether the overall difference was between homeschooling and public special education. A final limitation was the lack of validity and reliability of the researcher-developed schooling stress scale. Despite these limitations, the study's findings can contribute to the professional knowledge base for both parents and educators caring for children with disability.

Significance

Within the past decade, children in special education programs have been increasing in numbers, raising concern that many families may be in crisis (*Special*

Education News, n.d.-a). As a consequence, it is vital to investigate the effect of special education programs on parental stress levels. In this study, two different school approaches to family stress were evaluated to determine whether there was a significant relationship between families that use a homeschooling approach and families that use a public special education approach. The predictive ability of severity of a disability and school choice on parental stress was assessed in a school-aged population with special needs/learning disabilities, adding to the more prominent literature on secondary education research. This information contributes to both the literature on special education processes for special needs children and the present information on how homeschooling similarly affects parental stress. Schooling approaches vary in the amount of stress they produce for parents. The results of the study can be informative for public schools with special education programs and homeschooling associations that provide information to parents. These programs can use the information to inform future child and family interactions within public and homeschooling sectors.

Information from the study can also be significant for parents. Parents raising a child with disabilities are more likely to experience significant stress; what is unclear is how much of this stress is exacerbated by the schooling approach. This information may help parents make future schooling decisions for their special needs children. Children with disabilities require special educational accommodations that have been shown to significantly increase parental stress levels. It may be that arranging these accommodations influences the parental stress; however, additional research is needed, and a comparison group that does not need to coordinate services is needed, to add to the

literature on this topic. Because most parents caring for a special needs child scored above the 85th percentile on parental stress inventories, it is vital that professionals identify families in crisis and help them to implement needed coping strategies (Karande et al., 2009).

This research study was designed to follow Walden University's vision to increase individual self-worth by generating awareness of at-risk families raising a special needs child. The stress of parenting a special needs child does not seem to dissipate over time, and prolonged stress increases the chances of family members suffering mental health issues, abuse, and neglect (Benzies et al., 2010). The results from the current research will promote social change through increasing parents' awareness to make informed decisions about their children's schooling. The research may also provide information to schools indicating that in-place special education programming services may be considered stressful by parents and may suggest the need for program modification. Such future program changes may reduce stress and promote positive mental health in the future. This research may also stimulate additional investigation on this topic. As more information is generated on the topic, even greater public awareness will be achieved, and this awareness may mitigate future family stress.

Summary

The education of children with special needs has a long history. Professionals understand that, with the proper education and support, children with special needs can exceed the limitations once placed upon them. Through the collaboration of laws and established organizations, all children, regardless of whether they have a disability or

chronic illness, are now guaranteed an appropriate education (*Special Education News*, n.d.-a).

In the United States, families deal with the stressors of everyday life and changes to the family dynamic; however, there is now an additional stressor due to the increased incidence of children born with special needs (Halfon et al., 2012). This stress, when added to an already strained family life, makes parents more susceptible to mental health issues and children more vulnerable to abuse and neglect, making strained family life a vital issue for the preservation of families in our society (Halfon et al., 2012).

Chapter 2 presents a comprehensive examination of the literature on the possible stressors associated with educating students with special needs in the public special education setting. It also provides information on the changing family dynamic, the vulnerabilities of families raising children with special needs, and the educational concerns and stressors for parents raising children with special needs. Finally, it presents an examination of special education within the school system, common diagnoses of children in special education, the option of homeschooling a child with special needs, and the importance of outside support for all families caring for a child with a disability.

Chapter 2: Literature Review

Introduction

The following literature review provides a foundation for the understanding of the many issues involved in educating children with special needs in public school special education and homeschooling programs. There was a gap in the literature regarding the possibility that additional stress is put on families when a child with special needs enters formal schooling and the special education system. To fill this gap, the purpose of this research project was to examine the degree of stress reported by families with a school-aged special needs child and to determine whether stress level differences exist as a function of school approach or severity of disability. An objective of the study was to demonstrate whether parents' emotional stress could be predicted by two predictor variables: type of schooling approach (public school special education programs or homeschooling) and the severity of the child's disability. A second objective was to investigate the extent to which parents experienced increased stress levels associated with educating a child with special needs and whether schooling method (homeschooling versus public school) and the severity of the child's disability predicted increased parental stress levels.

The chapter begins with background information on the changing family dynamic in the United States. Next, the factors associated with the increase in the number of families raising a child with special needs are explained, and information is provided on how family life stressors may change once the child enters school. Information on special education and the common diagnoses that special education programs serve is

presented. Finally, information on homeschooling is provided, as is information on the FAAR model and how it may be applied to the current investigation.

Literature Search Strategy

Numerous resources were used to develop this literature review. The majority of studies reviewed in this chapter were located through an Internet search and included peer-reviewed journals as well as primary sources related to children with special needs, learning disabilities, special education, and parental stress found through Walden University's databases: EBSCO, Academic Search Premier, and Education Resources Information Center. The majority of the articles and books selected were published within the last 5 years. Key search terms included *parental stress*, *children with disabilities*, *school related stress*, and *special education programs/laws*. The articles obtained for this study were from digital and print resources.

Theoretical Framework

The theoretical basis used for this research was the FAAR model by Patterson (1988). In this model the effects of high stress levels on families raising a child with a chronic illness or a disability are considered. The model also explains how the family unit always strives to maintain equilibrium and does so by using the resources and coping strategies the individuals possess (Patterson, 1988). According to the FAAR model, each family member's perception of their situation is critical for achieving balance and normal functioning. Thus, when the family is in the adjustment phase, only small changes are required to maintain normal functioning. However, when a family crisis occurs, the demands put on the family begin to exceed their coping capabilities, causing them to

transition to the adaptation phase. It is during the adaptation phase that the family must try to restore their equilibrium by acquiring new strategies and seeking new support systems. During this phase, the family also has the opportunity to use their new skills and support systems to create a more positive family environment and outlook (Patterson, 1988).

Applying the Family Adjustment Adaptation Response Model to Current Research

Families over time face both hardship and changes as a normal and predictable part of family life. Through the changes and challenges of family life, families develop unique patterns of functioning and coping strategies that help to maintain equilibrium (Patterson, 1988). The strategies help to protect the family when they encounter unexpected strains and stressors as well as aid them in their recovery following a major crisis or transition. When families experience stressors or crises, the available resources and their ability to adapt affect the family's response and resilience (Bayat, 2007). The FAAR model developed by Patterson (1988) was created to facilitate the assessment of a family during a period of turmoil. The model encourages evaluation of a three-level system: the individual, the family, and the community. The emphasis is on the family system and the members' struggle to maintain equilibrium by using their resources and coping strategies as they meet life's strains and stressors (Patterson, 1988).

Traditional academic work with the FAAR model began with early researchers who studied depression and its effects on each family member and the family's functioning as a unit during stressful life events. The first major family stress model that was created was the ABCX family crisis model that included three components

(Patterson, 1988). Within this model, the first component considered is the stressor, which can be any event or transition affecting family life having the potential to create major change. The second component requires evaluating the existing resources the family has. The third component of the model requires the evaluating the family's perception of the stressor, which ultimately creates the crisis (Patterson, 1988).

The ABCX model evolved when longitudinal studies were conducted and the model could not account for all of the data. The ABC and X model was originally used to describe the recovery of families suffering the loss of a family member during war. The model analyzed the family's course of recovery after incurring a crisis. The model was used further when advancements were made by McCubbin and Patterson (1983), which included analysis of both recovery and adaption of a family in crisis and would be renamed the Double ABCX model (Patterson, 1988). The FAAR model was useful for this research because it combines emotional, physical, and social elements of family life. It also helps generate preventative strategies for families raising a child with an acute illness or behavioral issues (Patterson, 1988). In situations where a family is raising a child with special needs, the seriousness of the condition determines the intensity and pressure a family experiences. Children with special needs often require continuous care, the strain and demands of which have the potential to affect family life. When parents receive the official diagnosis for their child, the theory explains how they can slip into crisis.

In the early stages of a crisis, families usually lack the strategies needed to cope with their new situation and require support and assistance (Patterson, 1988). Unlike

traditional school settings, parents choosing to homeschool their child with special needs do not have to worry about the treatment or education of their child. They are in complete control of their child's curriculum and their IEP. Homeschooling parents can tailor or combine curricula to fit their child's individual needs, lessening the strain and pressures of sending a child to school (Noel et al., 2013). Another advantage to homeschooling is having one parent at home and the ability to keep established schedules and routines, which helps to maintain equilibrium and family functioning (Noel et al., 2013). Finally, homeschooling can allow parents to eliminate already established stressors associated with the coordination of services and participation in public special educational meetings (Noel et al., 2013).

Research Using the Family Adjustment Adaptation Response Model

The previous and current FAAR model has been used as the basis for research to investigate functioning of families that have faced adversity and crisis for over 20 years. For example, Bayat (2007) investigated the resilience of families that have a child with autism. The FAAR model was used to determine how the parents perceived and created meaning of their child's disability. The emphasis was on the perceptions of each family member, because individual perceptions can affect the home environment, attitudes, and ability and willingness to manage and coordinate outside resources as well as balance the internal family demands and stressors. The model was also used to evaluate each family member's attitudes and ability to adapt and regain equilibrium (Bayat, 2007).

The model proved to be both valid and reliable when evaluating each family member's attitudes toward their current family situation. Family members' attitude

toward their home situation and recovery proved to affect their family both positively and negatively, including the family's ability to recover and regain equilibrium (Bayat, 2007). The results from the model were also used to allocate outside resources, establish new family roles, alternative routines, and effective forms of family communication to promote recovery (Bayat, 2007).

Discrimination against people with AIDS was investigated using the FAAR model. Zhi (2008) examined families with a member (parent or child) who had AIDS (parent or child). The model was used to determine whether there was an imbalance in the meaning the family gave to the crisis, how the family handled new demands, and the family's ability to handle the changes. Zhi reported that the communication skill level of the family, level of disease-related knowledge, and dysfunctional processing among the family members were significant predictors of functioning. The model proved useful in helping the family establish meaning to the family crisis. It was also helpful when trying to determine how the family handled their new demands, understood their level of dysfunction, and developed a plan for positive adaptation (Zhi, 2008).

Past study results have revealed, parents experience a significant stress increase when raising a child with special needs. Currie and Kahn (2012) investigated the stress families undergo when caring for a family member (child or parent) with a special medical or learning need. They revealed that families experienced significant stress associated with the demands of caregiving. Two phases of the model, adjustment and adaptation, were used to highlight the process experienced by families. The model was also used to evaluate family functioning prediagnosis, and Currie and Kahn revealed that

the model was an effective predictor of 3-year post diagnosis outcomes. The model demonstrated that positive change in families with better communication was associated with better use of resources and flexibility. The model also helped to show weakness for families in areas so that proper strategies could be implemented to assist them in their recovery (Currie & Kahn, 2012).

The findings from these studies revealed both the usefulness and flexibility of the FAAR model, as well as the importance of assisting families in crisis, especially those exhibiting areas of weakness and struggle (Currie & Kahn, 2012). Struggling families often require early intervention programs, as well as support services, but often times have nowhere to turn. Having established programs which provide families with outside support services becomes an important issue for the preservation of all families in crisis (Currie & Kahn, 2012). Also revealed was the importance of strong family relationships and good communication between family members (Currie & Kahn, 2012). When family relationships are strong, a family in crisis can transition more swiftly into recovery and eventually regain their state of equilibrium. Individuals from strong families perceive their family crisis more positively and most times react and adjust more easily (Currie & Kahn, 2012).

The Transformation of the Family Structure in America

During the past quarter century, the structure of the traditional American family has undergone many transformations. Changes in family structure and attitudes toward marriage and family have put stress and pressure on both parents and children. Although some changes such as an increase in women's rights and role options can be viewed

positively, Edmeades, Hayes, Hollingworth, and Warner (2010) reported that the majority of the changes have been considered challenging, including the increase in divorce rate, compromised financial security due to economic changes, and the negative attitudes toward marriage and family. Some psychologists even purported that the historical view of the American family structure is on the decline and in danger of extinction (Skolnick, 2010). Still others argue that the American family structure has never been static and that changes to its structure are inevitable and may prove to be positive, especially for women (J. Jones, 2009).

The Changing Role of Women

A number of changes within the American family structure directly affect women in society. Individuals getting married in the United States today are much older and more established in their careers than in the past. This change has had a direct impact on the age at which a woman has her first child. That is, women giving birth to their first child are considerably older than ever before in history. For the first time in history, the rates of women giving birth in their 30s have exceeded the rates of women giving birth in their 20s (Edmeades et al., 2010). This increase in later-age childbirth for women may be due to women's increased career focus, which often requires postponing marriage and family. Indeed, marriage was once considered a women's primary focus but is now considered secondary to a successful career. Having an established career has also allowed women to become financially independent and able to support themselves outside of marriage. This may be a contributing factor in the change in attitude toward

matrimony itself and the significant decrease in the number of marriages now taking place (Edmeades et al., 2010).

Divorce Rates

Whereas the number of couples who enter into marriage is on the decline, divorce rates have leveled after many years of steady increase (Baker, 2010). The current divorce rates in America are estimated to be at 50% for first time marriages, 67% for second marriages, and 74% for third marriages (Baker, 2010). Such high rates of divorce have changed the family dynamic. Remarriages commonly lead to blended families, single parent families, and families with unmarried parents also contribute to variations in the traditional family unit. Many children today will spend a portion of their childhood living in a single parent home (Baker, 2010). Other significant changes to the family unit include multiracial families, gay/lesbian families, and extended-family households (Rimalower & Caty, 2009). Important to note is that as the family structure has evolved, so have the responsibilities of the family members (Edmeades et al., 2010).

Financial Security

For most families, it is no longer possible for the father to work while the mother stays at home to care for the home and their children. Financial security now depends on the employment and combined income of both parents. When both parents work, younger children attend daycare or depend on individuals outside the immediate family unit for daily care (Yeatman, Sennott, & Culpepper, 2013). Attaining financial security may be an even more critical issue for single-parent homes. Many mothers and fathers who head single-parent homes run an increased risk of experiencing poverty. Moreover,

children growing up in single-family homes usually lack supervision because the single parent must work and typically has limited financial and community resources to rely on (Edmeades et al., 2010).

The most financially stable family type is the family with both a mother and a father. However, single-father homes have increased in number within the last 30 years and are currently the fastest growing family unit (Yeatman et al., 2013). Father-headed families are less likely to suffer from poverty and fathers are more likely to be holding a good job. Single-father families are also more likely to do better economically in all aspects of family life when compared with single-mother families (Yeatman et al., 2013). Thus, the homes most vulnerable to poverty are those headed by single mothers, who are at much higher risk of chronic poverty and holding lower income jobs (Edmeades et al., 2010). Unless the single mother is a little older and established in her career, the jobs available to her will most likely be minimum wage dead-end jobs.

Regardless of whether a mother or father heads the family, children raised in single-parent homes are at risk for experiencing many disadvantages. They are more likely to have lower educational achievement, more likely to have a child in their teens, have negative health effects, and are more likely to become welfare recipients as adults (Yeatman et al., 2013). In father-headed families, children have a higher risk of drug use, more school problems, and are more likely to take part in risky behaviors (Yeatman et al., 2013).

Possible Reasons for the Rise in Single-Parent Homes

One out of every two children born in the United States during the last decade will have spent some portion of his or her childhood in a single-parent home. Incidences of single-parent homes have increased considerably since the 1970s (Cherlin, 2010). Possible causes for this increase in single parent homes may be elevated divorce rates or the increased number of unmarried women giving birth or adopting children. A statement was issued indicating that 7 out of every 10 pregnancies of single women in their 20s were unplanned (Kost, 2015). These young mothers may also be unemployed or hold only a minimum wage-earning job, both of which increases their chances of living in chronic poverty. Children born to teen mothers are twice as likely to end up in foster care, have multiple caregivers, and are twice as likely to suffer abuse or neglect (Brown, 2010). The estimated cumulative public cost for caring for pregnant teens and their babies during the past 10 years was approximately \$161 billion (Brown, 2010). With a recent increase in unplanned pregnancies and an already elevated rate in teen pregnancies, this issue comes to the forefront of public health issues throughout the United States (Brown, 2010).

Increase in Numbers of Children Born With Special Needs

Despite differences in the family structure, most families in the United States are now experiencing complex lifestyles and increased demands, bringing about changes in all aspects of family life. As families in the United States deal with the new stressors of everyday life and extreme changes to the family dynamic, there are now increasing numbers of children being born with special needs (Halfton, Houtrow, & Larson, 2012).

This increase in numbers of children born with special needs may present unique challenges or stressors to the family unit.

For most parents, the first signs of a problem in the development of their child may be their child veering from the norms and milestones or exhibiting irregular patterns in infancy. For other parents, problems are not detected until the child enters school (Kayama, 2010). Problems that can be observed within a school setting suggesting that a child's development is abnormal can manifest as behavioral, emotional, physical, or academic variations. The child's disability can surface in a variety of ways, which may include a deficit in language or reasoning skills, hyperactivity, inability to sustain attention, or decreased perceptual coordination (Kayama, 2010).

For parents, the realization that there is a problem and the beginning stages of a diagnosis can be a stressful and emotionally devastating time (Halfon et al., 2012). Once parents are aware of or suspect a problem, they often need the assistance of both their medical professional and their school system, if their child is at schooling age and in need of early intervention. Federal law requires school districts to provide appropriate testing to determine whether a disability exists and whether there is a need for early intervention or academic services. A pediatrician can also help by determining whether the child is suffering from a medical condition that may be the source of or contributing to the problem (Halfon et al., 2012). Currently, 15.1% of children in the United States have special needs (U.S. Department of Education, NCES, 2015).

Parental Stress Following an Official Diagnosis

For most parents, receiving a diagnosis is the beginning of a long process that may include many years of stress and pressure. An official diagnosis may also cause a reaction of shock, distress, or grieving but also a sense of relief, as parents are no longer dealing with uncertainty. To add to this turmoil and stress, medical professionals may use terminology and abstract concepts parents find overwhelming and perplexing, causing increased confusion and feelings of helplessness (Obeng, 2010). The time span between a parent's suspicion and the official diagnosis has been shown to influence his or her feelings of satisfaction with regard to the efficiency and empathy demonstrated by involved professionals (Kayama, 2010). In addition, parents' initial experiences and perceptions on received care typically have a long lasting impact on their ability to cope with their child's diagnosis (Kayama, 2010).

Past research results have revealed, most families raising a child with a disability or chronic illness are likely to experience social, physical, and financial strain (Sung & Park, 2012). Parents of children with disabilities can become overwhelmed with the additional demands and responsibilities of family life, making them more prone to elevated levels of stress, sadness, guilt, depression, and grieving (Benzies et al., 2010). How parents manage additional family pressures directly influences the family's experiences in daily life, family cohesion, and any chance for a positive family outcome. Parental attitudes toward the required care regimen, either pessimistic or optimistic, are also important and have been found to exert a great deal of influence on family life (Hill & Rose, 2009). Parents unable

to manage increased stress levels might be struggling with time management, lack of knowledge about the diagnosis, a child's severe behavioral issues, or a lack of services and support available to them (Obeng, 2010). In such cases, parental stress management becomes an important issue for children with a disability, because living in a home with stressed parents doubles a child's chance of experiencing abuse or neglect (Obeng, 2010).

Severity of a Disability

Levels of reported parental stress are found to vary as a function of the severity of a child's disability; however, there is limited empirical evidence on this topic and most research on this topic has been conducted on children with autism disorders. Researchers investigating in this area have found that parents of children with autism spectrum disorder (ASD) report higher rates of stress intensity when compared with parents of children with other special needs as well as parents of typically developing children (Phetrasuwan & Miles, 2009). High parental stress rates have been strongly connected to the symptoms and behaviors of autism. Currently, researchers are still trying to determine whether high parental stress rates are due to the core symptoms of autism or the associated problems in behavior (Obeng, 2010).

Although results from some studies have demonstrated that children's behavior problems rather than their adaptive behaviors or the severity of a disability predicted maternal stress, other researchers have identified that the difficulties specific to each diagnosis can predict parental stress (Obeng, 2010). Tait and Mundia (2012) conducted a study on ASD and determined that the severity of autism as opposed to level of

functioning contributed to high parental stress levels. Based on these mixed results and the paucity of empirical evidence on this topic, additional research needs to be conducted to determine whether severity of disability can predict parental stress, especially in a special-needs elementary education population.

Family Coping and Stress Management

The implementation of family coping and stress management for parents of children with special needs is an important issue. When families are under a great deal of stress, outside support systems become a main source for parental acquisition of coping strategies and stress reduction techniques. The quantity and quality of social support parents receive has been shown to directly influence their coping capacity (Benzies et al., 2010). Support services the family might need may include social, family, or individual support, all of which may help to sustain the family's optimal functioning in everyday life. The pressure of stress within the family unit affects mothers and fathers differently, and they have been shown to differ in their stress management strategies. For fathers, alcohol abuse is a response to stress that can become a problem, whereas for mothers, excessive stress levels can lead to clinical depression (Sung & Park, 2012).

Elevated stress levels can also affect the relationship between parents and their children. It is important to note that parents' feelings toward their child's behaviors directly influence their relationship (Staples & Diliberto, 2010). Thus, if parents believe the child's behavior is intentional, they may feel responsible or inadequate in their parental role. Through support and education, parents will be less likely to blame themselves and may be able to take on a more proactive role in establishing a behavioral

treatment plan (Nur & Kavakci, 2010). Even when parents have been properly educated on their child's diagnosis, they are still unable to completely release themselves from the responsibility of the diagnosis, oftentimes leading to feelings of embarrassment and accountability for their child's disability (Halfon et al., 2012).

Stress Management Techniques

Parents dealing with stress usually engage in one of three main stress management approaches, including problem-focused, emotion-focused, or perception-focused strategies. Parents implementing the problem-focused strategy attempt to decrease their stress level by modifying the problem or situation they are experiencing (Halfon et al., 2012). Problem-focused strategies work to eliminate or decrease stress by taking control of one's life and relationships. The person must begin to understand their individual situation and implement the most rational action to avoid stressors in the future (McLeod & McKinnon, 2010). The individual must then regularly evaluate the pros and cons of each plan and design different options for dealing with the current and future stressors. Problem-focused coping works most effectively because it teaches parents how to eliminate their stressors. The model teaches the individual to identify the cause of their stress, how to eliminate or decrease the source of their stress, and then develop effective coping strategies for long-term success (McLeod & McKinnon, 2010). Parents implementing emotional-focused stress-reduction techniques attempt to reduce the emotional distress experienced in their situation (Halfon et al., 2012). Such stress-reduction techniques allow parents to alter how they experience potential stressors in their life while helping to reduce the potential for negative impact (Scott, 2012). With

emotion-focused coping, the parent does not wait for his or her life to change or focus on changing the inevitable; instead, they learn to accept and face the issues they are facing presently while also learning how to minimize the negative impact. Emotion-focused coping can help the parent reduce the levels of chronic stress he or she may be experiencing and allow both emotional and physical recovery (Scott, 2012). Common techniques used in emotion- focused coping may include meditation, journaling, and reframing (Scott, 2012).

Perception-focused coping strategies are implemented when the parents work toward changing negative perceptions of their family life. Typically through individual or group therapy, the parent tries to become more positive with his or her outlook on life and the family situation. This strategy encourages optimism, happiness, and humor through tough times as a way of changing an individual's perception for the better through each family situation or crisis (Scott, 2012).

Irrespective of the coping strategy used, therapeutic services are a vital part of rehabilitation for all families raising a disabled or chronically ill child (Halfon et al., 2012). In most families, seeking outside services depends on the parents' motivation to do so and is more likely to occur when the child's needs exceed the family's coping abilities. Such services can help set a positive psychosocial climate in the home, mitigate possibilities of abuse, and aid in the social development of the special needs child (Halfon et al., 2012).

Importance of Social Support

The amount of social support parents received from friends and relatives also influence their capacity to cope. Supportive relationships can help provide a safeguard from negative life events while also making the individual feel loved and valued (Obeng, 2010).

Not all relationships are of value for stressed parents and some may actually cause more harm than good. Indeed, society's negative reaction to any child's behaviors can imply to parents that their parenting skills and abilities are being evaluated and questioned (Obeng, 2010). Parents of all children may experience criticism and negative judgments on their parenting; however, parents of children with disabilities may be even more susceptible or bothered by such interactions because they can cause a parent to feel embarrassment and eventually lead to social withdrawal (Obeng, 2010). Regardless of the method chosen by the family, social support and coping strategies are vital in maintaining healthy family functioning (Currie & Kahn, 2012).

Life for families with a special needs child can be stressful, and prolonged elevated stress levels can influence the family's resilience and coping abilities (Benzies et al., 2010). Once a child reaches school age, parents have the additional pressure of negotiating or coordinating educational services for their child. This additional stress makes the already strained family life even more difficult to cope with, whereby the parents may become more susceptible to mental health issues and children more vulnerable to abuse and neglect (Phetrasuwan & Miles, 2009). Understanding strained family life is thus a vital issue for the preservation of families in society.

Research on Starting School and Increased Parental Stress

Family members experience different stressors as children progress through different developmental stages. Research indicates that stress may increase for families of children with disabilities during the school years. Children with a disability or special needs typically enter the school system through special education programs. Although the intent of the program is to assist the child and family, the enculturation into the program has been shown to be associated with feelings of added pressure for parents (Karande et al., 2009). The most troubling issue frequently reported by parents was their child's poor school performance and chronic low grades. Parents evaluated this problem as the most stressful because, even though their child worked hard, he or she still had low academic achievement and poor grades (Karande et al., 2009).

The second most troubling issue for parents was concern over their child's future. Parents questioned their child's ability to continue education long enough to complete college. They also reported that they believed without a college degree there would be limited opportunities for the child to become productive independent adults (Karande et al., 2009).

The third most frequently reported problem was concern about their child's behavior in school (Karande et al., 2009). Parents were most concerned with whether their child would act out aggressively toward others or intentionally be defiant. They reported believing that such actions would put a strain on their child's relationship with the teacher that would result in the possibility of future negative interactions taking place (Karande et al., 2009).

Finally, for working parents, scheduling continued visits to a clinic and therapy sessions was also reported to be a significant concern due to the time involved and coordinating family schedules. For most parents, marital and family relationship strain was a main concern (Karande et al., 2009). Being aware of the additional stress families typically experience when raising a child with a disability brings attention to the risks of adding further stress on already fragile families (Obeng, 2010). Although the public education system should be inclusive in educating all children and special education programs have been implemented to ensure that children with disabilities receive an appropriate education, recent research indicates that participation in such programs may exacerbate parental stress. Additional research is needed on this topic to determine whether there are differences in stress reported by parents participating in public education as opposed to alternative schooling approaches to find out whether parents would benefit and have reduced stress by selecting one educational approach over another.

Public Schooling and Special Needs Children

History of Special Education

The education of children with special needs has a long history. Contemporary special education, education for special needs and learning disabled children, marked its formal beginning after World War II (*Special Education News*, n.d.-a). It was during this time when special advocacy groups were formed and these groups began fighting for the rights of disabled populations. Groups such as United Cerebral Palsy and the Muscular Dystrophy Association started advocating

for the education of all children, even those born with mental, behavioral, emotional, or physical disabilities (*Special Education News*, n.d.-a). By the 1960s, more schools were allowing disabled children to enter, which prompted the establishment of Public Law 94-142, The Education of all Handicapped Children Act. This law required schools to provide free appropriate public education to students with disabilities in the least restrictive environment (*Special Education News*, n.d.-a).

Over the last 40 years, additional laws were established to protect disabled children and their rights to receive an education. Today, educating children with disabilities has become a common goal in all educational settings, and specialized college programs help to ensure that educators being trained today are knowledgeable in the field of special education. As a consequence, schools are better equipped to accommodate the needs of students with a wide range of disabilities and aid them in attaining a proper education (*Special Education News*, n.d.-a).

Special Education System Today

Special education systems have evolved considerably and are currently present in all public schools and most private institutions. Special education programs often begin in elementary school and continue all the way to the college and university level. Within each educational institution, special education departments are responsible for meeting the needs of all students within the special education system (McLaughlin, 2010). Their main purpose is to tailor the general

education curriculum to ensure special education students have access to proper and appropriate education, in order to minimize the effect of their disability on their educational attainment (McLaughlin, 2010). This establishes a leveled academic platform so a child with a learning disability has the same opportunity as a typically developing child to receive a proper education.

Current Influential Special Education Laws

Two highly influential special education laws were the driving force behind the special education system in schools today. In 2001, the Elementary and Secondary Education Act, Title I, No Child Left Behind Act was passed (McLaughlin, 2010). A couple years later, in 2004, the Individuals with Disabilities Education Improvement Act (IDEIA), was passed (*Special Education News*, n.d.-c). Due to the passing of educational laws, children with disabilities or chronic illnesses have access to an appropriate education in the least restrictive environment (*Special Education News*, n.d.-c).

No Child Left Behind Act

In 2001, the Elementary and Secondary Education Act, Title I, No Child Left Behind Act was created to regulate schools receiving Title I funding from the federal government (McLaughlin, 2010). The act was adopted to set national educational standards to ensure that students nationwide have the same chance to be successful, even in demographics where children were more likely to be left behind. McLaughlin (2010) noted that each state is required to set targets for overall achievement and then to use these targets to determine whether their

schools have made adequate yearly progress. As a part of this initiative, in order to assess academic progress, yearly standardized tests are given in math and English in third through eighth grades and once in 10th through 12th grades. Students must also be tested at least once in elementary, middle, and high school (McLaughlin, 2010).

Individuals With Disabilities Education Improvement Act

In 2004, IDEIA was passed. This law was created to ensure that children with disabilities receive the services they require throughout the United States. IDEA also regulates the early intervention services and special education services provided by states and agencies. This law currently affects 6.5 million eligible children (*Special Education News*, n.d. –c). The IDEIA was designed to be inclusive of common diagnoses to ensure that all children with a recognized diagnosis would be covered by the act. Indeed, several diagnoses, reflecting psychological disorders, conditions, impairments, and learning disorders, are covered by the act.

Common Diagnoses for Children in Special Education Programs

The IDEIA has defined and provided information about each disability under individual headings as a way to incorporate all children with learning disabilities enrolled in special education programs. The following disability descriptions and information are based on the mandates of the IDEIA.

Autism Spectrum Disorder

Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by social impairments, developmental disabilities, communication difficulties, and stereotypical patterns of behavior (Autism Society, 2011). It is estimated that 369,774 school-aged children in the United States have autism (U.S. Department of Education, 2011). Autism usually appears by the time a child reaches 3 years old and affects each child differently. Autism, or classical ASD, is the most severe form of autism, whereas other conditions along this spectrum include milder forms known as Asperger syndrome, Rett syndrome, hyperlexia, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified. Although ASDs vary significantly in nature and severity, they present in individuals from all ethnic and socioeconomic groups as well as every age group.

Although the causes of autism are still unknown, research suggests that the disorder has several causes (Autism Society, 2011). Autism is not curable, but early detection and intervention helps improve future outcomes. Autism has increased 600%, occurring in one in every 110 births, and one in every 70 boys born in the United States now have some degree of autism, as reported by K. B. Jones et al., 2015). Approximately 1.5 million Americans are living with ASD today (K. B. Jones et al., 2015). The Autism Society has projected the cost of caring for an individual with autism ranges from three million to five million dollars throughout their lifetime, and the United States spends approximately 90 billion dollars annually on this disorder (Autism Society, 2011).

Attention Deficit Hyperactivity Disorder

Attention deficit hyperactivity disorder (ADHD) is currently one of the most common behavioral disorders in school-aged children. The disorder affects 5.3 million families in the United States (U.S. Department of Education, 2011). It is a neurological condition caused by the malfunctioning of the brain's circuitry that manages self-control, inhibition, and attention. Some purport that people with ADHD may have a deficit in neurotransmitters in their brain that control behavior (U.S. Department of Education, 2011). Although these problems can usually be seen when the child is young, an official diagnosis will not be established until the child is older. Research is still being done to gain a better understanding of this disorder because the cause of ADHD has still not definitively established (U.S. Department of Education, 2011).

Emotional Disturbance

Emotional disturbance (ED), affecting approximately 387,368 or 8% of children in the United States, is a condition that encompasses a variety of behaviors that include a child's inability to learn with no explainable intellectual, sensory, or physical health interference factors (U.S. Department of Education, 2011). The ED category includes children with depression, anxiety disorders, bipolar disorder, schizophrenia, and children who are unable to build or sustain personal relationships. Children with ED display inappropriate behaviors or feelings under normal environmental circumstances and often develop physical symptoms or phobias connected to their psychological issues. For a child to be classified as ED, symptoms must be present for extended periods of time and must be severe enough to adversely affect the child's educational performance (U.S. Department of Education, 2011).

Common behaviors exhibited by children with emotional disturbance may include hyperactivity, shortened attention spans, aggression, impulsivity, withdrawal, unwarranted fear or anxiety, immaturity, self-injury, and learning difficulties. Severe symptoms include distorted thinking, excessive unprovoked anxiety, peculiar motor actions, and irregular mood swings. These children are often identified as having severe psychosis or schizophrenia (U.S. Department of Education, 2011).

The causes of ED and the mental disorders behind it are still not fully understood. However, various factors, such as heredity, brain disorders, diet, stress, and family functioning, have been thought to be contributing factors to emotional disturbance (U.S. Department of Education, 2011).

Mental Retardation

Mental retardation is a diagnosis that describes children who have limitations in communicating, mental functioning, social skills, or self-care. Mental retardation occurs in approximately 444,894 or 1% to 3% of all children in the United States (U.S. Department of Education, 2011). Children affected by mental retardation may learn and develop more slowly than do their peers. They are also more likely to have trouble learning and mastering skills in their personal lives and at home (U.S. Department of Education, 2011). The mental retardation category includes children with Down syndrome, fragile X syndrome, Prader-Willi syndrome, Williams syndrome, Klinefelter syndrome, and Turner syndrome (U.S. Department of Education, 2011).

The most common causes of mental retardation are genetics, health conditions, troubled pregnancies, and troubled births. Mental retardation is not a disease or an

illness, and it is not contagious. Although there is no cure for mental retardation, most children affected by mental disability can learn to do many things; it just takes them more time and effort (U.S. Department of Education, 2011).

Learning Disabilities

There are five categories of learning disabilities. Once a student is recognized as having a disability, the category of disability is diagnosed. The five categories of learning disabilities are spoken language, written language, mathematics, memory, and reasoning. There are currently 2,412,801 school-aged children in the United States with learning disabilities (U.S. Department of Education, 2011).

Other Health Impairments

The category other health impairment describes chronic or acute conditions that limit a child's strength, vitality, or alertness and causes an adverse affect on his or her academic performance. There are currently 703,912 children diagnosed with other health impairments. They vary greatly, but most result from infections, genetics, or environmental factors and tend to occur during prenatal, perinatal, or postnatal development (U.S. Department of Education, 2011). Yet, some are a result of an accident, or illness, and in some cases, the cause cannot be identified. Due to the significant variation in health impairments, no specific age of onset can officially be determined. However, this category is very important given that approximately 5% of children are affected, an increase of approximately 351% in the past 10 years (U.S. Department of Education, 2011).

Speech or Language Impairments

Speech or language impairments are defined as communication disorders that adversely affect a child's ability to perform academically because they typically involve problems in communication and oral motor functioning. Currently, there are 1,089,976 school-aged children in the United States with speech and language impairments (U.S. Department of Education, 2011). Such impairments can range from the inability to make simple sounds to the inability to understand or use language. In addition, some children may also exhibit limited motor functioning, which is needed for proper speech and eating. Loss of hearing, physical or mental disabilities, and neurological or brain disorders may all be causes of speech or language disorders. Other possible causes include allergies, excessive throat clearing, coughing, screaming, or yelling. However, professionals frequently cannot determine the true cause of a child's speech or language impairments (U.S. Department of Education, 2011).

Speech and language impairments are common and affect one in every 10 students. Approximately one million children are serviced through special education programs for some form of speech or language impairment (U.S. Department of Education, 2011). These impairments encompass a multitude of disorders that include processing disorders, articulation problems, oral and facial deformities, developmental and language delays or disorders, sensory integration disorders, phonological disorders, orofacial and myofunctional disorders, language delays or disorder, semantic and pragmatic difficulties, motor disorders, stuttering, and velocardiofacial syndrome (U.S. Department of Education, 2011).

Individualized Education Programs

Once a condition, disorder, or impairment is diagnosed in a public education student, an IEP is created for that student. Special education teachers can assist in developing an IEP for each student (*Special Education News*, n.d.-a). Curriculum modifications are made through the IEP, which allows the special education teacher to provide the teaching materials in a format tailored for specific needs, abilities, learning difficulties, and disabilities of each individual child. Special education teachers are also responsible for tracking and reporting students' progress, behavioral issues, social abilities, and academic development. In some cases, special education teachers are also responsible for monitoring and improving the students' emotional and social well-being (*Special Education News*, n.d.-a).

In most school environments, special education teachers are required to coordinate their work and communicate with the school psychologist, social workers/counselor, therapists, school administrators, teachers, and parents. Teachers are also responsible for helping coordinate the annual review of each of their students, which requires input from all of the participatory school staff. This initiative may include input from the school psychologist, the school counselor, classroom teachers, and special education teacher as well as the parents of the student. The annual review helps to determine whether the student successfully mastered the established goals, whether additional goals are needed, or whether an area has been met successfully and should now be removed from the IEP (*Special Education News*, n.d.-a).

Parental Involvement in Special Education

Parental involvement in education has become an important issue for both the federal government and the school systems. Laws have been passed to mandate parental attendance in specialized meetings and school districts have adopted strategies to encourage and nurture parental involvement (Snyder & Dillow, 2012). Parental involvement in their child's education is of particular importance when the child has a disability or special needs. However, as previously indicated, for some parents, attending specialized meetings, such as an annual review, is a source of great stress and pressure. Parents report feeling that the formality and structure of the meetings hinders their participation. Moreover, parents who do participate indicate that even when they are able to participate and share their views, they still tend to leave the meeting feeling as though their opinions had not really been considered. Some parents have suggested that they believe the staff had already made all decisions about their child's education prior to the meeting. Still other difficulties may be a sense of confusion or inferiority felt by some parents, due to their lack of understanding of the educational terminology often used throughout the meetings. Such negative experiences may lead to lack of parental participation, which schools currently report as one of their most significant problems (Snyder & Dillow, 2012).

Even though parents expressed negative experiences at the annual meetings, some still reported being generally satisfied with the overall outcome of the annual meetings when goals were clear, teachers seemed committed to executing goals, feelings of trust were established, and a mutual sharing of ideas took place. Parental feelings of

involvement throughout the school year in other school activities also determined feelings of satisfaction (Snyder & Dillow, 2012).

Homeschooling and Children With Special Needs

An alternative to enrolling a child with special needs into a traditional school system is the option of homeschooling. In the United States, many families are homeschooling children with special needs ranging from attention deficit disorder to severe multiple handicaps. Parents often feel they are better able to meet their child's special needs through individualized education, flexibility, encouragement, and support in their own homes (Home School Legal Defense Association [HSLDA], 2012). To homeschool their child with special needs, parents are required to fully disclose the child's special needs when filling out homeschooling paperwork. If the child still requires special services through the public school system, such services require permission from the director of the local special education program (HSLDA, 2012). There is limited research on the outcomes associated with homeschooling, even though there were 1.5 million homeschooled students between the ages of 5 and 17 in the United States in 2007 (U.S. Department of Education, NCES, 2015).

Modern homeschooling officially began in the 1970s. In the beginning, the desire to homeschool was met with a great deal of resistance from the traditional public education system (Noel et al., 2013). At first, children would be considered truant if they were being homeschooled. During this time, there was also the public argument that a child being homeschooled had limited opportunities for socialization and access to extracurricular activities. To address these issues and fight for their rights,

homeschoolers formed a support network, a precursor of the HSLDA. Forming this association in 1983 helped provide homeschooling parents with political support and assistance while continuing to strive for the establishment of homeschooling as a legitimate form of education. The HSLDA eventually turned into a nationwide organization with 12 regional officers and an elected chairperson by 1983 (Noel et al., 2013).

When modern homeschooling first began, parents reported varied reasons for choosing this form of education for their children. Some parents felt that traditional school systems did not appropriately educate students in specific religious beliefs. Others believed that homeschooling would afford a superior education. Still others feared violence within the public or private school system, and others just wanted to spend more time with their children (Noel et al., 2013).

With a powerful support system and a widespread use of technology, information available via the Internet in particular, homeschooling has grown substantially in popularity. The estimated number of children being homeschooled was over one million, and this number was projected to increase by approximately 15 to 20% each year (Noel et al., 2013). The homeschooling initiative has also gained enough power to keep state and federal regulations to a minimum, while also convincing congress to ban any inclusion in the No Child Left Behind Act, currently influencing traditional education systems.

Research on the educational outcomes of children being homeschooled suggested that homeschoolers are outperforming their public education counterparts. An academic outcome comparison of 5,124 homeschooled and public schooled students demonstrated

that homeschooled students outperformed students in traditional school settings in standardized testing composite scores. The basic battery of tests included reading, math, and language arts. The homeschooled students ranked 18 to 28 percentile points above public school averages (HSLDA, 2010). Even though the evidence demonstrating the enhanced academic success of homeschooled children is significant, comprehensive research in this area is still needed, especially when it involves children with special needs (Noel et al., 2013). Furthermore, there has been no research to date on the impact of homeschooling versus public schooling on parental stress and coping.

The issue of homeschooling children with special needs has become complex. Homeschooling, for some parents, can be a welcomed alternative to the education provided by the public school system. Alternatively, some school districts oppose the decision to homeschool children with special needs. For homeschooling parents, educating a child with special needs may be less stressful than public school; however there is no empirical evidence to support this claim. Indeed, homeschooling families are not currently required to follow a set curriculum. The flexibility may allow parents of children with special needs the ability to choose an appropriate curriculum based on their child's individual needs. In addition, a wide range of support mechanisms is available, whereby parents have access to internet instruction, the ability to choose their own educational materials, join homeschooling support groups, or utilize community-based programs (Noel et al., 2013). The consequences of these considerations need to be investigated empirically to determine if there are differences associated with homeschooling versus public schooling, especially as they relate to parental perceptions

of stress. The purpose of the current investigation is to add to the literature on this topic and to determine if parents of special needs students who differ in their schooling approach differ in their stress level.

Literature Related to the Method

As the purpose of the current investigation is to determine the relationships in parental stress levels between families who homeschooling and those who participate in public special education, and to determine if severity of disability is related to parental stress a quantitative research method and ex post facto research design is proposed. It is predicted that parents who participate in public special education will experience greater reported stress than parents who homeschool their special needs child. Although there is a lack of literature on research on this topic to date, justification for the proposed methodology can be provided by empirical research investigating the impact of adaptation and coping in families of children with behavior problems and similar circumstances.

As reported in this literature review, parental stress is often used as a dependent measure and child and parent demographic and personal characteristics serve as independent variables. Information on these variables is most often gleaned via self-administered survey or researcher-administered interview. In an effort to reach more participants and to encourage honest responding, it was determined that self-administered assessments would be preferable to an in-person researcher interview. Finally, although research comparing homeschooling and public schooling approaches often include measures of academic outcomes, the purpose of the current investigation is to evaluate

the impact of schooling approach on parental stress, therefore, no examination of academic outcome will be made.

Summary and Conclusions

The literature review presented an examination of the complex nature of raising a child with special needs and the factors that can affect parental stress levels. In the literature it has been established that family structure, parenting stress, coping strategies, and outside support are all very important in the lives of families raising a child with a disability. A comprehensive examination of the literature on the possible stressors associated with educating students with special needs in the public special education setting is provided, as well as information on the changing family dynamic, the vulnerabilities of families raising children with special needs, and the educational concerns and stressors for parents raising children with special needs. Finally, information was presented about existing examinations of special education within the school system, common diagnoses of children in special education, the option of homeschooling a child with special needs, and the importance of outside support for all families caring for a child with a disability. Information on research on the effects of public special education on parents was presented and information on homeschooling in general was provided as there is currently no research on the effects of homeschooling on parental stress. What is unknown is how different educational approaches result in different stress levels for families and parents. The current investigation will add to the literature on this topic. Chapter 3 includes a presentation of the research design and methodology proposed for use in this study.

Chapter 3: Research Methods

Introduction

The purpose of the current research was to examine the degree of stress reported by families with a school-aged special needs child and to determine whether stress level relationships exist as a function of school approach or severity of disability. An objective of this research was to investigate the possibility that educational programs, particularly those associated with public school system, placed additional stress on families with children with special needs. An objective of the study was to investigate the extent to which parents experienced increased stress levels associated with educating a child with special needs and whether schooling method (homeschooling versus public school) and the severity of the child's disability predicted increased parental stress levels.

Participants in the research study completed the self-administered questionnaire, FICD-20, developed by Trute et al. (2007); the CPI created by Crouse (2011) to determine the severity of the child's disability; and the ESS, which includes 15 additional questions created to reveal extent of increased parental stress caused by schooling a special needs child. A regression analysis was used to demonstrate whether parents' emotional stress can be predicted by two predictor variables: type of schooling approach (public special education programs or homeschooling) and the severity of the child's disability. This chapter will provide information on the research design and approach, setting and sample, instruments, and materials used in the current investigation. A review

of the procedures for data collection and analysis is provided as is a discussion of the ethical considerations implemented to protect participants' rights. The chapter concludes with a summary.

Research Design and Rationale

A quantitative approach and ex post facto research design was used for the current investigation. The methodology and design was considered appropriate as the purpose of this study was to evaluate quantitative score data with nonmanipulated independent variables in order to test specific hypotheses using statistical analysis.

Research Approach

A quantitative research method was used for the current research. The quantitative research method was appropriate when examining known variables and when examining the statistical relationship or differences between quantitative variables (Creswell, 2003). In the current investigation, specific research questions concerning the relationship among the quantifiable variables of schooling approach, severity of disability, and parental stress was evaluated. Quantitative research was also used to collect and analyze the numeric data.

Quantitative research was considered appropriate for the current study as the purpose of the study was to understand and describe the relationship of schooling approach and severity of disability on the variable of parents' emotional stress, as numerically defined. Quantitative methodology was also appropriate to explain how the variables influenced the questions in the research (Gay, Mills, & Airasian, 2006). In the current investigation, the influence of two selected independent variables, educational

approach and severity of disability on the quantitative dependent variables of parental emotional stress, were evaluated statistically by using regression analysis. A regression analysis was allowed for the determination of the influence of schooling approach and disability severity on parent emotional stress.

Research Design

The ex post facto research design was appropriate for investigating the comparisons of nonmanipulated independent variables (Heppner, Kivlighan, & Wampold, 2008). These designs were considered the most appropriate for the current research as the two independent variables for investigation, educational approach, and severity of disability, were selected variables and could not be manipulated. Therefore, a true experiment examining the impact of these variables was not possible, and the ex post facto design was considered the next highest in internal validity. Although causality cannot be determined in an ex post facto design, this design has the highest possible internal validity given the nature of these independent variables.

This design also allowed for statistical regression analyses. This analysis provided more information than a descriptive or correlation design as significant predictive relationships between the independent variables of schooling approach and severity of disability on the dependent variable of parental emotional stress can be identified. Given that there is a lack of research on this topic, this information was a valuable addition to the literature.

Research Questions and Hypotheses

Two research questions guided the current investigation. Although both questions focused on parental stress, one question was related to general parental stress associated with raising a child with a disability and the other question was related to parental stress exacerbated specifically by schooling.

Research Question 1. Can the degree of parent's emotional stress, as measured by the ESS, be predicted by the severity the child's disability or the choice of schooling (public school special education program or homeschooling)?

Ho1. The parent's stress, as measured by scores on the ESS, cannot be significantly predicted by the severity of the child's disability and choice of schooling.

Ha1. The parent's stress, as measured by scores on the ESS, can be significantly predicted by the severity of the child's disability and choice of schooling.

Research Question 2. Can the degree of parent's emotional stress, as measured by the FICD-20, be predicted by the severity the child's disability or the choice of schooling (public school special education program or homeschooling)?

Ho2. The parent's stress, as measured by scores on the FICD-20, cannot be significantly predicted by the severity of the child's disability and choice of schooling.

Ha2. The parent's stress, as measured by scores on the FICD-20, can be significantly predicted by the severity of the child's disability and choice of schooling.

Methodology

Population, Sample, and Sampling Procedures

Data were collected from parents of children with special needs / learning disabilities who were homeschooled or who were attending a public education special needs educational program. Parents of school-aged children, ranging in age from 5 to 18 years old, were invited to participate. The children of the selected parents had already been receiving special education services from their school district or using a special education curriculum for homeschooling. In order to examine the possible differences in parental strain and family demands, all parents selected for this study were the primary caretakers of the children with disabilities.

Only children with an already established disability were invited to participate. All families had at least one additional typically developed child (in addition to their disabled child) if invited to participate. The homeschooling and public education families were recruited in western New York, online parental support organizations run by Amy Dunaway, and Walden's online participant pool. The sample size for this project was 70 participants (33 parents of homeschooled children and 37 parents of public special education children). The size of the sample was determined by using a multiple regression formula for behavioral statistics (Gravetter & Wallnau, 2009) in order to achieve an alpha of $p < .05$ and a power of 80% or .8.

Instrumentation

In this research study, I used a self-administered questionnaire presented as one document. In total, participants were asked to respond to 92 questions.

The Family Impact of Childhood Disability Scale

The FICD-20 (see Appendix A) was designed to assess the impact of raising a child with a disability as rated by a parent (Trute et al., 2007). Permission to use the instrument was obtained (see Appendix B). The scale has a positive and negative subscale. The subscales can be combined to yield a total score that can predict long-term parenting stress. The questionnaire includes 20 positive and negative statements (10 positive and 10 negative), which parents evaluate on a 4-point Likert scale (Trute et al., 2007). The Likert scale is scored 1 (*not at all*), 2 (*mild degree*), 3 (*moderate degree*), and 4 (*substantial degree*). The scores for the 20 items (10 positive and 10 negative) were totaled for the combined impact score. The scores on the instrument can range from 20 (indicating low stress levels) through 80 (indicating high stress levels). An example of an FICD-20 positive statement is “the experience has brought us closer together,” and an example of a negative statement is “there has been unwelcomed disruption to ‘normal’ family routines.”

The FICD-20 questionnaire has already established high reliability and validity as an assessment tool for psychological intervention. An internal consistency reliability alpha of .71 for the positive subscale and .88 for the negative subscale has been reported (Trute et al., 2007). It is best utilized early in the intervention process as a tool to identify the effects experienced by parents with a child who has been diagnosed with a developmental disability or chronic illness. As a clinical assessment tool, it can provide practitioners with a better understanding of parental stress levels. The results from the

instrument can also provide information on how parental beliefs may interfere with parental or family adjustments in the future (Trute et al., 2007).

Educational Stress Survey

The ESS was developed to assess the level of stress a parent perceives from the special educational services required of his/her child (see Appendix C). The ESS was created as a survey containing 15 items, which were coded using the response scale 0 (*strongly agree*), 1 (*agree*), 2 (*disagree*), and 3 (*strongly disagree*). There were nine items that were reverse coded so that a higher score denoted lowered perceived parent stress of the special educational system required for his or her child.

In order to determine the psychometric adequacy of the ESS, the survey was pilot tested with 13 parents with a child receiving special educational services. Results from these 13 pilot study participants provided psychometric information of the ESS. First, the inter item reliability of the ESS was computed. With all 15 items, the Cronbach's alpha for the ESS was an acceptable $\alpha = .75$. However, when the item "The relationships my child has with his/her siblings are nurturing and supportive and are not strained because of the additional educational pressures,"¹ was removed, the Cronbach's alpha was a much stronger $\alpha = .90$. As such, the total ESS was computed from the remaining 14 items.

The total ESS was calculated from the 14 items; the total score was the sum of items. A higher score denoted lowered levels of perceived parent stress with the special educational services required of their child. Descriptive statistics were conducted on the total ESS (see Table 2). The mean ESS score was $M = 27.08$ ($SD = 8.41$), and ESS scores ranged from 10.00 to 39.00. Participant scores on the ESS were distributed

normally. The normal distribution of scale scores was validated by the skewness value of -0.46 (skewness value of 1.00 or higher indicates skewness) and the kurtosis value of -0.15 (a kurtosis value of 2.00 or higher indicates kurtosis). A Kolmogorov-Smirnov Z test provided confirmation of normal distribution of ESS scale scores, $z(13) = 0.14$, $p = .20$. The histogram of the ESS scores with a normal curve is presented in Table 2.

Cognitive Processing Inventory

The CPI (see Appendix D) was used to assess academic areas of difficulty and severity of a learning disability. Permission to use the instrument can be found in Appendix E. The CPI was created by Crouse (2011), a certified school psychologist, in order to determine deficient academic areas typically encountered by students with learning disabilities. The questionnaire contains 50 questions rated on a 5-point Likert scale. The Likert scale is scored 1 (*obvious difficulty*), 2 (*apparent weakness*), 3 (*average or uncertain*), 4 (*not a problem*), and 5 (*obvious strength*). Scores on the Likert scales were totaled; the highest score possible is 250 and the lowest score possible is 50. The questionnaire aims to assess processing skills and learning styles and to differentiate the different learning disabilities to identify areas of difficulty as a way of evaluating the severity of the child's disability (Crouse, 2011).

A split-half method was used to evaluate the internal consistency and overall reliability of the CPI. All items and subscales were randomly separated into two analogous groups and the split-half correlations were collected from the normative sample of 4,212 cases: 3.1 (women) and 3.2 (men). The correlations ranged from $.90$ to $.98$, which demonstrated that the CPI had very strong internal consistency (Crouse,

2011). The initial item selection and categorization resulted from published research findings related to emotional/behavioral development (Crouse, 2011). It also included Crouse's direct observations and data obtained through interviews conducted with parent and teacher. Factor analysis was used on the original item selection to ensure that each item was weighting on the specific emotional or behavioral factor being evaluated (Crouse, 2010).

Construct validity was obtained through correlational studies comparing internal and external *t* test scores derived from the CPI with scores obtained from the same participants using the Behavior Assessment System for Children (Crouse, 2011).

Overall, these reliability and validity studies provide very strong support for the CPI as a screening and assessment instrument for emotional and behavioral disorders.

Demographic Survey

A demographic survey was created to analyze and gather relevant information from parents that participated in the study (see Appendix F). This information was then used to further analyze the participants and their special educational needs.

Operationalization of Constructs

Dependent/Criterion Variables

The two dependent or criterion variables used in the study measured parental emotional stress. Parental emotional stress was measured with the FDIC-20 and the ESS, and both instruments yield continuous score variables. Information on how the scores were derived is presented later in this chapter.

The FDIC-20 is a published instrument with established validity and reliability estimates. The purpose of the assessment was to determine a parent's perceived impact of raising a child with a disability. The FDIC-20 was often used early in the intervention process and had been deemed a useful tool for practitioners. Although the inclusion of data on how educational approach and disability severity parental impact of overall stress was important, the FDIC-20 did not require the consideration of school- or education-related stressors parents had experienced. The purpose of the current investigation was to determine whether educational approaches contributed to parental stress, and thus, an additional assessment of perceived family stress exacerbated by schooling a child with a disability was deemed necessary. Because there was currently no published instrument on perceived stress level exacerbated by schooling a child with a disability, I developed such an assessment. The assessment of the unique and combined contributions of educational approach and disability severity on both forms of parental stress scores may be an important addition to the literature.

Independent/Predictor Variables

There were two between-subjects predictor variables: type of educational approach and severity of the child's disability. The categorical independent variable, type of educational approach had two levels, homeschool educational approach or public education special needs approach. Individuals were placed in one level based on their response to a question asking them to indicate the schooling approach currently used. No attempts were made to determine aspects about the homeschooling approach such as curriculum differences because the goal of the study was to determine if there were overall differences

between homeschooling and public special education. The participants' level was entered into a regression equation to determine whether schooling approach predicted parental emotional stress, in general and as related to schooling specifically. It was important to assess differences between these two educational approaches on both types of parental stress (overall stress and stress exacerbated by schooling) in a population of students with a diagnosed disability because information on this comparison may impact future educational practices.

The predictor variable, severity of child's disability, was measured by the Cognitive Processing Inventory, a continuous variable with a range of total severity scores between 50 and 250. Scores on the inventory were determined for each participant and their predictive relationship to parental emotional stress were also determined using regression analysis. Although some researchers purported that disability severity was related to parental stress, empirical investigations on the relationships among disability severity, parental stress, and educational approaches have yet to be conducted.

Data Collection

Following the approval of the Walden University Institutional Review Board, an initial e-mail or a mailed letter was sent to the appropriate support group organizations (identified via Google search). The letter explained the dissertation project and requested that the organization post information about the study. Contact information for the researcher was also included in the initial communication (see Appendix G for letter and Appendix H for study posting information). Interested parents used the contact information, and the researcher then provided an introductory letter of invitation. The

introductory letter explained the purpose of the study and that the study was completely voluntary and anonymous, that the participants could quit at any time, the time needed for completing the questionnaires, and the benefits/risks of the study. The introductory letter also contained a link to the study being hosted by Survey Monkey. Informed consent was assumed when the participant opened the survey link and submitted responses to the survey. Given that no identifying information was requested on the survey, the accuracy of the demographic data provided could not be verified.

All survey responses were kept confidential and Survey Monkey uses the SSL (Secure Sockets Layer), which is a way of transmitting private information on the Internet. The SSL creates a safe connection between a user and their server, encrypting the information transmitted through the web page, keeping all data safe. Moreover, Survey Monkey ensures that the researcher is the owner of the data collected and the only one with access to survey data. Survey Monkey requires users to create a unique password and username, and the surveys appear on secured areas of Survey Monkey with Secure Sockets Layer technology, which protects user information via server authentication and data encryption.

All data are being kept private and password protected and will remain in my custody. These precautions ensure data cannot be used by anyone else. All participants were redirected after the surveys were completed and a thank-you note (see Appendix I) was automatically sent. In the event that a parent felt emotionally stressed after answering the questions, a referral source was provided in the thank-you notes and my information was made available again (see Appendix J). All study participants were

informed (via study invitation and at the conclusion of the online survey) that the aggregated study results would be made available to them. In order to receive the study results, interested participants were asked to provide an e-mail address. I collected the e-mail addresses and forwarded the study results to interested participants following approval of the dissertation.

Data Analysis

Following data collection, the survey responses were downloaded into the Statistical Package for the Social Sciences, PASW Statistics 18. Descriptive and inferential data analyses were conducted. Descriptive analyses included ranges, means, and standard deviations of all dependent variables and demographic variables. Inferential analysis included two multiple regression analyses, with the dependent/criterion variable, parental stress levels (as measured by the FICD-20 and then as measured by the ESS) and the two predictor variables educational method (as indicated by response on the demographic questionnaire) and severity of a disability (as assessed by the CPI).

Multiple regression analysis is most often used with continuous predictor variables, even though a categorical variable can also be used. In the current study both a continuous predictor variable (childhood disability severity) and a categorical predictor variable (educational approaches) were evaluated, making multiple regression an appropriate evaluation technique and preferable to analysis of variance because this approach requires only categorical independent variables. The main advantage of using a simple/direct multiple regression analysis in the present study was that this approach determined whether one of the study predictors was responsible for predicting more of

the variance than the other by calculating the beta values for each predictor (Gravetter & Wallnau, 2009). The information gained from this study will add to the literature on this topic.

Threats to Validity

Threats to internal validity reflect design limitations and may impact the tenability of the findings, especially as related to inferring cause and effect relationships between the independent and dependent variables. The study design that mitigates most selection threats to internal validity, a true experiment, was not possible due to the nature of the independent variables. Choice of homeschooling versus public schooling is a family decision and could not be manipulated for this study (and likely not for any other educational or psychological research). Similarly, the variable of disability severity is impossible to manipulate because it is based on inherent individual factors. Because it was unethical to manipulate schooling choice and impossible to manipulate disease severity, a causal-comparative (ex post facto) design was used with selected independent variables. Although this design does not allow for the control of the selection threat to internal validity, this design was considered highest possible on the constraint continuum considering the nature of the independent variables. Strategies to augment other specific threats to internal validity were used and a one-time data collection procedure ensured that history, maturation, statistical regression, testing, and instrumentation threats to internal validity were controlled. Threats to experimental mortality were acknowledged, and it was demonstrated that participants from the public school group were more likely to complete the entire questionnaire; however, there were no demographic differences

between the groups of completers and non completers, so it is unlikely this threat was salient.

Threats to external validity are reflected in the limitations of the study. Because this is a newer area of research, I was also unable to find an established scale to assess parental stress caused by educating a child with special needs, so I created a 15-question instrument for this study that was rated on a Likert scale. A limitation of this study centers on the measurement, because there was a need for research literature that examined the psychometric quality of the survey the ESS and/or surveys created by other academics.

Ethical Procedures

Numerous efforts were made to ensure the ethical treatment of the participants in this research. All procedures were reviewed and approved by the Walden University Internal Review Board prior to study implementation. The study did not involve any deception of participants and included only minimal risks. In the event that parents experienced emotional turmoil, depression, worry, or anxiety prompted by the child's disability, they would have been referred to a source to help them deal with this situation. Information on coping was also provided by the researcher and available resources that could have aided them in their coping were disseminated in the follow-up note of thanks.

Participants' privacy and confidentiality were addressed by eliminating any personally identifying information on all questionnaires. Participants were assigned a number as another precautionary measure to maintain confidentiality. The researcher did not have access to any personally identifiable information after the data were collected,

except whether the respondent desired a copy of the results of the study. All study data was stored electronically and password protected on the researcher's personal computer. Respondents were advised to clear their computer caches after they submitted their survey responses.

Summary

The purpose of the current research was to examine the degree of stress reported by families with a school aged special needs child and to determine whether parental stress levels are associated with school approach or severity of disability. This chapter provided an overview of the methodology of the quantitative research approach. Seventy parents of homeschooled and public special education children participated in the study by completing four questionnaires to assess parental stress and disability severity. Multiple regression analyses were used to evaluate the research hypotheses that parent's scores on the ESS and the FICD-20 can be predicted by the severity of the child's disability and choice of schooling.

Once a child begins school, parents must battle for compassion, understanding, and the appropriate services their child requires. This may put additional stress on already strained family life and may also place family members at higher risk for mental health issues, abuse, and neglect, making this a vital issue for the preservation of families in society (Sung & Park, 2012). The information gained in this study will provide a better understanding of the difficulties many families experience when dealing with the education of their special needs children. Through awareness coping strategies can be implemented for parents just beginning to deal with schooling a child with a disability.

Chapter 4: Results

Introduction

With the continued increase in prevalence of children having special needs, it is vital to examine the consequences of different educational approaches on parental stress (U.S. Department of Education, 2011). Although researchers have suggested that participating in the special education system was stressful for parents, there was a dearth of research about how different educational approaches, such as homeschooling, affected parental stress. Such information is important because prolonged elevated stress levels have been shown to negatively influence a family's resilience and coping ability (Benzies et al., 2010). Accordingly, the purpose of the study was to examine how two predictor variables, schooling approach (special education via public school or homeschool) and disability severity, affected the degree of reported parental stress in families with a school-aged special needs child. The criterion variable, parental stress, was measured in two ways: emotional stress in response to raising a child with a disability via the FICD-20, and emotional stress in response to the special educational needs of a child with a disability via the ESS. Type of schooling was determined from demographic survey and degree of disability severity was measured via the CPI.

The data collection plan listed in Chapter 3 was carried out as planned without any changes. An initial e-mail was sent to the appropriate support group organizations in order to explain the dissertation project and request that the organizations post

information about the study. Contact information was included in the initial communication (see Appendix G for letter and Appendix H) for study posting information). Once interested parents sent a contact e-mail, an invitation/introductory letter was sent directly to them. In the introductory letter, I explained the purpose of the study, participation being voluntary and anonymous, time needed for participation, benefits/risks, and that termination was an option at any time. The introductory letter also contained a link to the study hosted by Survey Monkey. Informed consent was assumed if the participant opened the survey link and submitted responses to the survey questions. The surveys were collected from participants from November 1, 2013, until January 31, 2014. Participants completed surveys online via a Survey Monkey link that was e-mailed directly to participants from me or accessed directly from a web link through Survey Monkey. I had a Survey Monkey–encrypted and password-protected account. When participants answered the survey online, surveys accumulated within the account and were not accessible to anyone else. The data collection closed at the end of January 2014. The link to the survey was then deactivated, preventing any future use from participants.

Once all the surveys were collected, I downloaded the study data file into an SPSS 22.0 data file, which is a password-protected program, on my home computer (only individually/personally accessible). Any data on information (i.e., IP address) that could identify the participants were immediately removed from the Survey Monkey file. Data were then analyzed using SPSS 22.0. The remainder of the chapter provides information about the results of the data analyses.

Data Collection

Survey Completion Analysis

Study invitations were sent to 100 parents and of those, 79 parents elected to participate (79% response rate). Of those 79 participants, nine did not complete all of the survey questions but did answer all demographic questions presented earlier in the survey. Because all nine incomplete surveys were from homeschooling parents, a *t* test was conducted to determine whether the incomplete data sets differed from the completed data sets on the sociodemographic questions. According to the study results, there was no significant difference in marital status categorization, ethnic group differences, age of mothers and fathers, age of child, or gender of the child. Accordingly, the nine incomplete data sets were not included in any of the main study analyses, resulting in a final sample size of 70 participants.

Descriptive Statistics: Study Participants

Of the 70 participants, the majority (80%) were mothers and only 20% were fathers (see Table 1). The mothers and fathers provided information about themselves and, if married, their spouse. For example, participants were asked to provide age group information for both parents, resulting in complete age group data for both parents. The median age of mothers was 41 to 45 years and fathers, 46 to 50 years. The majority of participants reported they were married (63%) and of White/Caucasian race (83%).

Table 1

Descriptive Statistics: Participant Information (N = 70)

Variable	Frequency	Percentage
Gender		
Female	56	80.0
Male	14	20.0
Age of mother (year)		
18–25	5	7.1
26–30	2	2.9
31–35	15	21.5
36–40	11	15.7
41–45	22	31.5
46–50	7	10.0
51–55	1	1.4
56–60	5	7.1
61–65	1	1.4
71–older	1	1.4
Age of father (year)		
18–25	3	4.3
26–30	3	4.3
31–35	8	11.4
36–40	9	12.9
41–45	18	25.7
46–50	15	21.4
51–55	4	5.7
56–60	8	11.4
61–65	2	2.9
71–older	0	0.0
Marital status		
Married	44	62.9
Separated	1	1.4
Divorced	15	21.4
Single	7	10.0
Widowed	1	1.4
Data missing	2	2.9
Ethnicity		
White/Caucasian	58	82.9
Black/African American	4	5.7
Asian/Pacific Islander	2	2.9
Indian/Native American	1	1.4
Hispanic/Latino(a)	1	1.4
Multiracial	3	4.3
Data missing	1	1.4

Information about household composition was collected, and children of the participants ranged in age from 2 to 18 years old, with an average age of 11 years, and the median school grade reported was sixth grade (see Table 2). The range of household size (number of adults living in the home) was one to five, with an average of two; most participants reported that two children lived in their home, with a range of one to seven. The mean number of children with special needs living in the household was one.

Table 2

Descriptive Statistics: Continuously Coded Child and Household Composition Data
(*N* = 70)

Household statistics	<i>Mdn</i>	<i>SD</i>
Age of child	11.61	4.10
Grade of child	6.43	3.32
Number of adults in household	2.04	0.73
Number of children in household	2.44	1.32
Number of children with special needs in household	1.24	0.71

Note. *Mdn* = median, *SD* = standard deviation.

Each parent was asked to answer the questionnaire about their child with special needs. The results indicated 70% were boys and 30% were girls. A large number of children were identified/suspected of having a learning disability (71%), and the most common disorder was ADD/ADHD (80% boys and 20% girls).

Table 3

Descriptive Statistics: Child Information (*N* = 70)

Variable	Frequency	Percentage
Gender		
Male	51	72.9
Female	19	27.1

Type of schooling

Public school special education	37	52.9
Homeschool special education	33	47.1
Identified or suspected learning disability		
Yes	50	71.4
No	20	28.6
Reason for medication ^a		
ADD/ADHD	23	32.9
Allergy	7	10.0
Growth hormone	3	4.3
Emotional/behavioral problems	14	20.0
Special education services ^a		
Learning disability	25	35.7
Emotional-behavioral disability	12	17.1
Speech/language	34	48.6
Other health impairment	4	5.7
Identified or suspected ADD/ADHD		
Yes	36	51.4
No	34	48.6
Child had serious head injury		
Yes	7	10.0
No	63	90.0
Child has/had medical problems that have affected brain		
Yes	9	12.9
No	61	87.1
Child has behavior problems that interfere with school		
Yes	43	61.4
No	27	38.6

Note. ADD/ADHD = attention deficit disorder/attention deficit hyperactivity disorder.

^aFrequencies may not add up to 70 nor percentage to 100% for these questions, as not all of the children required medication or special education services; moreover, responses were not mutually exclusive (e.g., child could take medication for ADD/ADHD and allergies).

Descriptive Statistics: Study Variables

There were two predictor variables and one criterion variable in the study. The criterion variable of parental stress was measured in two ways: via the FICD-20 for emotional stress in response to raising a child with a disability and via the ESS for emotional stress in response to the special educational needs of a child with a disability.

Type of schooling status was determined by demographic survey and degree of disability severity was measured via the CPI.

Type of Schooling Status

The predictor variable of type of schooling status was measured via the demographic survey. Participants were asked to report what type of schooling their special needs child participated in (public school or homeschool). The results indicated that approximately half of the participants' children (53%) were attending a public school and the other half (47%) were homeschooled.

Disability Severity

The second predictor variable of severity of child's disability was measured via the CPI. The possible range of scores for the CPI is 50 to 200 points. A higher score on the CPI denote a less severe disability. In the current sample, the mean score for the CPI scale was 123 and the range was 50 to 193. The standard scores have a mean of 100 and a standard deviation of 15. The standard deviation provided a measure of the difference between the scores: ± 1.0 indicates moderate differences, ± 2.0 indicates significant differences. The farther the scores were from the mean, the more severe their disability (Crouse, 2011). When a participant's score deviated ± 1.0 standard deviation per score of 15 from the mean it indicated the participant's behavior was moderately different from the average child. When a score deviated ± 2 standard deviations per score of 15 it indicated the participant's behavior was significantly different than the average child. Skewness, kurtosis, and Cronbach's alpha analyses indicated that the variable was normally distributed and high in internal consistency reliability (see Table 4).

Parental Stress

The criterion variable of parental stress was examined as two conceptually similar, yet very distinct constructs: (a) emotional stress from having a child with special needs, assessed using the FICD-20; and (b) emotional stress from the special education needs and services required of a child with a disability, accessed via the ESS.

Family Implications of Childhood Disability Scale

Participants completed the FICD-20. The possible range of scores for the FICD-20 is 20 to 80 points. A higher score on the instrument denotes a higher parent emotional stress level (with regard to the child disability). In the current sample, the mean score for the FICD-20 scale was 53 and the range was 31 to 70. Skewness, kurtosis, and Cronbach's alpha analyses indicated that the variable was normally distributed and high in internal consistency reliability (see Table 4).

Educational Stress Survey

The possible range of scores for the ESS is 14 to 56 points. Higher scores on the ESS denote higher levels of parent emotional stress with regard to their child's special education experiences. In the current sample, the mean score for the ESS scale was 34, and the range was 20 to 52. Skewness, kurtosis, and Cronbach's alpha analyses indicated that the variable was normally distributed and high in internal consistency reliability (see Table 4).

Table 4

Descriptive Statistics: Study Variables (N = 70)

<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>K</i>	<i>α</i>
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CPI	123.00	32.28	-.155	-.313	.96
FICD-20	53.33	9.24	-.078	-.326	.78
ESS	34.67	6.86	.087	.278	.80

Note. Sk = skewness, K = kurtosis, α = Cronbach's alpha.

Inferential Analyses: Assumptions

Statistical analyses were performed to determine whether data met the required assumptions for multiple linear regressions, specifically reliability in measurement, normality in the distribution of scale data, lack of multicollinearity, and independence of errors. As indicated in the previous section the requirements of reliability and normality were met. Normality in the distribution of scale data is based on skewness and kurtosis values being as close to 0.00 as possible and definitively less than 2.00. Kurtosis characterizes the relative peakedness or flatness of a distribution compared with the normal distribution. Positive kurtosis indicates a fairly peaked distribution and a negative kurtosis indicates a somewhat flat distribution.

A Durbin–Watson analysis was conducted to determine independence of residual errors (Coladarci, Cobb, Minium, & Clarke, 2008; Tabachnik & Fidell, 2013). The analyses revealed that the assumption of independence of errors was met for type of schooling and severity of child disability predicted parents' emotional stress concerning their child's special education experiences (1.75), which indicated independence of errors (Coladarci et al., 2008). The type of schooling and severity of child disability also predicted parents' emotional stress (1.72), which indicated independence of errors (Coladarci et al., 2008).

Analyses for the assumption of lack of multicollinearity among the predictor variables were carried out via Pearson bivariate correlation, which can be conducted with categorically coded or continuously coded variables (Rencher & Christensen, 2012; Tabachnik & Fidell, 2013). The type of special education (i.e., public school or homeschooled) was correlated with severity of child disability, as measured by the CPI, parent emotional stress from child disability. The predictor variables were not significantly correlated, indicating that the variables were appropriate for inclusion in the multiple regression models.

Inferential Analyses: Research Questions

Research Question 1. The first research question asked, “Can the degree of parental stress, as measured by the ESS, be predicted by the severity of the child’s disability or the choice of schooling (public school special education program or homeschooling)?” This question was addressed via a multiple linear regression. In this multiple linear regression model, the type of special education (i.e., public versus homeschooled) and severity of the child’s disability, as measured by the CPI, were entered together as predictors of the dependent variable of parental stress resulting from the special education needs required for a child with a disability, as measured by the ESS. Although type of special education was not a significant predictor of parental stress, the severity of child’s disability moderately predicted parental stress (see Table 5).

Results from the multiple linear regression for the first research question showed that the overall regression model was not significant $F(2, 67) = 2.96, p = .058, R^2 = .081$. Based on the R^2 of .081, the model comprising the predictors of type of special education

and severity of child disability explained 8.1% of the variance in parental stress concerning child special education needs and services. The unique predictive values of the independent variables of type of special education and severity of child's disability on parental stress were then examined. Type of special education was not a significant predictor of parental stress, $\beta = -.165, p = .164$. Severity of child's disability did significantly predict parental stress, $\beta = .239, p = .046$. Based on the coding of variables, increased severity of child disability predicted increased levels of parental stress with regard to special education services of their child. Squaring the β of .239 for severity of child disability resulted in .057. Therefore, severity of child disability explained 5.7% of the variance in parental stress, as measured by the ESS.

Table 5.

Type of Special Education (Public vs. Homeschooled) and Severity of Child's Disability, as Assessed by the CPI, Predicting Level of Parent Emotional Stress, as Assessed by the ESS (N = 70)

Independent variable	<i>p</i>	B	β	95%	
				Upper	Lower
Type of special education	.164	2.25	-.165	-5.44	0.94
Severity of disability (CPI)	.046	0.05	.239	0.00	0.10

Note. CPI = Cognitive Processing Inventory; ESS = Educational Stress Survey.

Research Question 2. The second research question asked, "Can the degree of parental stress, as measured by the Family Impact of Childhood Disability Scale (FICD-20), be predicted by the severity the child's disability or the choice of schooling (public school special education program or homeschooling)?" This question was addressed via a multiple linear regression where the variables of type of special education (i.e., public versus homeschooled) and severity of child disability, as measured by the CPI, were

entered together in the regression model as predictors of the dependent variable of parental stress, as measured by the FICD-20. The type of special education (public schooling or homeschooling) was not a significant predictor of parental stress resulting from having a child with a disability. In contrast, increased severity of child disability moderately predicted increased levels of parental stress concerning their child's special education needs and services (see Table 6).

Results from the multiple linear regression for the second research question showed that the overall regression model was significant $F(2, 67) = .046, p = .77, R^2 = .088$. The individual predictive values of the two independent variables on parental stress were then examined. Type of special education (public versus homeschooled) was not a significant predictor of parental stress resulting from having a child with a disability, $\beta = .033, p = .777$. In contrast, increased severity of child disability significantly predicted increased levels of parental stress concerning their child's special education needs and services, $\beta = -.296, p = .014$. Squaring the β of $-.296$ resulted in an individual effect size of $.088$, which was the same effect size as the model R^2 of $.088$.

Table 6.

Type of Special Education (Public vs. Homeschooled) and Severity of Child Disability, as Assessed by the CPI, Predicting Level of Parent Emotional Stress, as Assessed by the FICD-20 (N = 70)

	<i>p</i>	β	B	95% B	
				Lower	Upper
Type of special education	.777	.03	0.61	-3.67	4.89
Severity of disability (CPI)	.014	-.30	-0.09	-0.15	-0.02

Note. CPI = Cognitive Processing Inventory; FICD-20 = Family Impact of Childhood Disability Scale.

Summary

The purpose of this study was to examine whether type of schooling status (public school special education or homeschooled special education) and/or the severity of the child's disability significantly predicted two types of parental emotional stress. The first type of parental stress was in response to raising a child with a disability and was measured using the FICD-20. The second type of parental stress was in response to the special education needs required of a child with a disability, and this construct was measured via the ESS.

Study data met the assumptions for multiple linear regression analysis. Scale data displayed good inter item reliability. Furthermore, data were normally distributed and did not show autocorrelation or multicollinearity. Two multiple linear regression analyses were conducted to address the two study research questions. The results from the multiple linear regression analysis for research question one indicated that type of schooling status was not a significant predictor of parental stress, as measured by the ESS; however, the degree of severity of child disability did significantly predict the level of parental stress. Moreover, as the severity of the child's disability increased, so did parental stress with regard to special education needs and services for their child.

Results from the multiple linear regression analysis for the second research question showed that the overall regression model was significant. Similar to research

question one, type of special education was not a significant predictor of parental stress, as measured by the FICD-20. However, the severity level of child disability did significantly predict increased levels of parental stress, as measured by the FICD-20. As the severity of the child's disability increased, so did parental stress resulting from having a child with special needs.

Chapter 5 will present and provide an interpretation of the study results. The chapter is structured according to topic and will begin with a review of the studies purpose, the studies participants, and the research questions. The results from the study research questions will then be summarized.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this study, two under examined constructs hypothesized to be associated with parental stress among parents with a child with a disability, type of educational setting (i.e., public special education versus homeschooled public education) and severity of child's disability, were investigated. One purpose of this study was to examine whether the type of special education setting (i.e., public versus homeschooled) for the child with a disability influenced the level of parental stress and how disability severity level was related. Two distinct operational definitions were created regarding parental stress, stress in response to raising a child with a disability, and stress in response to the special education needs required of a child with a disability.

Few researchers have compared parental stress levels across type of special education settings. Understanding how type of schooling affects stressors in families with a child with a disability is important for numerous reasons (Halfon et al., 2012). For example, prolonged elevated stress levels can negatively influence a family's resilience and coping abilities, especially in families with children who have special needs (Benzies et al., 2010). Moreover, stressors contributed by the school setting may make the already strained family life even more difficult to cope with, resulting in an increase in parental mental health issues and increase a child's vulnerability to abuse and neglect (Phetrasuwan & Miles, 2009).

The majority of literature about the effects of disability severity has been conducted with parents of children with autism or Down syndrome and not children with

a learning disability (Phetrasuwan & Miles, 2009). Moreover, the results from these studies in different populations have been equivocal. Based on these mixed results and the paucity of empirical evidence about the effects of disability severity on parental emotional stress, additional research was needed, especially in a special needs elementary education population.

The chapter opens with a review of the study purpose, information about the study participants, and the research questions. Results from the research questions are then summarized and an interpretation of study results follows. Information about the impact of the study results on social change is provided and study limitations and recommendations are then discussed. The chapter concludes with a summary.

This quantitative study was conducted with a sample of 70 participants (parents of a child with a disability). The majority of participants were mothers in their 40s, White/Caucasian, and married. Although previous researchers had conducted research with similar populations (e.g., children with autism or Down syndrome), the parents in this study had children with other types of disabilities, including learning disabilities, emotional-behavioral disabilities, speech/language disabilities, and/or other health impairment.

This study was designed to determine whether type of special education setting (i.e., public versus homeschooled) and severity of child disability predicted parental stress (measured in two different ways) reported by families with a school-aged special needs child. Severity of child disability, one of the independent variables, was measured by the CPI, and school type was evaluated by demographic survey. Parental stress was

measured two ways to determine stress in response to raising a child with a disability and stress in response to the special education needs required of a child with a disability. Emotional stress in response to having a child with special needs was assessed via the FICD-20, and emotional stress via special education needs, and services required of a child with a disability was assessed via the ESS.

Interpretation of the Findings

Multiple linear regressions were employed to answer the two study research questions. The first research questions was “Can the degree of parent’s emotional stress, as measured by the ESS, be predicted by the severity the child’s disability or the choice of schooling (public school special education program or homeschooling)?” In this multiple linear regression model, the type of special education setting (i.e., public versus homeschooled) and severity of the child’s disability, as measured by the CPI, were entered together as predictors of the criterion variable of parental stress (stress resulting from the special education needs required for a child with a disability) as measured by the ESS. Although the overall multiple linear regression model was not significant, univariate results from the multiple linear regression showed that the severity of a child’s disability did significantly predict parental stress. The finding that disability severity predicted parental stress was expected and consistent with previous research (Helgeson, Becker, Escobar, & Siminerio, 2012; Ingersoll & Hambrick, 2011; Miodrag & Hodapp, 2010; Parkes, Caravale, Marcelli, Franco, & Colver, 2011; Theule, Wiener, Tannock, & Jenkins, 2013), but this study was the first to include an assessment severity of a child's learning disability as a predictor of parental stress. Accordingly, the results from this

study add to the existing literature by extending it to a new population and providing support for previous researchers who demonstrated that child disability severity increases parental stress. Although it was expected that type of schooling would affect parental stress (Lois, 2010; Schetter & Lighthall, 2009), the type of school setting, and the provision of homeschooling, may be less stress provoking than initially thought, or that some of the potentially stressful factors inherent in public school special education are ameliorated by homeschooling.

The second research questions was “Can the degree of parent’s emotional stress, as measured by the FICD-20, be predicted by the severity the child’s disability or the choice of schooling (public school special education program or homeschooling)?” This question was addressed via a multiple linear regression where the variables of type of special education (i.e., public versus homeschooled) and severity of child disability, as measured by the CPI, were entered together in the regression model as predictors of the criterion variable of parental stress (stress in response to raising a child with a disability), as measured by the FICD-20. Results from the multiple linear regressions for the second research question showed that the overall regression model was significant. When examining univariate effects, severity of child disability drove the model significance, and increased severity of a child’s disability significantly predicted increased levels of parental stress concerning their child’s special education needs and services. Type of special education (public versus homeschooled) was not a significant predictor of parental stress resulting from having a child with a disability. Similar to the results obtained with the EES, findings about parent’s emotional stress, as measured by the

FICD-20, suggested that (a) severity of a child's learning disability is a predictor of parental stress and (b) type of school setting, and the provision of homeschooling, may be less stress provoking than initially thought.

In this study, parental stress, the criterion variable, was measured in two ways, emotional stress from having a child with special needs, assessed using the FICD-20 and emotional stress from the special education needs and services required of a child with a disability, assessed via the ESS. The type of special education setting (public versus homeschooled) did not significantly predict either type of parent emotional stress whereas severity of disability significantly predicted both types of parent emotional stress. Overall, different parental stress instruments yielded similar results, and the severity of a child's learning disability predicts parental stress levels and the type of school setting does not. The provision of homeschooling may be less stressful for parents than originally thought.

Type of Schooling

The finding that type of special education setting (i.e., public versus homeschooled) did not emerge as a significant predictor for either types of parental emotional stress was surprising. Although this was the first research to include this constellation of variables, the results did not corroborate the previous similar literature on this topic. Schetter and Lighthall (2009) posited that homeschooling might increase parental stress due to cost and the time commitment required; however, the current findings do not support this postulate, suggesting that type of schooling (and homeschooling) may not increase parental stress. The current findings also did not

support qualitative research by Lois (2010) who found that “the intensive demands of homeschooling left [mothers] stressed and dissatisfied with the amount of time they had to pursue their own goals” (p. 421). The type of school setting, and the provision of homeschooling, may be less stress provoking than initially thought. Although additional research should be conducted to verify these findings, the information gleaned from the current study may support the use of homeschooling for children with disabilities. One reason for a lack of significance in predicting parental stress may be that some of the potentially stressful factors inherent in public school special education (e.g., cost of schooling, the school day structure and duration, and the quality of curricula and educational materials) are ameliorated by homeschooling

Severity of Disability

Although research exists about parental stress caused by disability severity in certain populations, including cerebral palsy (Parkes et al., 2011), diabetes (Helgeson et al., 2012), ADHD (Theule et al., 2013), intellectual and development disabilities (Miodrag & Hodapp, 2010), and autism or Down syndrome (e.g., Ingersoll & Hambrick, 2011), this study was the first to include an assessment severity of a child’s learning disability as a predictor of parental stress. The results from this study will add to the existing literature that has demonstrated the severity of a child’s disability increases parental stress.

Results from this study also add to the literature by demonstrating that the severity of child disability significantly predicted a specific type of parent emotional stress, stress as it relates to their child’s special education needs. A review of the

literature documented no published quantitative research on this topic, and the qualitative research conducted with parents and children with special needs have not focused on special education stressors. Although parents of special needs children struggle with their child's special education needs (Algood, Hong, Gourdine, & Williams, 2011; Mackintosh, Goin-Kochel, & Myers, 2012; Papageorgiou & Kalyva, 2010), no researchers have examined parental emotional stress as a function of disability severity in the homeschool environment. The results from the current study make intuitive sense, that greater disability severity is associated with more parental emotional stress and that homeschooling more severely disabled children does not result in greater stress than schooling through the traditional special education setting. Although additional research should be conducted to determine whether the current findings can be replicated these preliminary results suggest homeschooling as an alternative to public school special education settings for even severely disabled students.

Limitations of the Study

As with all studies, this study had limitations. A significant limitation of this study was the lack of research on this topic. This study was in a new area and examined the construct of parental stress due to a child's special educational needs. I was unsuccessful when trying to locate research articles on the possibility that parental stress was increased while educating a child with special needs in a public school's special education program or being homeschooled. I was only able to find information on parental stress due to raising a child with special needs, but not specifically about educating a child with special needs. Therefore, I used articles with information on

parental stress related to special education meetings, dealing with teachers and administration, and poor academic performance, and was able to relate this information back to my study. For homeschooling, there was a little more information available on both the stress and advantages of homeschooling a special needs child.

There was also limited information on parental/gender differences as the main caregiver for children with special educational needs attending a public school or being homeschooled. Being the main caregiver of a child with special needs was a fundamental role in a family and gender differences would affect family life significantly, which would then directly impact the life of the child and their living environment. I was unable to locate research on stay-at-home fathers that homeschool their special needs child, so I researched the topic of fathers at home raising children, not limiting the search to only special needs children. I used more generalized information and related the relevant topics to this study.

Being a newer area of research, I was also unable to find an established scale to assess parental stress caused by educating a child with special need. This brought about another limitation to my study. I was then faced with the challenge of creating a scale that was both valid and reliable. After many hours of research and statistical analysis, I created the ESS. It has 14 questions rated on a Likert scale and was used in this study (it had 15 questions, but one question was removed). This scale is another limitation of this study because the psychometric measures of this scale need to be tested by qualified professionals to further establish both the reliability and validity of the scale.

Recommendations

Recommendations for Practice

In 2013, 6.5 million children were eligible to receive special educational services in the United States (U.S. Department of Education, NCES, 2015). With the continuing increase in prevalence of children with special needs in the general society, it was vital to examine the effects of different educational approaches on parental stress. Parents of children with special needs face multiple obstacles in educating their child and obtaining the proper services, resulting in stress, confusion, and frustration. The results from the current study indicate that parent emotional stress may not vary as a function of schooling type. Therefore, it is recommended that schools administrators, counselors, and educators provide better communication and parental education about special education services and programs as they coordinate public educational services and also consult about homeschooling. This recommendation is important as pertinent educational information is not effectively being shared with parents, hindering their ability to make appropriate judgments about the services and evaluations their children are receiving. Esquivel et al. (2008) found that attending public specialized education meetings, such as an annual review, could be a source of great stress and pressure for parents of children with learning disabilities, and that the formality and structure of the meetings hindered their participation, making them unlikely to participate and share their views. The parents also maintained that this situation created feelings of confusion or inferiority (Esquivel et al., 2008). It is recommended that parents who find service coordination and communication inadequacies stressful, and who are worried that homeschooling could be

even more stressful be informed that type of schooling (homeschooling versus public) did not prove to be a significant predictor of parent's emotional stress in this study.

Establishing better communication and providing parental education about special education services, would augment a parent's ability to advocate on behalf of their child's educational needs and services. Too often, parents do not realize the importance of this until the first conflict arises over their children's educational program.

Recommendations for Future Study

Numerous recommendations for future research emerge from this study. This study is the first of its kind to examine the construct of parent stress due to child's special education needs. Indeed, a survey that measured parent stress due to a child's special education needs could not be found in the literature, so I created a the Educational Stress survey to measure this construct. There were gaps in the special education literature that needed to be addressed. One gap centered on the measurement of parent's emotional stress due to their child's special education needs; there was a need for research literature that examined the psychometric quality of the survey used in this study, the ESS, and/or surveys created by other academics. Another gap was understanding specific parental stress triggers as they related to special education within the contexts of public special education and homeschooling. Additional recommendations for future research include similar investigations with a larger more diverse sample size and more representation from fathers. A cross-sectional study that examines how parent emotional stress varies as a function of parent and/or child factors, such as gender or age (of parent or child) may also be instructive. This type of study would be appropriate because it is descriptive and

can be done as a survey, and completed at one point in time. Another possibility for future study could be to collect qualitative data with open ended questions, allowing for parents to provide more personalized in-depth information about parental stress.

Implications

This quantitative study adds to scholarly literature in the field of education and family health in specific ways. The results of this study showed a significant association between severity of child disability and parental stress in children with learning disabilities. The majority of the previous research on this type of association has been conducted in different populations, including parents of children with autism (e.g., Ingersoll & Hambrick, 2011), and other disorders. While some researchers have examined parental stress (in general) among parents of children with a learning disability, only research with specific disorders (i.e., autism or ADHD) has been conducted (Smith, Romski, Sevcik, Adamson, & Barker, 2014). As the current findings also find support for the relationship between severity of learning disability and parent emotional stress perhaps stakeholders can be encouraged to consider learning disabilities as inherently stressful to families, as is cerebral palsy, diabetes, and Down syndrome. Moreover, the findings suggest that resources to mitigate parent emotional stress in populations of learning disabled children should be explored. The findings from the current study are especially timely because a report from the National Center for Learning Disabilities (2013) documented that 2.4 million students were recently diagnosed with a learning disability and 41% of special education students were diagnosed with a learning disability in 2011.

The results from this study are especially relevant for discussions about types of educational settings used to teach children with disabilities (i.e., public special education or homeschooled special education). Given that the current findings indicated that school setting did not play a significant role in parent emotional stress, it can be concluded that both types of education formats may be appropriate and healthy for families to consider. The findings from the current study present a contrast to previous postulates about homeschooling being stressful for families and suggest that additional research should be conducted. Moreover, the findings suggest that homeschooling for children at minimal as well as severe disability levels may result in similar amounts of stress, suggesting that parents with even severely disabled children can consider homeschooling, if stress was a factor in the decision. The results of this finding are also timely, as there has been an 18% increase from 2007 to 2012 in the number of children homeschooled in the United States (U.S. Department of Education, NCES, 2015). The current findings may help parents of children with learning disabilities to make a decision about the feasibility of homeschooling and may inspire other researchers to consider the societal importance of this growing population.

This study has positive social change implications because it offers insight and awareness to the stressors of parents educating a child with special needs. Once a child reaches school age, parents must battle for compassion, understanding, and the appropriate services their child requires. This may put additional stress on already strained family life and may place family members at higher risk for mental health issues, abuse, and neglect, making this a vital issue for the preservation of families in our society

(Sung & Park, 2012). The findings from the current research suggest that homeschooling and traditional public special education may result in similar stress levels for parents and that homeschooling even severely disabled children may not result in greater parental emotional stress. The information gained through this study may provide a better understanding of the difficulties many families experience when dealing with the education of their special needs child. Through awareness, coping strategies can be implemented for parents just beginning to deal with schooling a child with a special need. True social change will come when parents are better equipped with coping strategies for family stress and they receive supplementary information on navigating special educational services. With the constant changes in the education system and new educational demands, collaboration and preparation must be provided by the school system and professional psychologists to help foster a positive learning environment for all students and their parents/caregivers.

Summary

An informative body of literature has shown that life for families with a special needs child can be stressful and that the severity of the educational needs required for child can result in increased negative outcomes for parents (Esquivel et al., 2008; Karande et al., 2009; Miodrag & Hodapp, 2010; Parkes et al., 2011; Sarant & Garrard, 2014; Webster et al., 2008). However, few researchers have examined the associations between severity of child disability and parental emotional stress in learning disability populations. Furthermore, there was a dearth of research about parent stress resulting from their child's special education needs and the child's school context. Accordingly,

the purpose of this study was to examine whether parental stress was significantly influenced by type of schooling (i.e., public school special education versus homeschooled special education) and the severity of disability. Parental stress was measured in two ways: emotional stress in response to raising a child with a disability via the FICD-20 and emotional stress in response to the special education needs required of a child with a disability via the ESS. Severity of child disability significantly predicted both types of parent emotional stress. The type of special education setting, however, did not significantly predict parent emotional stress.

Results from this study provide awareness and acknowledgement of parental stress among parents with children having learning disabilities, in both school settings, and suggests no difference between the two types of schooling. The current findings support previous research suggesting that severity of child disorder is associated with more parental stress; however, the type of schooling and severity of a disorder suggest that homeschooling children with mild or severe disorders results in similar amounts of parental stress. It is recommended that parents be informed of these findings to facilitate their school choice decision making. It was also recommended that school stakeholders be advised of the findings, so that they may be better able to provide accurate information to parents and recognize that families of children with learning disabilities are likely experiencing stress. Additional research was recommended to replicate these findings, but in the meantime, it is suggested that homeschooling may be an appropriate alternative to traditional public special education, in terms of influencing parental stress.

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Appendix A: The Family Impact of Childhood Disability Scale

In your view, what have been the family consequences of having a child with disability in your family (please circle best answer):

1. There have been extraordinary time demands created in looking after the needs of the child with disability.
not at all mild degree moderate degree substantial degree
2. There has been unwelcome disruption to “normal” family routines.
not at all mild degree moderate degree substantial degree
3. The experience has made us more spiritual.
not at all mild degree moderate degree substantial degree
4. It has led to additional financial costs.
not at all mild degree moderate degree substantial degree
5. Family members do more for each other than they do for themselves.
not at all mild degree moderate degree substantial degree
6. Having a child with disability has led to an improved relationship with spouse.
not at all mild degree moderate degree substantial degree
7. It has led to limitations in social contacts outside the home.
not at all mild degree moderate degree substantial degree
8. The experience has made us come to terms with what should be valued in life.
not at all mild degree moderate degree substantial degree
9. Chronic stress in the family has been a consequence.
not at all mild degree moderate degree substantial degree
10. This experience has helped me appreciate how every child has a unique personality and special talents.
not at all mild degree moderate degree substantial degree
11. We have had to postpone or cancel major holidays.
not at all mild degree moderate degree substantial degree
12. Family members have become more tolerant of differences in other people and generally more accepting of physical or mental differences between people.
not at all mild degree moderate degree substantial degree
13. It has led to a reduction in time parents could spend with their friends.
not at all mild degree moderate degree substantial degree

14. The child's disability has led to positive personal growth, or more strength as a person in mother and/or father.

not at all mild degree moderate degree substantial degree

15. Because of the situation, parents have hesitated to phone friends and acquaintances.

not at all mild degree moderate degree substantial degree

16. The experience has made family members more aware of other people's needs and struggles, which are based on a disability.

not at all mild degree moderate degree substantial degree

17. The situation has led to tension with spouse.

not at all mild degree moderate degree substantial degree

18. The experience has taught me that there are many special pleasures from a child with disabilities.

not at all mild degree moderate degree substantial degree

19. Because of the circumstances of the child's disability, there has been a postponement of major purchases.

not at all mild degree moderate degree substantial degree

20. Raising a disabled child has made life more meaningful for family members.

not at all mild degree moderate degree substantial degree

Appendix B: Letter of Permission From Dr. Trute

Dear Lorraine Wehrmann,

We consider the FICD to be in the public domain, and therefore there is no charge for its use. I would appreciate receiving any reports or publications involving this measure, but this is done as a courtesy not a requirement.

The most recent version of the scale (FICD-20) can be found at:

Trute, B., Hiebert-Murphy, D., & Levine, K. (2007). Parent appraisal of the family impact of childhood developmental disability: Times of sadness and times of joy. *Journal of Intellectual & Developmental Disability, 32*, 1-9.

Recent publication on psychometrics of FICD-20:

Benzies, K. M., Trute, B., Worthington, C., Reddon, J., Keown, L., and Moore, M. Assessing psychological well-being in mothers of children with disabilities: Evaluation of the Parenting Morale Index and Family Impact of Childhood Disability Scale. *Journal of Pediatric Psychology* Advance Access published September 15, 2010.

The FICD is psychometrically stronger as a 20 item scale when compared to the 15 item version. We suggest that the positive and negative sub-scales be used separately, rather than using a combined cumulative score.

Attached is a copy of the 20-item FICD.

Best of luck with your dissertation research.

Barry Trute

Appendix C: Educational Stress Survey

1. My child's day-to-day educational needs are a great source of stress.

Strongly Agree Agree Disagree Strongly Disagree

2. I feel I have adequate support and understanding for my child's special educational needs.

Strongly Agree Agree Disagree Strongly Disagree

3. My child's special educational needs have caused an increase in marital strain.

Strongly Agree Agree Disagree Strongly Disagree

4. The relationships my child has with his/her siblings are nurturing and supportive and are not strained because of the additional educational pressures.

Strongly Agree Agree Disagree Strongly Disagree

5. My child's special educational needs have not made it difficult for him/her to establish friendships.

Strongly Agree Agree Disagree Strongly Disagree

6. I worry that my child's educational studies will never be a positive enjoyable experience.

Strongly Agree Agree Disagree Strongly Disagree

7. I worry that my child is not being encouraged to work to his/her potential because of his/her special educational needs.

Strongly Agree Agree Disagree Strongly Disagree

8. At times, I feel overwhelmed and isolated as a parent with a child with special educational needs.

Strongly Agree Agree Disagree Strongly Disagree

9. My relationship with my child has not suffered because of stress associated with the educational process.

Strongly Agree Agree Disagree Strongly Disagree

10. I worry that my child is not going to achieve the educational milestones his/her peers will achieve.

Strongly Agree Agree Disagree Strongly Disagree

11. I do not feel that my child's special educational needs has made him/her a target for bullying.

Strongly Agree Agree Disagree Strongly Disagree

12. I worry that my child's special educational needs makes him/her a source of tension and frustration for educators.

Strongly Agree Agree Disagree Strongly Disagree

13. I worry that my child does not have enough free/play time in the evenings because his/her special educational needs increases the time needed to complete homework assignments.

Strongly Agree Agree Disagree Strongly Disagree

14. My child's special educational needs has put a financial strain on our family because of the additional educational resources my child requires.

Strongly Agree Agree Disagree Strongly Disagree

15. I do not worry that my child's special educational needs will negatively affect his/her self-esteem.








Strongly Agree Agree Disagree Strongly Disagree

Appendix D: Cognitive Processing Inventory (CPI)

	Grade (if in school):	
	Age of child:	be sure to select age ▼
	Sex of child:	<input type="checkbox"/> Male <input type="checkbox"/> Female
	State in which you live:	▼
	Hand used for writing/drawing:	<input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Both
	Primary Ethnic Origin:	<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> Indian <input type="checkbox"/> Hispanic <input type="checkbox"/> Mixed
	Is any medication taken on a regular basis? If so, for what?	<input type="checkbox"/> No <input type="checkbox"/> ADD/ADHD <input type="checkbox"/> Allergy <input type="checkbox"/> Growth <input type="checkbox"/> Emotion/Behavior
	Has this child ever received any of these Special Education Services?	<input type="checkbox"/> No <input type="checkbox"/> LD <input type="checkbox"/> EBD <input type="checkbox"/> Speech/Lang <input type="checkbox"/> OHI
	Are there other family members with learning difficulties?	<input type="checkbox"/> No <input type="checkbox"/> Parent <input type="checkbox"/> Sibling <input type="checkbox"/> Aunt/Uncle <input type="checkbox"/> Grandparent <input type="checkbox"/> Cousin
	Were there any complications before or during birth?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?
	Has there ever been a serious head injury?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?
	Has there ever been any medical issue that may have affected the brain?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?
	Did this child have many ear infections during infancy or childhood?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?
	Is there an identified or suspected attention deficit disorder (ADD or ADHD)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?

	Does this child have an identified or suspected Learning Disability?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?										
	In your opinion, are there any behavior problems which may interfere in school?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?										
	Is there a visual problem that is not fully correctable with glasses?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?										
	Is there any hearing problem that is not fully corrected?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> ?										
	For the following 50 items please select the rating that best describes this child based on the scale to the right. Please complete all items for an accurate rating, then click the "Submit Rating" button at the bottom of the page.	<table style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Obvious Difficulty</td> <td>Apparent Weakness</td> <td>Average or Uncertain</td> <td>Not a Problem</td> <td>Obvious Strength</td> </tr> </table>	1	2	3	4	5	Obvious Difficulty	Apparent Weakness	Average or Uncertain	Not a Problem	Obvious Strength
1	2	3	4	5								
Obvious Difficulty	Apparent Weakness	Average or Uncertain	Not a Problem	Obvious Strength								
1	Ability to understand or remember questions, directions, or verbal instructions. Like when a teacher is just lecturing without any charts or pictures.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5										
2	Ability to quickly think through a difficult problem or situation. Does a better answer come later in the day or even the next day?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5										
3	Ability to remember new phone numbers and/or addresses.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5										
4	Ability to remember the names of characters or other specific details in a story or movie.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5										
5	Ability to remember or understand the basic idea of what happened in a movie or story - general	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5										

	information rather than specific details.	
6	Ability to get or stay organized. Does organization come easily?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
7	Ability to pay attention to instruction, activities, or games.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
8	Ability to remember or follow complex directions or requests (involving 3 or more steps). Does the request need to be repeated?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
9	Ability to read quickly and fluently. For ages 4-7, ability to remember nursery rhymes.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
10	Ability to quickly sound out new words. For ages 4-7, ability to quickly identify numbers and letters.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
11	Ability to understand what is read just using the "context" (without pictures). For ages 4-7, ability to understand what is read to him/her (without looking at pictures).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
12	Ability to understand what is read when there are pictures for clues.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
13	Handwriting neatness. For ages 4-7, ability to color neatly and stay within the lines.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
14	Writing mechanics (spelling, punctuation, capitalization, etc.).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

	For ages 4-7, ability to play visual "memory" games.	
15	<p>Writing content. Ability to express ideas in writing when the "mechanics" don't matter.</p> <p>For ages 4-7, ability to find the hidden pictures in "hidden picture" puzzles.</p>	
16	<p>Letter/word orientation. This is a "difficulty" if letters are ever reversed (b/d, etc.), out of order in words or starting words with the wrong letter.</p> <p>For ages 4-7, this is a difficulty if letters are often reversed.</p>	
17	<p>Ability to remember specific formulas for solving math problems.</p> <p>For ages 4-7, ability to remember basic addition and subtraction facts.</p>	
18	<p>Ability to estimate or figure out the answer to math problems without using a specific formula.</p>	
19	<p>Verbal speed - ability to talk quickly and clearly.</p>	
20	<p>Verbal fluency without noticeable pauses or groping for words. Is it difficult to come up with the right words to express a thought?</p>	
21	<p>Ability to solve visual, mechanical, or "hands on" puzzles or problems.</p>	

22	Ability to recognize voices (like on the telephone).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
23	Ability to stay focused and recheck tasks without making careless mistakes.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
24	Ability to be creative and come up with new ideas or new ways of doing something.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
25	General sense of humor. Do you (does he/she) see humor in lots of situations or have difficulty understanding what others think is funny?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
26	Rhythmic or musical skills (even if an instrument is not played).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
27	Ability to "plan" and to break large tasks into smaller parts or steps.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
28	Arts and crafts skills (drawing, painting, sculpture, etc.).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
29	Ability to visualize and imagine things in his/her head (pictures, faces, words, numbers, etc.)?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
30	Ability to accomplish long-term goals or projects.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
31	Directional skills (right/left, north/south, etc.).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
32	Ability to complete jigsaw puzzles.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
33	Ability to remember the words of new popular songs?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
34	Ability to remember the tunes to new popular songs?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

35	Ability to cope with an unexpected change in plans.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
36	Ability to cope with transitions from one activity to another.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
37	Ability to remember the rules to games.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
38	Ability to keep up with activities. Are you (is he/she) the first to start and/or finish something (4 or 5) or are others kept waiting (1 or 2)?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
39	Ability to sit still for long periods of time?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
40	Ability to control emotions and avoid overreacting to situations.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
41	Ability to cope with disappointment.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
42	Ability to begin tasks without being told or reminded.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
43	Ability to keep busy to avoid being bored.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
44	Ability to stick with or follow a schedule for homework or chores.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
45	Awareness of homework assignments (does he/she come home knowing what to do?).	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
46	Ability to find or gather necessary materials to complete chores or assignments.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
47	Ability to keep room or desk clean and organized.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
48	Awareness of how his/her behavior affects others.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

49	Sensitivity to the feelings of others.	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
50	Ability to stick with a difficult or unpleasant task.	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
	Participation Code (if you have one):	<input type="text"/> If you don't know what this is, leave it blank
		<input type="button" value="Submit Rating"/> <input type="button" value="Reset"/>

Appendix E: Letter of Permission

From: [Scott Crouse](#)

Date: 1/2/2012 10:26:33 PM

To: [LeeAnn](#)

Subject: Re: Question about parents rated survey for LD

Hello:

I suppose my rating scale (CPI Pro) could provide a measure of a parent's perception of the severity of their child's learning disability. You have my permission to use the instrument for your dissertation if you wish to do so. Here is a free registration code which will allow you to use the instrument for a full year - 3674345

Let me know if you have any other questions. Good luck with your project!

Scott L. Crouse, Ph.D.

<http://www.LDinfo.com>

Appendix F: Demographic Questionnaire

- 1) Age of Parents Mother _____ Father _____
- 2) Gender of parent filling out questionnaires Male or Female
- 3) Marital status Married Divorced Single
- 4) How many family members currently live in your home? Adults _____
Children _____
- 5) How many children with special needs live in your home? _____
- 6) How long has your child been participating in a public special educational program?
_____ /NA
- 7) How long has your child been participating in a homeschooling program?
_____ /NA

Appendix G: Invitation Letter to Organizations

Dear Agency,

My name is Lorraine Wehrmann. I am a student at Walden University in the psychology department under the supervision of Dr. Kathryn Mueller. I am inviting your agency to participate in a research project entitled, Comparing Stress Levels of Parents 18 or older Who Choose Homeschooling to Public School Education for Their Child with Special Needs. The purpose of this research project is to examine the degree of stress reported by families with a school aged special needs/learning disabled child, and to determine whether parents' emotional stress, can be predicted by the type of schooling approach (public special education programs or homeschooling) and the severity of the child's disability. Walden University's Institutional Review Board has approved this study.

The study will utilize a survey that was designed to ask your agency members questions regarding parental stress levels when educating a child with special needs. Participation in this research is completely voluntary and your members may refuse to participate without consequence, or withdraw from the study at any time after they begin. If you agree, your agency members will be invited to participate in the study and will be apprised of the informed consent procedure. The survey will take approximately 20 minutes to complete. Your organization members will receive no compensation for participating in the research study. Responses to the survey will only be reported in aggregated form to protect the identity of respondents. The results from the study will add to the literature on this topic and may be informative for public schools with special education programs and for parents of children with special needs. The results of the research may promote social change through increasing an awareness needed to create programs better equipped to meet the needs of at risk families and promote positive mental health and psychological wellbeing within each family. Neither the researcher nor the university has a conflict of interest with the results. Finally, the data collected from this study will be kept in a locked cabinet for five years.

There are no known or minimal risks or discomforts associated with participation in this research. In case of stress as a result of the survey or the need for immediate counseling referrals, the last window of the online questionnaire will provide information on coping strategies and a list of counseling resources that can be utilized.

To insure age and proper research procedures, auditors of the Walden University Institutional Review Board and regulatory authority will be granted direct access to the research data without violating the confidentiality of the participants. Further information regarding the research or the results of this research, can be obtained by provide an e-mail address to the principle researcher Lorraine Wehrmann at lorraine.wehrmann@waldenu.edu;

Questions about your rights as participants can be directed to the Walden University Research Participant Advocate at 001-612-312-1210 (USA telephone number) or email address irb@waldenu.edu.

Thank you for your time,
Lorraine Wehrmann

Appendix H: Parent Invitation/Consent Form

Dear Parent,

My name is Lorraine Wehrmann. I am a student at Walden University in the psychology department under the supervision of Kathryn Mueller. You are invited to participate in a research project because you are 18 or older and the primary and the care givers of a child between the ages of (5-12) with special needs/learning disability. Your child must be either homeschooled or attending a public school, and receiving special educational services. You must also have at least one additional typically developed child (in addition to their disabled child) enrolled in school or homeschooled. The name of this research study is, Comparing Stress Levels of Parents Who Choose Homeschooling to Public School Education for Their Child with Special Needs. The purpose of this research project is to examine the degree of stress reported by families with a school aged special needs/learning disabled child. Walden University's Institutional Review Board has approved this study.

The study will utilize a survey that was designed to ask you a few questions regarding parental stress levels when educating a child with special needs. Participation in this research is completely voluntary and you may refuse to participate without consequence. If you decide to participate in the study you may stop participating at anytime during the study. The survey will take you approximately 20 minutes to complete. You will receive no compensation for participating in the research study. Responses to the survey will only be reported in aggregated form to protect the identity of respondents. The results from the study will add to the literature on this topic and may be informative for public schools with special education programs and for parents of children with special needs. The results of the research may promote social change through increasing an awareness needed to create programs better equipped to meet the needs of at risk families and promote positive mental health and psychological wellbeing within each family. Neither the researcher nor the university has a conflict of interest with the results. The data collected from this study will be kept in a locked cabinet for five years.

There are no known risks associated with your participation in this research. In case you experience stress as a result of the survey or needs an immediate counseling referral, the last window of the online questionnaire will provide information on coping strategies and a list of counseling resources that can be utilized.

Further information regarding the research or the results of this research, can be obtained by provide an e-mail address to the principal researcher Lorraine Wehrmann at lorrance.wehrmann@waldenu.edu;

Questions about your rights about being a participants can be directed to Walden University Research Participant Advocate at 001-612-312-1210 (USA telephone number) or email address irb@waldenu.edu.

In order to guarantee anonymity, signatures will not be required. A parent's completion of the surveys will signify their consent.

Please consider printing or saving a copy of this consent form in case you have questions or would like additional information in the future.

Thank You,

Lorraine Wehrmann

Appendix I: Thank You Note

Dear Participant,

I would like to thank you for your participation in the Comparing Stress Levels of Parents Who Choose Homeschooling to Public School Education for Their Child with Special Needs. The information you shared will contribute to a better understanding of the differences in parental stress levels when educating a child with special needs. Once all the data are collected and analyzed, any data, pertaining to you, as an individual participant, will be kept confidential.

In the event that you are experiencing emotional turmoil, depression, worry, or anxiety prompted by your child's disability, please refer to the attached list of resource to help you deal with this situation.

If you are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please feel free to contact Lorraine Wehrmann at lorraine.wehrmann@waldenu.edu. I plan to share information through email or by mail. In particular, if you would like a summary of the results, please let me know by providing your email address or your home address.

Sincerely,

Lorraine Wehrmann

Appendix J: Counseling Resources

If you are located in Western New York, please use the following resources to find a therapist nearest you at <http://www.allwny.com/counseling>

- **Allegany Rehabilitation Associates**
- **Avalon Eating Disorder Center**
- **Bethany Insight**
- **Buffalo Psychology Group**
- **Central Referral Service**
- **Christian Counseling Ministries of Western New York**
- **Community Missions of Niagara Frontier**
- **Dr. Ken Condrell**
- **Entrust ADR Resources**
- **EPIC For Children**
- **Erie County Council For The Prevention of Alcohol and Substance Abuse**
- **Families CAN of WNY**
- **Hamburg Counseling Services**
- **Kids Crisis Services**
- **Kids Escaping Drugs**
- **Lake Shore Behavioral Health Inc.**
- **Michael A. Evola MS, CSW-R Psychotherapy**
- **Nike F. Carli CSWR Individual and Family Therapy**
- **Restoration Society Clubhouses**
- **Sisterhood Wellness Center**
- **Spectrum Human Services**
- **The Counseling Center of WNY**
- **The Mental Health Association of Erie County**
- **Mental Health Association in Niagara County**
- **Dr. Thomas Unger PH.D. Buffalo Psychology Group**
- **Village Clinical Group, Family Counseling**
- **Western New York Mental Health Counseling**
- **Western New York United**

If you are not located in western New York, please use the following to locate a therapist nearest you: <http://www.findatherapist.com>
