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Parents' Involvement in their Preschoolers Public Education: Families of Children with and without Disabilities

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Parents' Involvement in their Preschoolers Public Education: Families of Children with and without Disabilities

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Masters of Arts Thesis

Parents’ Involvement in their Preschoolers Public Education:
Families of Children with and without Disabilities

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Abstract

Parent involvement in early childhood education benefits the parents, the teachers, and most importantly the child. Parent involvement is a concept that refers to the participation of parents in their child’s development and academic learning, and is centered on the fostering of relationships between the home environment and the school environment (Fantuzzo, Tighe, & Childs, 2000). Currently, little research has been done on parent involvement in early childhood (and even less focusing on children with disabilities, specifically), and this study aims to fill this gap in the literature. Thirty nine parents of children enrolled in a public preschool program, which enrolls both children with and without disabilities, participated in this study, as well as the five teachers working at this program. The parents completed a survey packet which included questions about parent involvement both at home and within the school, as well as questions regarding the barriers that prevent parents from being involved. Upon the return of the packets, the teachers complete a brief questionnaire regarding the participating families’ involvement. The results revealed group differences based on the race/ethnicity of the family, the disability status of the child, and differences between barriers to home-based involvement and school-based involvement. These results suggest that family characteristics impact a family’s level of involvement and the barriers families’ face in regards to school-based and home-based involvement in their child’s early education.

Keywords: parent involvement; early childhood education; preschool; parenting; achievement gap; barriers; parenting stress; home-based involvement; school-based involvement
Parents’ Involvement in their Preschoolers Public Education: Families of Children with and without Disabilities

The family is the most important influence on a child’s development (Fantuzzo, Tighe & Childs, 2000). When a child enters an early childhood education program around age 3, it may be the first time that the child socializes outside of the family or will be in the care of another adult for an extended period of time. Parents play an important role in preparing the child for this new experience and in helping the child adapt to a new environment. By being involved in their child’s education, parents influence the child’s educational experiences, and help the child create a foundation for future learning (Waanders, Mendez, & Downer, 2007). This thesis considers parents’ involvement in their young children’s education, and examines levels of involvement both at home and within the school, taking into consideration family characteristics and contextual factors. This thesis also explores differences in barriers that prevent families of children with and without disabilities from being involved in their child’s education.

Parent Involvement

Parents’ involvement in their child’s education refers to the participation of parents in their child’s development and academic learning and is centered on fostering relationships and connections between the home environment and school environment (Fantuzzo et al., 2013). Mendez (2010) goes further and suggests that parent involvement is a multidimensional construct that is affected by three different domains: personal characteristics of the family (parent age, employment, education), contextual factors (neighborhood, community, resources), and learning opportunities (frequency and duration).
Teachers and school administrations encourage parent involvement by creating opportunities for parents to be present within the school (Powell, Son, File, & San Juan, 2010). These opportunities are important because parents and teachers can work together to develop the child’s skills, which in turn impact social, emotional, behavioral, and cognitive development (Blair, 2002). For example, attention skills and behavior regulation skills that are learned in preschool impact later success, as more demands are placed on the child each year (i.e. less free time, stricter schedules) (Powell et al., 2010).

Previous research has shown that the younger the child, the more important communication and unity between the parent and the teacher is (Sandberg & Vuorinen, 2008). Although the importance of parent involvement is widely cited throughout the child’s educational career, research on parent involvement in early childhood is scant, thus little is known about factors that contribute to parent involvement at this young age (Arnold, Zeljo, Doctoroff, & Ortiz, 2008). Part of the struggle when researching parent involvement in early childhood education is that many surveys do not comprehensively capture family involvement both in the classroom and at home; therefore, researchers are not capturing the entire range of experiences that may constitute family involvement (Fantuzzo, Tighe & Childs, 2000). There are a number of experiences that occur outside of the classroom that may help parents prepare their child for academic success. For example, a parent taking a child to the zoo, library, or other public venue may constitute as a learning experience for the child if the parent and child are engaging in conversation and the parent is teaching the child about his/her surroundings. Experiences like this may not be captured appropriately on family involvement surveys. When barriers such as a parent’s work schedule interfere with their ability to volunteer within the classroom, it
can appear as though the parent is not involved in their child’s education on survey measures focused on school-based involvement. It is important to measure involvement both within the school environment as well as outside of the school environment, in order to holistically represent parents’ involvement.

According to Epstein’s (2001) Theory of Overlapping Spheres, family life, school, and the community in which a child lives are three interactive, overlapping spheres of influence on the child’s life and contribute to the child’s growth, development, and education. When schools, families, and the communities work together to promote the wellness of children, the benefits can be significant (Epstein, 2010). If teachers and parents work as partners, environments which provide positive learning opportunities for the child can be created across contexts (Epstein, 2010). Positive, warm environments improve child development and decrease the risk for negative outcomes, whereas less than ideal environments may exacerbate risk factors and lead to poor developmental outcomes (Bradley & Caldwell, 1979). Because children spend their day in more than one environment, it is important that these settings communicate with one another to provide stability across learning environments (Epstein, 2010). According to Epstein, there are specific types of collaboration that must occur between the school, home, and community in order to provide the greatest number of benefits for the developing child (Epstein, 1996). These include parenting, communication, volunteering, learning at home, decision making, and collaborating with the community.

Epstein (1996) believes that home-based involvement benefits the child’s development. According to Epstein (1996), teachers should send home activities that directly correspond with what is going on inside the classroom. This way parents know
what their children are learning, and know which skills to focus on at home. Parents that are involved in their child’s education show the child that they care about education and that school is important (Waanders et al., 2007). According to Wen, Bulotsky-Shearer, Hahs-Vaughn and Korfmacher (2012), home-based parent involvement (for example, spending time together working on letter recognition) is the most significant predictor of future academic achievement. In their study focusing on parent involvement as measured by parent report of weekly and monthly academic activities within the home, Wen and colleagues (2012) found a positive association between parent involvement in the home and vocabulary scores for children enrolled in a Head Start Program. Similarly, Fantuzzo and colleagues (2013) report that home-based involvement is positively related to alphabetic knowledge, vocabulary, and mathematics. For children at-risk, like those raised in poverty or from racial/ethnically disadvantaged backgrounds, home-based parent involvement is more strongly correlated to competence in the classroom than school-based parent involvement (Burchinal, McCartney, Steinberg, Crosnoe, Friendman, McLoyd, Pianta, 2011).

The second kind of parent involvement is school-based involvement. According to Hilado and colleagues (2011), volunteering and attending parent-teacher conferences are the most common forms of parental involvement. Fantuzzo and colleagues (2000) report that parents’ volunteer hours in the classroom and parent workshop attendance is significantly related to how parents and teachers rate a child’s motivation for learning, social skills, and school readiness. Meaningful communication between the teacher and the parent(s) is the most important component in keeping both teacher and parent engaged in the education of the child (Fantuzzo et al., 2000). Larocque, Kleiman, and
Darling (2011) suggest that parental involvement is a crucial variable for school systems, as it is difficult for a school to teach every child all of the necessary material, hence strong family support and involvement can supplement what is being taught in the school (Larocque et al., 2011).

All families are unique, and offering a variety of ways for families to be involved is important so that the maximum number of families benefit. Studying families from diverse backgrounds is important because research shows that ethnic minority families suffer from particular stressors related to their minority status (i.e. acculturation stress, SES related stress, religious beliefs; Emmen et al., 2013). These unique stressors likely impact parent’s involvement in their child’s education, and need to be accounted for when researching or developing parental involvement efforts. According to Epstein (1996), family involvement practices in schools are the most beneficial when they are created with the help of parents as when parents help to create the policies and decisions, they are more likely to trust and respect the process.

**Parenting Stress**

High levels of parental stress can be created by the responsibilities of caring for a preschool aged child (Noel, Peterson & Jesso, 2008). At this age, children are still dependent on the parent and require parental resources including time, energy, and money (Noel et al., 2008). High levels of stress are often created when there is a mismatch between the demands of parenting and the resources that the family has available to meet these demands (Williford, Calkins, & Keane, 2007). The leading cause for parenting stress is economic disadvantage (Noel, et al., 2008). For families living in poverty, even fewer resources are available, which can jeopardize adaptive child
development outcomes (Dawson-McClure, Calzada, Huang, Kamboukos, Rhule, Kolawole, Petkova, & Brotman, 2015). For example, a parent that is highly stressed by the challenges of poverty may respond to their child in maladaptive ways, such as using harsh parenting techniques (including high control, physical punishment, and negative parent-child interactions), which in turn can lead to externalizing behaviors and poor self-regulation in children (Bradley & Corwyn, 2007; Theise, Huang, Kamboukos, Doctoroff, Dawson-McClure, Palamar, & Brotman, 2014).

According to Noel and colleagues (2008), mothers that are highly stressed tend to provide less stimulation for their child and are less responsive to their child’s needs, which can hinder the child’s social, affective, and cognitive development. For example, stressed parents provide less verbal labeling and have less extensive conversations with their child, resulting in children’s slower vocabulary development. Impacts on language development have lasting effects, as spoken language skills and vocabulary development in preschool can predict later reading achievement into the eighth grade (Noel et al., 2008). Increased parental stress can also lead to increased externalized behavior problems for the child, which in turn negatively impacts the child at school (Williford et al., 2007). This relationship is bidirectional, meaning that a child with behavior problems like aggression can also cause increased stress to the parent (Williford et al., 2007). These externalizing problem behaviors tend to decrease as the child gets older due to improvements in the development of emotion and behavior regulation skills, making early childhood an important developmental period when positive parent-child interactions and positive parenting practices can have important, lasting impacts (Williford et al., 2007).
Parenting stress and disabilities. The task of parenting a child with a developmental disability is often overlooked and undervalued by society, which is unfortunate given the numbers of parents faced with the complex task of parenting a child with a disability (about one in six children, or 15%; Boyle, Boulet, Schieve, Cohen, Blumberg, Yeargin-Allsopp, Viser & Kogan, 2011). Often times, parents of a child with a developmental disability are more financially unstable and experience more hardships surrounding money (Curran et al., 2001). Raising a child with a disability can cost approximately three times more than raising a child without a disability due to medical bills, professional services, and specialty care (Curran et al., 2001). Having a child with a disability often places demands on household resources that will change and require adjustment – changes often made by the mother, resulting in increased stress (i.e. not returning to work; Curran et al., 2001). This increase in stress can be attributed to the extra demands placed on the parents related to caring for their child, including feeding, toileting, and dressing their children for a much longer time period than a parent of a child without disabilities (Shearn & Todd, 2000), and many parents do not believe they are equipped with the specialized skills required for this extra care which leads to feelings of lower self-competence (Saloviita, Italinne & Leinonen, 2003). These cumulative stressors often mean parents of children with disabilities experience poorer physical and mental health (Miodrag & Hemp, 2010; Tadema & Caskamp, 2009).

Parents of children with disabilities often have more responsibilities related to their child’s education as well, because their children receive needed special services (i.e. speech therapy, occupational therapy, and physical therapy) included in their Individualized Education Plan (IEP; Sperling & Mowder, 2006). Parents can experience
frustration trying to obtain appropriate education for their child (Sperling & Mowder, 2006). The parents of children with a disability tend to be more focused on supporting the well-being and safety of their child, as well as school climate, teacher communication, and the knowledge level of the staff, whereas parents of children without a disability tend to be focused more on academic development (Sperling & Mowder, 2006; Stuart, Flis, & Rinaldi, 2006).

**Barriers to parent involvement**

One of the most important barriers that prevents parents from becoming involved in their child’s schooling is the parent’s own education level (Mattingly et al., 2002). Fantuzzo, Tighe, and Childs (2000) collected data from 641 parents and found that parents with a higher level of education were significantly more involved in school-based activities (i.e. parent-teacher conferencing). Further, for families of children with a disability, parents’ education level predicts the likelihood of special education (IEP) meeting attendance and input, and likelihood of needed service advocacy (Shriver & Kramer, 1993). Several researchers have documented that the quality of the learning environment and maternal involvement at home is correlated with the mother’s level of education, possibly because parents with a higher level of education feel more confident and competent when working on academic skills at home with their child (Hill & Taylor, 2004; DePlany et al., 2007; Magnuson, Sexton, Davis-Kean, & Huston, 2009).

**Achievement Gap.** Disparities in educational achievement are apparent when students’ outcomes include factors such as race/ethnicity or socioeconomic status (Cameron, Grimm, Steele, Castro-Schilo, & Grissmer, 2015). These disparities are often referred to as the achievement gap. This gap in learning can occur before school entry
and is broadened by early school experiences (Burchinal et al., 2011). Early childhood is a developmental period in which rapid learning occurs, and children who are not learning basic foundational skills during this period may fall behind (Cameron et al., 2015). Differences in the quality of a range of contextual factors, such as school climate, neighborhood, and parenting impact the development of these skills and contribute to the child’s long-term academic success (Burchinal et al., 2011). A review of the literature indicates that there are two main factors which contribute to this achievement gap: race and socioeconomic status (SES; Cameron et al., 2015). Although the SES-achievement gap and the race-achievement gap are heavily intertwined, there are some specific factors related to each that impact the development of the child.

Early childhood environments have long-term consequences for the child (Mollburn, Lawrence, James-Hawkins, & Fomby, 2014). Socioeconomic status influences the child’s environment in that parents with higher SES are able to provide more stimulating home environments and materials for their child, and are often more sensitive, supportive, and interactive (Dotterer, Iruka, & Pungello, 2012). Parents with a higher SES are also more likely to participate within the school, as they feel more like equal partners with school staff and are more likely to voice concerns and opinions (Hill et al., 2004; McCoach et al., 2010). Conversely, parents with lower SES tend to be less responsive and supportive, less interactive, and more negative when interacting with their child (Dotterer et al., 2012). These differences are critical given results from a study done by Raviv, Kessenich, and Morrson (2004), who found that parental sensitivity is directly related to the child’s language development, which plays an important role in the child’s development of early literacy skills. Noel, Peterson, and Jesso (2008) report findings that
support these results, and report that children from families with a lower SES develop vocabulary skills slower than children from higher SES. In their study, Anderson, Howland, and McCoach (2015) found that when a family’s SES was at least one standard deviation above the mean of the sample, the child was less likely to be recommended for special education services, which indicates that SES can impact a child’s educational achievement and learning ability by dint of access to available supports. Poverty limits parents’ resources which increases stress, and can negatively impacts the child’s physical, socioemotional, and cognitive development (Dotterer et al., 2012; Mollburn et al., 2014; Dawson-McClure, Calzada, Huang, Kamboukos, Rhule, Kolawole, Petkova, & Brotman, 2015). Lower SES can often be paired with a neighborhood characterized by poverty and poorer living conditions (Clements et al., 2004), higher rates of crime, and unemployment (Ellen & Glied, 2015). This may impact the child’s growth and development if the child is living in a neighborhood that is not safe to play and explore in (Clements et al., 2004). In their longitudinal study, Mollburn and colleagues (2014) found that the strongest link between resources (financial, social, etc.) and the child’s development occurs during the preschool period.

The other major factor that contributes to the achievement gap is race/ethnicity. According to Burchinal and colleagues (2011), black children begin school a half of a standard deviation behind white students on basic skills (number and letter recognition, verbal skills, and social skills) and are more likely to be identified as needing special education services -- a substantial race gap that has already occurred by the age of 3, and will widen as children progress through future grades. According to Chang and colleagues (2009), ethnic minority families are also at an increased risk of suffering from
elevated levels of stress (due to lack of resources, family support, etc.), with potential detrimental effects on the child. This increased stress is caused by a disproportionate burden of poverty, discrimination, and violence experienced by ethnic minority families (Dawson-McClure et al., 2015). Ethnic minority children are at more social risk because they are more likely to experience racism and harsh stereotypes (Burchinal et al., 2011). Teachers have lower expectations for minority children, not necessarily influenced by the children themselves, but from stereotypes and social judgments made against ethnic minority groups (Burchinal et al., 2011). Parents in ethnic minority groups have the additional responsibility to provide their children with shelter and protection from prejudices, discrimination, and systematic biases against their minority groups (Dotterer et al., 2012). This can result in minority parents being more harsh and strict in order to protect their children from these negative experiences (Dotterer et al., 2012). Racism is also more likely to impede opportunities in employment, income, and housing, resulting in families living in poorer neighborhoods, in need of more resources, and working more stressful, low paying jobs (Dotterer et al., 2012). Biases, negative stereotypes, prejudices, and discrimination related to their minority status may impede learning and development for children of ethnic minority and contribute to the achievement gap.

**Present Study**

The present study investigates the levels of home-based involvement, school-based involvement, and the barriers to parental involvement for the families of children attending a public preschool program. Although parent involvement is a common area of study, parent involvement in early childhood education settings has received less attention from researchers compared to later educational periods (i.e. middle school;
Clements, Reynolds & Hickey, 2004). This study addresses this gap by exploring differences in parental involvement based on parent and child demographic characteristics related to barriers to parental involvement. These characteristics include race, socioeconomic status, parent’s level of education, and the child’s age. We hypothesized that there would be statistically significant group differences on home-based involvement, school-based involvement, and barriers to involvement based on the above family characteristics, and whether or not the child has a diagnosed disability. Specifically, based on the extant literature summarized above, we hypothesized that:

H1: At risk families (ethnic minority status, lower socioeconomic status, lower parental education, and younger child age) will report a greater number of barriers to involvement and, as a result, lower home-based and school-based involvement.

H2: Parents of a child with a disability will report more involvement within the school, more involvement within the home, and a greater number of barriers impacting their involvement.

Methods

Participants

The present study took place at a public preschool program in central Massachusetts in 2015. This preschool program enrolls children with special needs (44% of total enrollment) as well as typically developing children across 9 classrooms (8 part-time classes and 1 full-day class). Twenty-four percent of the student body was reported as low income, about nineteen percent were reported as having a first language other than English, and the student body was about 62.79% male the year this study took place. Currently, no specific parent involvement program exists at this preschool, thus any
parent involvement opportunities are created solely by the teachers. All of the early childhood classrooms teachers (n=5) that work in this program were invited to participate and agreed to do so. All of the parents of children enrolled in the program were invited to participate in this study; a total of 39 parents of children enrolled in the preschool program participated in the current study (32% return rate). The majority of the participants were mothers (n=36; 92.3%); one grandmother, one father, and one foster parent (foster-mother) also participated. The parents were between the ages of 25 and 49, with an average age of 34.92 years. The majority of the parents reported being married and living with their partner (26; 66.7%). Overall, 46.8% (n=18) of participating families were from ethnic/racial minority backgrounds: eleven (28.9%) families reported being Hispanic/Latino, four (10.25%) families reported being Asian, and three (7.69%) families reported being Black/African American.

The demographic questionnaire also asked parents to report demographic information regarding their child enrolled in the program. The children who participated were between the ages of 3 years 10 months old and 6 years old, with the average age of 4 years 6 months and an average length in the program of 1.5 years. Of the thirty-nine children, 15% (n=6) were reported to have a diagnosed disability; 20% (n=8) of the total sample of children reported receiving services from an Individualized Education Plan (IEP). Refer to Table 1 for additional demographic characteristics.

Procedure

Over the course of a few days (not all preschool classes met all 5 days per week), the teachers placed English or Spanish survey packet in the backpacks of all of their students. Signed consent was waived in order to ensure the anonymity of the families.
Participation in the study was completely voluntary. Once a packet was returned, the teachers completed a brief questionnaire which asked them to rate the engagement of the family from their perspective. After a two week period, the researcher picked up all of the completed packets from the teachers.

**Measures**

The survey packets sent home with each participant included the Home Observation Measure of the Environment Inventory (HOME; Caldwell & Bradley, 2003), the Family Involvement Questionnaire (Fantuzzo, Gadsden, Li, Sproul, McDermott, Hightower & Minney, 2013), and three open ended questions created by the researcher to assess activities enjoyed by the families outside of school, and barriers that prevent the families from participating both at home and within the school.

**Demographics.** The demographic questionnaire created for this study contained questions regarding age, ethnicity, amount of time that the child spends in the preschool program, and whether or not the child has a diagnosed disability and is receiving services from an Individualized Education Program (IEP).

**The home environment.** The child’s home environment was measured using the Disability (DA) version of the Home Observation for Measurement of the Environment (HOME) Inventory ($\alpha = .93$; Caldwell & Bradley, 2003) and was adapted for this study. The HOME Inventory was created to measure the amount and quality of cognitive, social, and emotional stimulation available to the child at home (Bradley, Rock, Caldwell & Brisby, 1989). The HOME was designed to be completed by a trained researcher visiting the family’s home. While in the home, the researcher indicated whether or not materials (books, puzzles, etc.) or interactions between the child and parent(s) were
present. For the purpose of this study, all of the statements were modified so that parents – rather than an observer - could indicate whether or not the materials were present and the interactions and experiences were occurring within the home. Three subscales from the original version of the DA HOME were used in this study (28 items): Learning Materials (α = .72 for the current sample), Language Stimulation (α = .77 for the current sample), and Academic Stimulation (α = .71 for the current sample).

Chronbach’s alpha for the current sample are α = .91, α = .73, and α = .89, respectively. The Learning Materials subscales focuses on collecting information regarding materials (toys, puzzles, books, etc.) that are present within the home of the child. The Language Stimulation subscales focuses on gathering information regarding parent modeling and materials that occur within the home that encourage the child to build language and communication skills. The third subscale, Academic Stimulation, gathers information on whether or not the child is encouraged to learn academic skills while at home. Sample items include: My child has toys which teach colors, sizes, and shapes; At least 10 books are visible in my apartment/home (Caldwell & Bradley, 2003). To score this measure, the total number of “yes” responses is totaled to reveal the involvement score for each subscale.

**Family Involvement.** Family involvement was measured using the Family Involvement Questionnaire – Short Form (FIQ-SF; Fantuzzo et al., 2013). The FIQ-SF is a 21 item scale that measures a family’s involvement in their child’s education in early childhood education settings. It is a 21-item self-report scale rated on a 4-point Likert scale (1 = rarely; 2 = sometimes; 3 = often; 4 = always). The FIQ-SF is broken into three subscales measuring different aspects of family involvement. The first subscale, Home-
School Conferencing (α = .85), measures the communication that occurs between the teachers and the families regarding the child’s social experiences and educational development (Fantuzzo, Tighe & Childs, 2000). School-based Involvement is the second subscale. This subscale measures the engagement of the parents within the school setting (α = .85; Fantuzzo et al., 2000). The third subscale within this measure is Home-based Involvement. This subscale measures the educational experiences available to the child at home (α = .81; Fantuzzo et al., 2000). A sample item from this measure includes: “I take my child places in the community to learn special things (e.g. zoo, museum, etc.).”

**Teacher Questionnaire.** Teachers were asked to complete brief set of demographic questions (age, number of years licensed as an early childhood teacher, and number of years teaching in this specific program), as well as a brief questionnaire aimed at capturing their perceptions of how involved (at home and at school) a particular participating parent was. The questionnaire consisted of five items created by the researcher. The items were rated on a 4-point Likert scale (1 = Never; 2 = Rarely; 3 = Often; 4 = Always). A sample item from this measure includes: “This parent asks me about their child’s progress at pick-up and drop off”. This measure was scored by totaling all items.

**Data Analysis**

Overall, the number of missing data points was small (8.72%), hence mean imputation was used prior to analysis for all quantitative measures. The qualitative results captured through the open ended questions contained some missing data as well. Overall, two of the participants (5.13%) did not answer any of the three open ended questions. For the first open ended question, there were two additional participants (5.13%) that did not
record an answer. Three additional participants (7.69%) did not record an answer for the second question, and one additional (2.56%) participant did not record an answer for the third question. Because this was qualitative data, the missing data was left blank and these participants were not included in the thematic analyses.

Independent samples t-tests and an ANOVA were used to test the two hypotheses, concerning group differences. For these tests, participants were grouped into dichotomized categories for minority status, education, and income, while participants were broken into three groups based on child age (3, 4, or 5 years old). These dichotomized categories were used based on the median splits for each category. A t-test was used to test the second hypothesis, looking at differences between students with an Individualized Education Plan and without. Differences in the barriers described by parents in the open ended questions were analyzed using thematic analysis and inductive reasoning methods via the data analysis software Dedoose. This software aids in the coding and analysis of qualitative data by allowing unique codes created by the researcher to be applied to the statements uploaded into the software. These codes then create larger themes that are present within the data. Inductive reasoning methods allow the researcher to look across all of the data without first creating a hypothesis (EBN group, 2000). This method allows the data to guide the researcher, rather than trying to disprove an already created hypothesis. Similar to inductive reasoning, thematic analysis is a method that is used to identify, analyze, and then report patterns that are present across a data set (Braun & Clarke, 2006). The coding schemes then informed the larger themes present within the data.

**Results**
Qualitative Themes

Using inductive reasoning and thematic analysis, patterns emerged from responses to the following open ended questions:

1. Please list obstacles that prevent you from being involved in your child’s classroom.
2. Please list obstacles that prevent you from being involved in your child’s education at home.
3. What are you and your child’s favorite activities to do together either at home or in the community?

Overall, thirty-seven parents responded to the open ended questions, only 2 parents failed to respond to any of these items. First, the researcher read through all of the responses with an open mind, in order to pick up on any recurring responses or themes within the data. After all of the responses were read through, the researcher began to assign broad codes to the data, condensing similar responses into labeled codes. These broad codes were again condensed, resulting in nineteen themes and three sub-themes (see Table 2).

The first open response question, which asked parents to list obstacles that prevented them from being involved in their child’s classroom, prompted similar responses from many of the parents. Ten out of the thirty-seven (27.02%) respondents indicated that not feeling needed within the classroom setting prevented them from being involved in their child’s education at school, coded as “Not Needed/No Need”. Some of the responses within this theme were “I have not been approached to participate”, “We haven’t been made aware of any opportunities to do so”, and “There aren’t enough school meetings for the parents".
Providing childcare to other children or younger siblings was another major theme, which acted as a barrier for involvement both within the home and at school. Seven of the respondents (18.92%) recorded that childcare interfered with their ability to volunteer within the classroom. Specifically, one parent reports that she “has other children I watch while at school”, and another parent indicated that she has “a daughter that doesn’t go to school yet”. Without care for these other children, it is difficult for the parent to be present in the classroom. Two parents reported that “younger siblings” acted as a barrier. These siblings require the parents’ attention, therefore leaving less time for the parent to work on academic skills with their other child while at home. There were a few themes that arose specifically regarding barriers to home involvement. Two of the respondents indicated that household chores got in the way of being involved in their child’s education identifying “lack of a planned routine and help” as a barrier to involvement at home, and two parents indicated that they wished that there was more time in the day to get everything done at home, responding that “we’ve done a pretty good job of being involved at home, but could always use more time in the day”.

The third open ended question asked parents to report activities that they like to do with their child either at home or in the community. Responses ranged from academic activities within the home, to visiting town establishments (i.e. restaurants, library, parks) and playing in nature. The category that received the greatest number of responses (20 respondents, 51.28%) contained activities related to reading, writing, or working on other academic skills. Six parents responded that their child liked to do puzzles while at home. Because these are skills that benefit the child while at school, responses citing puzzles as
a favorite activity were compiled into a subcategory underneath the larger category of reading/writing/academics.

The second largest category featured responses related to being outside in nature. Seventeen parents (45.96%) cited activities in nature, for example one parent reported that her child liked to “play outside in the dirt”, while another parent responded that her child liked to “be in the woods or involved in nature in any way”. Related to nature and the outdoors, sixteen parents indicated that their child liked to go to parks or playgrounds specifically; these responses were coded as a subcategory under the larger nature category. One parent wrote that one of her child’s favorite activities was to go to “local parks and playgrounds”, while another parent wrote that her child enjoyed “going to the park to meet with friends”.

The third major category created from responses to the third open ended question was Physical Activity/Exercise. Eighteen parents (48.64%) reported that their child enjoyed taking part in physical activities such as “swimming” or “t-ball and flag football”. Going for a walk was the one of the most popular physical activities, as was playing sports - both were cited by ten of the eighteen parents in this category. Popular sports included soccer, t-ball, and golf. Swimming was the third most popular physical activity, which was quoted by five parents. Another popular activity included riding bikes (3 parents).

The fourth category was named Visiting Town Establishments, and featured responses related to visiting a place within the community. Fifteen out of the thirty-seven respondents (40.54%) reported that their children enjoyed visiting various places in town with their family. Some families reported more broad activities, such as going to “town
events” or “community events”. Other families reported more specific places that they liked to visit. One family reported that they liked to “go out and explore new places such as food trucks and book stores”. The library was the most popular place to visit, as it was cited by nine of the respondents.

Similar to visiting town establishments, many parents cited that their children enjoyed taking day trips to take part in activities or visit places outside of the family’s immediate community. These activities further away from the home make up the next category, Day Trips. Five of the eleven respondents within the category indicated that their family enjoyed visiting museums, such as the ecotarium. Another popular place to visit was the zoo or aquarium, which was cited by five of the eleven respondents. There was also a subcategory featured under the broader category of day trips. Eight respondents indicated that their families enjoy visiting friends and family members. One respondent wrote that his/her family likes to “go out to eat as a family or have dinner including grandmother, aunt, and uncle.”

The remainder of the categories featured favorite activities that were done inside the home. Arts and crafts were a category enjoyed by eights of the families. Specific activities featured in this category are “painting”, “drawing”, and “coloring”. One respondent indicated that her daughter liked to “draw with her dad”. Another category was chores, which was cited by five families. Two parents said that “taking care of the dog” was a favorite activity, while another parent said that “cleaning together” was an activity that the family enjoyed. Seven families indicated that they enjoyed cooking and baking together. Seven families also said that singing and dancing was a favorite activity. The next category is called Pretend Play/Imagination, cited by six parents (16.2%). Two
parents did not expand upon their answer of pretend play, so no further information is available. One parent said that his/her child liked to “build Legos”, which allow the child to create various objects using their imagination, and one parent said that their child enjoyed playing with “anything that has to do with wheels i.e. trucks, cars, airplanes, trains”. The last category is Electronics which are becoming a large part of a child’s daily life; three parents indicated that their child enjoyed playing on their electronics when they were at home. Each of these responses indicated different electronic devices, indicating that “movies” “playing computer games” and “video games” were favorite activities.

**Preliminary Quantitative Results**

Overall, there were no significant group differences based on whether or not a child attended a full day session or half day session on any of the subscales for the HOME Inventory and the FIQ-SF. There were also no significant ANOVA group differences regarding how long the child had been enrolled in the program (1, 2 or 3 years) on any of the survey measures. When conducting a paired samples t-test to compare parents’ reports of home versus school-based involvement, results revealed significant differences as measured by the FIQ-SF. For this sample, there is significantly more home-based involvement compared to school-based involvement ($t_{(37)}=15.90$, $p<.0005$). Parents are involved in their child’s education while they are home or in the community with their child more often, as opposed to being involved within the school environment.

**Hypothesized Results**
Table 2 describes the means and standard deviations of the subscales for all quantitative measures described above. T-tests were used to explore differences on these subscales based on demographic factors.

**At-risk families.** To test the first hypothesis regarding at-risk families, independent samples t-tests were performed. These at-risk factors that contribute to lower rates of parental involvement are ethnic minority status, lower socioeconomic status (reporting an annual income of less than $55,000 per year), lower parental education (less than a college degree), and lower child age. In regards to ethnicity (46% of sample reporting as racial/ethnic minority; n=18), a t-test revealed that there was a significant difference on the Learning Materials Subscale of the HOME inventory ($t_{(36)} = 2.04, p <.05$). On this subscale, the parents of white children scored significantly higher, indicating that a greater number of learning materials are present within the home environment compared to ethnic minority students. No other significant results exist on this basis for the remaining subscales on this measure. Significant findings were also found on the Home-Based Involvement subscale of the Family Involvement Questionnaire ($t_{(36)} = -1.99, p <.05$). The parents of ethnic minority children scored significantly higher, indicating that more educational experiences are available for the child at home. There are no other statistically significant differences between ethnic minority children and white children on the remaining subscales of the Family Involvement Questionnaire. Qualitative analysis of the open ended responses indicated some additional differences between the responses of white families compared to ethnic minority families. A greater number of ethnic minority parents (18.91%) indicated that childcare acted as a barrier to involvement compared to white parents (8.12%). More
ethnic minority parents also indicated that work schedules conflicted with their ability to be involved compared to white parents (37.84% compared to 16.22%). Lastly, ethnic minority parents felt less needed within the classroom as compared to white parents (18.92% compared to 8.12%).

A t-test was used to identify differences based on a family’s income. Results indicate that there are no significant differences based on family income on any of the subscales of the FIQ-SF and the HOME Inventory. Qualitative analysis may provide some interpretation. Families that reported an annual income of less than $55,000 reported fewer childcare (5.4% of families compared to 21.62%) and work schedule (8.12% compared to 45.94%) barriers and had fewer reports of feeling not needed within the classroom (5.41% compared to 21.62%).

When looking at differences based on the parents’ level of education (see table 1 for parent education characteristics), a t-test revealed differences on the Academic Stimulation subscale of the HOME Inventory (t (37) = -2.09, p<.05). This shows that different levels of academic stimulation are provided within the home based on the parent’s highest level of education. Specifically, parents with a college degree are providing significantly more academic stimulation for their child. Also in regards to parent education, significant differences were present on the Home-School Conferencing subscale of the FIQ-SF (t (37) = -3.15, p<.05). This indicates that parents with a college degree are experiencing significantly more home-school conferencing than parents without a college degree. Lastly, significant differences were also found on the School-Based Involvement subscale of the FIQ-SF (t (37) = -2.23, p<.05). Parents with a college degree scored significantly higher, indicating that these parents are involved within the
school more compared to parents without a college degree. In regards to the analysis of the open ended response questions, parents with less than at least some college education reported that childcare (5.4% compared to 21.62%) and work schedule (2.71% compared to 51.35%) barriers were present less often and that they reported feeling not needed within the classroom less often (2.61% compared to 24.32%). Overall, parents with a lower education reported fewer barriers.

Lastly, group differences based on child age were examined. An ANOVA revealed significant differences on the Academic Stimulation subscale (F(2, 33) = 5.30, p <.05) of the HOME Inventory. To further investigate which groups were significantly different from one another, Tukey’s post hoc analyses were run. The results indicate that the mean score for parents of three year old children (n= 6; M = 5.63, SD = .49) was significantly lower on this measure of academic stimulation compared to the mean score for parents of four year old children (n= 16; M = 6.00, SD = .00). The mean score for the parents of three year old children (M = 5.63, SD = .49) was also significantly lower than the mean score for the parents of five year old children (n=17; M = 5.94, SD = .06). The mean scores between the parents of four year olds and five year olds were not significantly different. Overall, both the parents of four and five year old children provide significantly more academic stimulation within the home environment compared to the parents of three year old children. When analyzing the responses of the open ended questions, results revealed that the parents of four and five year old children cited childcare (21.62% compared to 5.41%) and work schedule (43.24% compared to 10.81%) barriers more often, whereas the parents of the three year olds (10.81%) felt not needed within the classroom more often compared to the parents of both the four year old
children (8.12%) and five year old children (8.12%). Although these numbers are not substantially different, it is interesting that the parents of three year olds felt less needed within the classroom despite having fewer childcare and work schedule barriers.

**Disability Differences.** The second hypothesis, which examined the presence of group differences based on whether or not the child was receiving services from an IEP, was also tested using a t-test. There were significant group differences on the Academic Stimulation subscale of the FIQ-SF \( t_{(37)} = -2.28, p<.05 \). Specifically, families of a child not receiving services from an IEP scored higher, indicating that these families are providing significantly more academic stimulation at home compared to families of a child receiving services. Data collected from the open response questions suggests group differences based on receiving IEP services as well. First, the parents of children with an IEP reported less often that childcare (5.41% compared to 21.62%) and work schedule (48.64% compared to 21.62%) acted as barriers for involvement compared to the parents of a child without a disability. Responses to the first open response question that asked parents about barriers for involvement within the classroom revealed that parents of a child with an IEP reported that they felt not needed within the school less often than parents of a child without an IEP (5.41% compared to 21.62%).

**Discussion**

This study addresses a gap in the literature, given the extant literature on the persistent achievement gap for children in racial/ethnic minority families or from disadvantaged backgrounds, and the dearth of literature on early childhood samples. Our first hypothesis, which stated that at-risk families (ethnic minority, lower SES [less than $55,000/year], lower parent education [no college degree], and lower child age) would
report lower levels of involvement and an increase in barriers, was partially supported. Some, but not all, of the risk factors contributed to lower levels of involvement. When racial/ethnic differences were tested, the results suggest that the parents of ethnic minority children provided fewer learning materials within the home, as measured by the Learning Materials Subscale of the HOME, compared to white parents. Conversely, racial/ethnic minority parents scored higher on the Home-Based Involvement subscale of the Family Involvement Questionnaire, which indicates that white parents provide more educational materials within the home compared to racial/ethnic minority parents but minority parents are more involved in educational activities at home. This may also be related to the differences in resources available to racial/ethnic minority parents. When resources are limited, learning materials at home may not be the top spending priority for these families, but staying engaged in activities – which may not require financial costs – could still be possible. There are also cultural values that may have impacted these results. For example, in some Asian cultures, parents believe that it is solely the teacher’s responsibility to provide educational opportunities for the child (Sohn & Wang, 2006). This may impact the materials that the parents buy for their child and how free time is spent at home. As described earlier, ethnic minority parents are less likely to volunteer within the school, as language barriers or cultural differences may cause discomfort (Chang et al., 2009). Racial/ethnic minority parents in this study reported that they felt as though they were not as welcomed or needed within the classroom compared to white parents. Based on prior research, parents’ discomfort engaging in the classroom may act as a barrier. A sensitive, welcoming teacher may have the ability to act as a buffer from these feelings of discomfort. When parents believe that the teacher understands and is
sensitive to the child’s culture, the parent is more likely to become involved in the classroom (McCoach et al., 2010). The results of a study done by Mendez (2010) indicate that when teachers regularly interact with the parents of their preschoolers, they feel more connected to the students and families and are more responsive to the ideas and suggestions of the parents (Powell, Son, File, & San Juan, 2010; Mendez, 2010).

Lower socioeconomic status was another risk-factor believed to contribute to lower levels of involvement. In this study, there were no group differences present on the HOME Inventory subscales or the FIQ-SF subscales. There were, however, specific differences related to SES gathered from the responses of the open-ended questions. When families reported an annual income of less than $55,000 per year, fewer childcare and work schedule barriers existed. It may be the case that the families earning more than $55,000 per year are working demanding jobs in which flexibility and time off are difficult, leading to an increase in barriers for these families. In the last forty years, the number of women present in the workforce has steadily increased (Radcliffe & Cassell, 2015). As a result, families must now navigate through the demands of family life without the flexibility that occurs when the mother is unemployed (Radcliffe & Cassell, 2015). This includes being involved in a child’s education, and because mothers are now holding more full time jobs, they are less likely to be able to take time off during the day.

The third risk factor believed to contribute to lower levels of parent involvement is parent education. Group differences were present on the Academic Stimulation subscale of the HOME Inventory, and the Home-School Conferencing and School-Based Involvement subscales of the FIQ-SF. Specifically, parents with a college degree scored higher on all of these measures, indicating that these parents are providing more
academic stimulation within the home, are in contact more frequently with the child’s
teacher, and are involved within the school environment more often. As discussed in the
literature review, parents with more education tend to feel more comfortable interacting
with teachers and school staff (Mattingly et al., 2002). If they are more comfortable, it is
more likely that they will experience more interaction with the teacher, contributing to
the higher scores on the Home-School Conferencing subscale. In regards to the School-
Based Involvement subscale differences, research indicates that parents with more
education were more involved in school-based activities and felt more comfortable and
competent when helping their children with academic activities (Fantuzzo et al., 2000).
For parents of a child receiving services from an IEP, those with a higher education are
more likely to attend IEP meetings, and during these meeting these parents are more
likely to provide input and advocate for the services that they believe their child needs
(Shriver & Kramer, 1993). The results from this study support existing literature on the
effects the parental education can have on parental involvement.

When using the responses of the open ended questions to provide some
clarification, parents with less education reported fewer barriers to involvement overall.
Education level impacts the job that an individual has, which in turn influences the
income of the family. Parents with less education may be holding a less demanding, more
flexible job, thus allowing them to be more involved at home and within the school. In
turn, this may mean that these families are not earning as much money annually. For
learning materials to be present within the home, it requires the financial stability to be
able to purchase these materials. Parents with less of an education may also not
understand the importance of learning materials present within the home, and may not
allocate the financial resources that they do have to these kinds of materials for their children. In order to help parents, Epstein’s Theory of Overlapping Spheres states that parenting help should be available to all families (Epstein, 2010). One of the six types of involvement within this theory outlines that parenting education classes should be offered to all families to teach parents about parenting techniques and how best to support their child’s education at home (Epstein, 2010; Epstein, 1996). These classes can help to increase the parents comfort and confidence levels. Both home-based involvement and school-based involvement are impacted by a mother’s education level.

Child age is the last risk-factor believed to contribute to parent involvement. Child age did impact parent involvement, as results indicate that the parents of four and five year old children provide significantly more academic stimulation (as measured by the Academic Stimulation subscale of the HOME Inventory) within the home compared to the parents of three year old children. It may be that parents with younger children, who likely have at least one more year to attend preschool before entering kindergarten, are not as focused on teaching academic skills to their children. Because the older children may be attending kindergarten the next year, these parents may feel that it is more important to make sure that their children have the skills needed to meet the demands of kindergarten. However, it is unlikely that this is a meaningful indication of age effects, as the youngest child in the sample was 3 years 10 months old. The parents of the three year old children reported that they felt less needed within the classroom as compared to the parents of four and five year old children. The parents of three year old children are likely experiencing schooling for the first time with their children, and therefore are unaware of the expectations of involvement and might be unfamiliar with
approaching and interacting with the teacher. The parents of older children (who might have a child attending preschool for the 2\textsuperscript{nd} or 3\textsuperscript{rd} time) might know what to expect in regards to being invited into the classroom or being involved within the school. There were no differences based on the duration the child had been enrolled in the program.

Overall, ethnic minority status, parent education, and child age contributed to a parent’s involvement. Ethnic minority parents and parents with a lower education tend to be reluctant to get involved in their child’s school (Sohn & Wang, 2006; Mattingly et al., 2002; Larocque et al., 2011). These groups experience significantly more stressors due to contextual factors (i.e. neighborhood, resources, and job attainment) and family characteristics. Socioeconomic status was not a factor that contributed to lower levels of involvement, and parents with lower SES actually reported fewer barriers compared to parents of higher SES. This partially supports the hypothesis that minority status, lower parent education, lower SES, and younger child age will result in lower parental involvement and an increase in barriers.

Our second hypothesis examining differences dependent upon child’s disability status was partially supported, as there were significant group differences on the Academic Stimulation subscale of the HOME Inventory. Research suggests that parents of a child with a diagnosed disability (therefore receiving services from an IEP) tend to focus more on the care, safety, and wellbeing of their child and do not practice academic skills as often (Sperling & Mowder, 2006). It may be the case that the parents of the children enrolled in this program are working more so on self-help goals and non-academic goals compared to the parents of a child without a disability, resulting in the group differences on the Academic Stimulation subscale. There were also differences
captured in the responses of the open ended questions. The parents of a child without an IEP reported that childcare and work schedule acted as barriers to involvement more than the parents of children with a disability. It is possible that the parents of a child with an IEP have made themselves more available, knowing the increased needs of their child. Parents of a child with an IEP are requested at meetings more often than the parents of children without a disability, and these parents may have obtained jobs that allow more flexibility during school hours. Parents often become frustrated trying to attain the proper educational supports within the school and must advocate for their child’s special needs (Sperling & Mowder, 2006), consequently placing them within the school environment more often and likely communicating with the teacher more often. Parents of a child without a disability felt as though they were not needed more than the parents of children without a disability. There are a number of reasons why parents of a child with a disability would be invited into the school, such as IEP meetings, behavior plans (if necessary), and to attend therapy sessions (occupational, speech, and physical therapy). Parents of children without a disability do not have to attend meetings in the same way and therefore they may feel less welcomed into the school. Because these parents likely have more experience within the school, they may be less likely to report feeling unwanted or unwelcome compared parents of children without a disability who have had fewer points of contact with the school and teachers.

Limitations

The current study possesses several limitations. First, the sample size is small compared to the total number of parents that were asked to participate in the study. Thirty-nine parents participated in the study out of a possible 121 parents (32%).
Selection effects likely occurred in this study. It is likely that the parents that chose to participate in the study are already more involved in their child’s education than those parents who did not participate. Analyses may have revealed different results if all of the parents that were asked to participate completed the survey measures. For example, home-based involvement may have been lower if the parents that did not participate are in fact less involved compared to the parents that did participate.

This study was conducted in a public preschool program with no explicit programming aimed at including parents in their child’s education. Had this study taken place in another preschool program, such as Head Start or a Montessori program, parent involvement may have looked very different. There are varying degrees of parent involvement based on program type, and home-based and school-based involvement may have been higher or lower depending on the program surveyed. There is an explicit need for staff training to bolster opportunities on parent involvement in this program.

Another limitation present in this study was that the researcher inadvertently left off a question regarding child gender on the demographic measure. However, the population that was sampled from was relatively even (63% male) and prior research does not indicate that significant gender results could be expected.

One final limitation is that the respondents were mainly mothers of the children. Only one father completed the survey measures, as well as one grandmother and one foster-mother. The researcher did not ask for a specific member of the family to complete the survey, so a parent that is not necessarily involved in the educational aspect of the child’s life may have completed the survey. In the future, it may be helpful to ask that the parent (or adult) most involved in the child’s education fill out the survey.
As described in the barriers section of the introduction, cultural beliefs may play a role in the amount of parental involvement for some families. Cultural values and beliefs were not asked about in the surveys, which may have impacted the results. For example, Latino parents often feel as though it is rude to interfere within the classroom and are more likely to work on academic skills within the home (Calzada et al., 2015). Latino parents find it important to work on behavior management skills at home that will help the child in an educational setting, as well as monitor homework and provide educational resources outside of the school setting (Calzada et al., 2015). It is even more common for a Latino parent to shy away from the school setting when a language barrier is present (Calzada et al., 2015). In the current study, involvement may have appeared to be lower for ethnic minority families due to cultural beliefs. However, this cannot be accounted for because cultural values and beliefs were not assessed in any of the survey measures. Similarly, there was no direct measure of parenting stress, which might lend interesting results for future studies.

The HOME Inventory used in this study was modified from its intended format, creating a need for necessary caution in interpreting these results. The researcher was unable to visit all of the family’s homes due to pragmatic limitations, hence, the measure was adapted so that parents could self-report (by indicating yes or no) on whether materials were present within the home and if social experiences were taking place. This adapted version of the measure has not been tested for reliability or validity, a needed step for future research.

When studying parent involvement, especially in early childhood, there needs to be a broader operational definition of what materials and experiences can be considered
educational. There are many experiences that occur throughout the child’s day that constitute as educational/learning experiences, and these are often left off of survey measures. Exploring the grocery store with the family, as well as other experiences in the community, are educational for the child and should be included when measuring parent involvement in a child’s education. As children develop and gain experience, learning materials appropriate for their developmental stage change. These changes in development must be considered when creating these survey measures. For example, downloading educational games on electronic devices (i.e. tablets) did not exist a short time ago when many of the existing measures were developed.

**Implications**

The results of this study support existing literature on the barriers that prevent parents from becoming involved in their child’s education. The results also indicate that school-based parental involvement was lower than home-based involvement, signifying the need for interventions to be created that focus on bringing parents into the school building in a variety of ways, while supplementing and supporting the involvement that is already occurring at home. While creating these intervention programs, the barriers discussed in this study should be considered. Programs should be inclusive for all families, paying close attention to ethnic values or beliefs as not to offend or seclude a particular ethnic group, be accessible to parents regardless of whether or not their child has a disability, provide support for parents of lower SES so that these families can participate, and allow parents with all levels of education to partake within the school. School-based parental involvement may increase, which in turn would increase academic performance and provide a vast number of benefits for the children, parents, and school staff. There is also a need to supplement and support home-based involvement. Parents
may not know how beneficial visiting places in the community, such as museums or zoos, can be. By talking with their child and interacting in these novel environments, children are learning and growing, and parents should be aware that these nonconventional ways of being involved are beneficial for their child. A need for a broad operational definition inclusive of all possible educational materials and experiences is necessary for future studies focusing on parent involvement. For future studies, it would be beneficial to look at differences in parent involvement and the barriers associated across multiple early childhood education programs (public, private, Montessori, etc.). Programs vary in frequency and type of involvement, and studying parent involvement across these programs may lead to interesting results. In the future, it would also be beneficial to address the limitation of modifying the HOME Inventory so that it can be completed by the parent. This is a widely cited measure, but requires the time and resources for a researcher to visit the home of the family. If reliability and validity allowed, it would be beneficial to have an adapted, self-report version of this measure so that a greater number of families could be reached, providing more parent involvement data to contribute to future studies in this area.
References


Cameron, C. E., Grimm, K. J., Steele, J. S., Castro-Schilo, L., & Grissmer, D. W.


Gardiner, E. & Iarocci, G. (2012). Unhappy (and happy) in their own way: A

Green, S.E. (2007). “We're tired, not sad”: Benefits and burdens of mothering a child with a disability. *Social Science and Medicine, 64*, 150-163.


special education program: a descriptive analysis of parent demographics and
level of involvement. *Psychology In The Schools, 30*, 255-263.


of typical and special needs preschoolers. *Psychology in the Schools, 43*(6), 695-700.

services for their children with autism spectrum disorder. *Teaching Exceptional
Children, 39*(1), 46-51.

children with profound intellectual and multiple disabilities: a study on care load

Theise, R., Huang, K. Y., Kamboukos, D., Doctoroff, G. L., Dawson-McClure, S.,
Palamar, J. J. & Brotman, L. M. (2014). Moderators of intervention effects on
parenting practices in a randomized controlled trial in early childhood. *Journal of

economic stress and neighborhood context as predictors of parent involvement in


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### Table 2: Qualitative Codes

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<td>Childcare</td>
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<td>No Barriers</td>
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<tr>
<td>Not Needed/No Need</td>
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</tr>
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<td>Work Schedule</td>
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<td>Chores</td>
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<td>3</td>
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<tr>
<td>Baking/Cooking</td>
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<td>3</td>
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<td>Day Trips</td>
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<tr>
<td>Visiting Family/Friends</td>
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<tr>
<td>Electronics</td>
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<tr>
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Table 3. Measure Descriptives

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