

Providence College

DigitalCommons@Providence

Social Work Theses

Social Work

4-28-2009

A Comparison of Teachers' Perspectives of Social Competency of Autistic Children in Inclusion and Self Contained Classrooms

Tara Noonan
Providence College

Follow this and additional works at: https://digitalcommons.providence.edu/socialwrk_students



Part of the [Social Work Commons](#)

Noonan, Tara, "A Comparison of Teachers' Perspectives of Social Competency of Autistic Children in Inclusion and Self Contained Classrooms" (2009). *Social Work Theses*. 39.
https://digitalcommons.providence.edu/socialwrk_students/39

It is permitted to copy, distribute, display, and perform this work under the following conditions: (1) the original author(s) must be given proper attribution; (2) this work may not be used for commercial purposes; (3) users must make these conditions clearly known for any reuse or distribution of this work.

A COMPARISON OF TEACHERS' PERSPECTIVES OF SOCIAL COMPETENCY
OF AUTISTIC CHILDREN IN INCLUSION AND SELF CONTAINED
CLASSROOMS

A project based upon an independent investigation, submitted in partial fulfillment of the requirement for the degree of Bachelor of Arts in Social Work.

Tara Noonan

Providence College
Providence Rhode Island

2009

Abstract

Building relationships at the preschool level is a significant developmental milestone of early childhood. Children with disabilities often lack certain social and language skills necessary to build friendships with peers. While many preschool children with disabilities have difficulty building relationships, this study will concentrate on autistic children and their ability to achieve social competency. There are three classroom environments in which preschool children with autism can be educated: the self-contained classroom, the inclusion classroom, and home schooling. This qualitative study attempted to determine whether the self-contained classroom or the inclusive classroom promotes more social competency building in preschoolers with autism. It was hypothesized that autistic children who are educated in an inclusive classroom will become more socially competent than autistic children who are educated in a self-contained classroom. Analysis of the data revealed that both autistic children in the inclusion classroom and the self-contained classroom have gained some social skills, but are not considered socially competent. Thus, from the results of the study it cannot be determined which classroom environment—the self-contained or the inclusive—is best suited for building social competency in autistic preschoolers.

Outline

- I. Introduction
 - A. Problem Formulation
 - 1. Introduce the concept of inclusion.
 - 2. Provide a brief description of the social benefits inclusion provides for children, especially children with disabilities.
 - B. Problem Justification
 - 1. Briefly discuss the importance of peer relations at the preschool level.
 - 2. Discuss the high risk for social and emotional difficulties later in life if children do not gain the adequate social skills during the preschool years.

- II. Main Points
 - A. Peer relationships at the preschool level.
 - 1. The Benefits
 - a. Provide comfort, pleasure, and opportunities to learn from one another.
 - b. Help children build self-confidence.
 - c. Allow children a foundation in which to further develop their social skills throughout life.
 - d. Children able to form social relationships are more socially interactive (i.e. engage in more fantasy play, and engage in higher rate of interactions per unit of time).
 - e. Increase in social competence.
 - i. Define social competence.
 - f. Social competence positively influences overall development of children.
 - i. Cognitive Development
 - ii. Language Development
 - iii. Communicative Development
 - B. Difficulties children with disabilities have in forming social relations with other children.
 - 1. at risk for future difficulties in other developmental areas
 - a. Social Development
 - b. Cognitive Development
 - c. Language Development
 - d. Social Maladjustment
 - e. Difficulties academically

- f. Possible juvenile delinquency
- g. Loneliness
- 2. Type of play
 - a. Imaginative play is simple versus complex
 - b. Solitary play versus group play
- 3. Social acceptance versus social rejection
 - a. Define social acceptance.
 - b. Define social rejection.
 - c. Social acceptance and rejection is associated with the quality of social interactions that children have with one another.
- 4. Children with disabilities engage in less social interaction
 - a. Children with disabilities have less advanced social skills.
 - b. Certain characteristics of children with disabilities affect their ability to socially interact with others.
 - i. Disabilities that do not affect all developmental capacities (such as speech impairments or physical disabilities) are often linked to more social competence and social acceptance.
 - ii. Disabilities that affect developmental capacities (such as autism, mental retardation and behavior disorders) can be linked to social rejection.

C. Autism

- 1. Define Autism
- 2. Autism as a spectrum disorder
- 3. Signs of Autism
 - a. Lack of or delayed spoken language
 - b. Repetition of words or movements
 - c. Lack of eye contact
 - e. Disinterest in peer relationships
 - f. Lack of imaginative play
- 4. Autistic behaviors that prevent the development of peer relationships
 - a. Self-stimulatory behaviors (repetitive behaviors such as rocking)
 - b. Difficulty initiating or maintaining a conversation
 - c. Hyper/Hypo activity
 - d. Tantrums
 - e. Non-responsive to verbal cues

5. Education for children with Autism

- a. Evaluation to determine eligibility for special needs
- b. Rights as a parent of a child with special needs
 - i. IDEIA (The Individuals with Disabilities Education Improvement Act).
- c. Development of IEP (Individualized Education Plan)
- d. Determination of appropriate classroom placement
 - i. Self-contained
 - ii. Mainstreamed
 - iii. Inclusion

D. Preschool inclusion

1. Define inclusion
2. Provide brief history of inclusion
3. Stimulated and responsive social environment.
4. Learn through observation.
 - a. communication skills
 - b. social skills
 - c. motor skills
 - d. language development
5. Perceived social benefits of inclusion for both children with and without disabilities.
 - a. Children with disabilities
 - i. Provided with opportunities to develop friendships with non-disabled children.
 - ii. Provided with peer models that allow them to learn new social/communicative skills.
 - iii. They spared the negative effects of segregated education (such as labeling).
 - b. Children without disabilities
 - i. Opportunity to learn to accept and respect others that are different from themselves.
 - ii. Opportunity to learn about individuals with disabilities.
 - iii. Learn altruistic behaviors including how and when to use them.

E. Social interactions within the inclusive preschool classroom

1. Engage in isolated and non-interactive play.
2. Prefer to “play” with other children with disabilities

3. Less likely to be chosen as friends by disabled and non-disabled peers
 - a. “Schema of normality or similarity to self”
 - b. Negative attitudes towards dissimilar others
 - c. Typically developing peers less accepting of children with disabilities.
 - d. Limited physical mobility and/or cognitive skills prevent children with disabilities to participate with other children.
4. Children with disabilities continue to experience difficulties with socialization skills.

III. Opposing Points

A. Mainstreaming

- a. Define mainstreaming
 - i. Students spend part of the day in self-contained setting and the other part of the day in regular education classroom.
- b. Typically for high functioning and moderately social children.
- c. Benefit of mainstreaming
 - i. Children are able to receive support in the self-contained classroom, but also given the opportunity to interact with their typically developing peers.
- d. Disadvantages of mainstreaming
 - i. Children are separated from their typically developing peers for the majority of the school day.
- e. Compare and contrast mainstreaming versus inclusion

B. Self-Contained Classroom

- a. Define the self-contained classroom
- b. Benefit of self-contained classroom
 - i. Student to adult ratio is very small
 - ii. More individualized attention
 - iii. Maximum academic support
- c. Disadvantages of the self-contained classroom
 - i. Separation from their typically developing peers
 - ii. Lack the opportunity to interact with typically developing peers
 - iii. Spend a lot of attention on social skill building, neglecting academic strengths and abilities of children.
- d. Compare and contrast self-contained versus inclusion

C. Homeschooling

- a. Teaching the child at home.

- b. Benefits of homeschooling
 - i. Flexibility to meet the individual child's needs
 - ii. Individualized one on one attention
- c. Disadvantages to homeschooling
 - i. Lack of opportunity for social interaction with other children
 - ii. Full-time involvement of one or both parents
 - iii. No opportunity for respite for parent
 - iv. Financial sacrifice (if one parent must leave work)
- d. Compare and contrast homeschooling and inclusion

III. Hypothesis

- a. It is hypothesized that autistic children who are educated in an inclusive classroom will become more socially competent than autistic children who are educated in a self-contained classroom.

IV. Methodology

- a. Sample
 - i. Three preschool teachers were interviewed. One teacher was an inclusion teacher and the other two teachers were self-contained classroom teachers.
- b. Data Collection
 - i. The interview questions were formulated by the researcher based upon the definition of social competency revealed by the literature.
 - ii. The goal of the interviews was to help the researcher determine which classroom is the best environment for the autistic child.
- c. Data Analysis
 - i. From the results of each of the interviews, the researcher will be able to indicate overall themes presented.

V. Conclusion

- a. Results
 - i. Four Themes
 - A. Type of play
 - B. Type of interactions
 - C. Social acceptance
 - D. Social competency
- b. Discussion
 - i. The data gathered in this study offered little support for the hypothesis.
 - ii. The results of the study were consistent with the literature.

- iii. The autistic children in both classroom settings were reported to have gained social skills since the beginning of the year.
 - iv. From the teacher's evaluations, the autistic children in both classroom settings are not considered to be socially competent.
 - v. The results of this study are not conclusive because it cannot be determined which classroom setting is best suited for the autistic child.
- c. Strengths/Limitations
- i. Strengths
 - A. Results of the study were rich in content due to the researcher's ability to interview the teachers for thirty minutes.
 - B. The researcher was able to ask for clarification when needed during the interview.
 - C. All three teachers that were interviewed currently have autistic children in their classrooms.
 - ii. Limitations
 - A. There was only one inclusion teacher that was interviewed.
 - B. The teachers interviewed were not from the same school district.
 - C. Difficult to generalize the results of the study.
 - D. It was difficult to determine which classroom setting was best suited for autistic children in terms of gaining social competency.
 - a. A scale should have been used to help the teachers interviewed determine where they thought their autistic children fell on the scale in relation to their social skills.
- d. Implications
- i. Implement a policy in which all school systems are mandated to have an autistic specialist present to faculty and staff different methods to help autistic children gain social skills.
 - ii. Activities to promote social building skills.
 - iii. Further research is needed in order to determine the best classroom environment for autistic preschool children

Introduction

Building relationships at the preschool level is a significant developmental milestone of early childhood (Bloch, 1997). Preschool children who struggle with developing peer relationships are at high risk for encountering difficulties socially and emotionally later in life (Guralnick & Groom, 1988). Some children are naturally able to interact with peers, while others need to learn how to build friendships. Children with disabilities often lack certain social and language skills necessary to build friendships with peers (Bloch, 1997). Studies have revealed that children with friends differ greatly in peer interactions. Children with friends are able to interact with peers for a longer period of time, yield more positive and reinforcing behaviors, engage in more fantasy play and prompt intricate social interactions with peers (Guralnick & Groom, 1988). By recognizing the importance of peer relationships for preschool children, as well as the difficulty encountered by children with disabilities in developing friendships, social workers can assist teachers in promoting friendship building within the classroom.

More than thirty years ago, the Individuals with Disabilities Education Act was passed. The act mandated that children with disabilities be provided with the opportunity to receive the same education that typically developing children receive. In order to ensure that children with disabilities were given the same educational opportunities as typically developing children, the concept of inclusion was introduced into the public school systems. Inclusion is defined as children with disabilities being placed in the regular classroom. While the primary goal of inclusion is to enhance the educational and learning environment for children with disabilities, it has been suggested that there are additional advantages to inclusion (Helper, 1994). It has been hypothesized that inclusion

provides an improved social environment for all children, with and without disabilities (Helper, 1994).

The educational system has made great strides over the past couple of decades in enhancing the educational and learning environment for children with disabilities. As of the year 2000, 587,000 preschool children with disabilities were receiving educational services and were being included in the regular classroom (American Youth Policy Forum and Center on Education Policy, 2002). Children with disabilities are now being given an equal chance to an education. In addition to providing equal education for all children, the inclusion classroom provides the opportunity for children with disabilities to develop improved social skills.

In order for all children to take full advantage of the inclusion classroom, they must be socially integrated into the inclusive classroom setting (Odom, 2000). It is the responsibility of the school staff to provide children with activities to enhance their ability to learn social competence and build social relationships with classmates, both special needs students and those whose development is typical. In order to implement efficient activities to enhance social competence, it is imperative that social work professionals first gain an understanding of the different classroom settings in which to educate children with disabilities and determine which setting best promotes social competency building in children with disabilities. It is equally important for social workers to observe the social interactions between children with and without disabilities and determine in which areas the children still need assistance in building competent social skills for their age level. By gaining an understanding of preschool children's relationships with one another and the ways in which they interact with one another,

social workers will be able to generate relevant interventions, i.e. social activities through which children can begin to build their social skills.

While there are many children with a variety of disabilities who are integrated into the regular classroom, this study will concentrate primarily on children with autism in both the self-contained and inclusion classroom. The self-contained classroom is defined as the most restrictive classroom in which children with autism (and other disabilities) spend the entire day in a classroom with other children with disabilities (including autism) (Hincha-Ownby, 2008). By comparing the social skills gained in autistic preschool children in the self-contained classroom and in the inclusive classroom, this study attempts to observe the differences in social competency in autistic children based upon the two different classroom settings. Additionally, this study hopes to determine which setting is best suited for children with autism in terms of gaining the ability to engage socially with other children, both with and without disabilities.

Literature Review

Main Points

Establishing relationships with peers is particularly important in the early childhood years (Bloch, 1997). Friendships with other preschoolers often provide children with comfort, pleasure, opportunities to learn from one another and a sense of self-confidence in oneself (Bloch, 1997). Additionally, engaging in meaningful relationships with peers at the preschool level provides children a foundation upon which to further develop social skills throughout life. It has been found that preschoolers who do not establish relationships with their peers are at risk for difficulties in emotional and social development in later years (Guralnick & Groom, 1988).

Presumably, children with friends are more socially interactive with their peers compared to those children who do not develop peer relationships. The term “socially interactive,” is defined as children with friends who are able to engage in a higher rate of interactions per unit of time, receive and produce positive reinforcing behaviors, engage in more fantasy play, and engage in the most complex social interactions with one another (Guralnick & Groom, 1988).

Preschool children who are successful at establishing peer relationships are much more socially competent than those children who are unable to make friends at the preschool level. There are various definitions associated with the term “social competency.” Most definitions include “initiating and maintaining successful interactions and mutually satisfying relationships with others and refer to the dimensions of effectiveness and situational appropriateness of children’s social skills” (Rodriguez, Smith-Canter, & Voytecki, 2007). Social competency is an extremely important attribute to develop at a young age because it is an essential element of human development (Rodriguez et al, 2007). Researchers have found that being socially competent positively influences the overall development of children, including cognitive development, language development and communicative development (Brown & Conroy, 2001 as cited in Rodriguez et al, 2007). It has been postulated by some researchers that children’s social competency is related to other developmental areas, such as language and cognitive abilities (Strain & Hoyson, 2000). For example, if a child has developed the ability to use appropriate language to converse with peers, then it is more likely that he or she will be accepted by his or her peers (Strain & Hoyson, 2000). Thus, establishing peer

relationships in the early years of life is very important for children in developing social competency and influencing their overall human development.

Children with disabilities are at risk for having difficulty in establishing peer relationships with other children (Bloch, 1997). Children with disabilities are also at risk for experiencing future difficulties in other developmental areas such as social, cognitive, and language development, as well as social maladjustment and loneliness (Rodriguez et al, 2007). Children with disabilities engage in a different type of play than their non-disabled peers. Typically, children with disabilities engage in solitary play rather than group play with other children, contributing to their difficulty in establishing friendships (Diamond, 1993). Children with disabilities engage in very simple imaginative play, whereas typically developing children engage in more complex imaginative play (Guralnick & Groom, 1988). Since children with disabilities engage in different types of play than typically developing children, children with disabilities are most often found to have much less social interaction with other children (Odom et al, 2006).

Within the realm of their peer group, children are either socially accepted or socially rejected by their peers. Social acceptance refers to positive appraisals and reinforcement of individual children by peers, participation in friendly play and the tendency to give positive reinforcement to one's peers (Odom et al, 2006). Additionally, social acceptance is marked by three characteristics: social awareness and interest in peers, communication and play, and friendship-making skills (Odom et al, 2006). Social rejection, on the other hand, is marked by the active exclusion of children from peer groups. Social rejection is associated with three characteristics: social withdrawal, aggression, and lack of communication (Odom et al, 2006). According to Odom et al

(2006), there have been very few studies focusing on the social acceptance of children with disabilities. On the other hand, there is evidence of social rejection by peers of children with disabilities. Studies have indicated that children with disabilities engage in less social interaction, exhibit more negative and less adaptive interaction styles, have fewer relationships and receive lower peer ratings (Odom et al, 2006). Thus, children with disabilities have less advanced social skills, which in turn contribute to social rejection by their typically developing peers.

Certain characteristics of children with disabilities affect their social participation and are inevitably associated with their social acceptance or social rejection (Odom et al, 2006). It has been found that disabilities do not affect all developmental capacities equally. For instance, positive development in cognitive processing, social problem solving, and emotional regulation appear to be influenced more by social participation and ultimately social acceptance (Odom et al, 2006). Conversely, disabilities in which these developmental capacities—cognitive processing, social problem solving, and emotional regulation—are affected is often associated with diminished social participation and social rejection (Odom et al, 2006). Certain types of disabilities—mental retardation, behavioral issues and autism—appear to have a greater impact on social participation and social acceptance. This study will concentrate on autistic children and their ability to develop peer relationships.

Autism is a developmental disability which is caused by a neurological disorder that affects the normal functioning of the brain (Autism Society of America, 2008). Autism is the most common developmental disorder under the autism spectrum disorder (ASD). Autism spectrum disorders consist of a number of psychological conditions

characterized by trouble with theory of mind, socialization, language, and representational play (Kutscher, 2006). The four other ASD disorders are Asperger's Syndrome, Rett's Disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorders (NOS—not otherwise specified) (Kutscher, 2006).

Autism is characterized by complete lack of or significantly delayed, spoken language; repetition of words or movements; lack of eye contact; disinterest in peer relationships and lack of imaginative play (Autism Society of America, 2008). It must be noted, however, that although autism is defined by a certain set of characteristics, each case is individual and different individuals may exhibit any combination of these behaviors in any degree of severity (Autism Society of America, 2008). Impaired social interaction is one of the key indicators of autism (National Institute of Neurological Disorders and Stroke, 2006).

Due to the lack of social interaction, children with autism struggle with establishing peer relationships beginning at the preschool level. Children with autism experience uncontrollable behaviors which prevent them from interacting with other children and ultimately prevent the development of peer relationships. Autistic behaviors which limit children from being able to interact with other children include: self-stimulatory behaviors (repetitive behaviors such as rocking), difficulty initiating or maintaining a conversation, hyperactivity, hypo-activity, frequent tantrums, and non-responsiveness to verbal cues (Autism Society of America, 2008). While not every child with autism will exhibit all of these behaviors, exhibiting any combination of the previously stated behaviors contributes to the lack of social interaction exhibited by autistic children.

Many children with autism require special education services throughout their school careers. There are a number of educational laws which provide autistic children the right to an education. The Individual With Disabilities Education Act (IDEA) is the most common law providing special education to children with disabilities (Sherman, 2007). The IDEA is designed to protect the rights of students with disabilities and provide them with a free appropriate public education. In the early 1990's the IDEA was amended to require that children with disabilities, including autism, receive their education in "the least restrictive environment appropriate" necessary to meet the child's individual needs (Stout, 2001).

"The least restrictive environment appropriate," as used in the IDEA, is defined as a regular education classroom (Stout, 2001). The IDEA mandates that parents of every child with special needs have the right to be part of an Individual Education Program team (IEP team) which meets and decides which special education services are needed for each child (Sherman, 2007). At the IEP meeting, the IEP team determines the appropriate placement for the child with autism (or any other disability). In most public school settings children with autism (or any other disability) can either be placed in a self-contained classroom, mainstreamed into art or music classes or be placed in an inclusion classroom. The latter option is considered to be the "least restrictive environment" (Sherman, 2007).

Inclusion is a relatively new concept in education (Odom, 2000). Since 1991, public school systems have been required to provide a free appropriate education to preschool-aged children with disabilities (Odom et al, 2002). Inclusion refers to children with disabilities, such as autism, being educated in the regular classroom with their

typically developing peers, while being provided with significant support in order to be successful (Hincha-Ownby, 2008). According to Odom et al (2002), inclusion contains four dimensions: interaction between children with disabilities and typically developing peers in the classroom as well as in the outside community; support services within the classroom for children with disabilities; services provided by professionals from various disciplines; and, lastly, the effect of inclusion on children with disabilities must be evaluated in order to determine whether or not the child with disabilities is making progress based on the goals established for each child.

The inclusion classroom setting provides a more stimulating and responsive social environment for children with disabilities, such as autism (Guralnick & Groom, 1987). In combination with a more stimulating and responsive social environment, it has been further suggested that the peer group within the inclusive classroom setting provides children with disabilities more age-appropriate, competent and positive models of cognitive, communication, and social competence than would be provided by the traditional special education classroom (Bergen, 2000). In the inclusive classroom setting, children with disabilities, including those with autism, are given the opportunity to learn through observation of the role models within the classroom, their typically developing peers. Interactions with typically developing peers, along with observational learning, allows children with disabilities to enhance a variety of skills, including communication, social, motor and language skills (Bergen, 2002).

Preschool inclusion provides many benefits to both children with disabilities and children without disabilities (Wolrey & Wilbers, 1994). First and foremost, children with disabilities are provided the opportunity to develop friendships with their typically

developing peers as they are no longer segregated from one another (Wolrey & Wilbers, 1994). Children with disabilities are also provided with peer models within the preschool inclusion classroom from which they are able to learn new social and communicative skills (Wolrey & Wilbers, 1994). When children with disabilities are included in the regular classroom, they are spared the negative effects of segregated education, such as the effects of labeling (Wolrey & Wilbers, 1994).

In addition to providing children with disabilities many benefits, the inclusive classroom setting also extends benefits to children without disabilities. Bergen (2002) has suggested that the preschool inclusion setting allows children without disabilities to become more sensitized and aware of others who are different from themselves at an early age. Introduction to children who are different at such an early age decreases the level of anxiety and the tendency of social avoidance of children different from themselves (Bergen, 2002). Furthermore, the integrated experience teaches typically developing children about altruistic behaviors, including how and when it is appropriate to use them (Wolrey & Wilbers, 1994). Lastly, being exposed to children with disabilities allows typically developing children to learn about the various disabilities with which their peers struggle on a daily basis (Wolrey & Wilbers, 1994).

The benefit of preschool inclusion provides much hope for an increased social competency outcome for children with autism and other disabilities alike. Odom (2000) has discovered from his research that children with disabilities have been found to engage in social interactions with peers less often than children without disabilities in the inclusive preschool classroom. Additionally, Guralnick and Groom (1987) reported that children with autism and disabilities alike are more likely to engage in isolated and non-

interactive play and less likely to engage in play groups than their typically developing peers. If children with disabilities do choose to play with other children, they prefer to interact with other children with autism and other disabilities rather than their typically developing peers (Guralnick & Groom, 1988). Moreover, children with autism and other disabilities are less likely to be chosen as playmates by their typically developing peers than those children without disabilities (Guralnick & Groom, 1987).

Children in preschool through third grade have the common tendency to choose their playmates and friends based upon homogeneity—same-sex, same-race and same-abilities (Sigelman, Miller, and Whirworth, 1986 as stated in Diamond, 1993). Preschool children view other children as either “like me or not like me” on the basis of characteristics such as gender, race, or disability (Kratzer & Nelson-LeGail, 1990 as stated in Diamond, 1993). Diamond (1993) suggests that when a child is recognized under the “not like me” schema by other children, that child is less likely to be perceived as a possible playmate to other children. Moreover, typically developing children often have negative attitudes towards children with disabilities and are thus less accepting of children with autism and other disabilities. A study conducted by Diamond (1993) indicates that children with disabilities, such as autism, may have limited physical mobility, as well as diminished cognitive and social skills. These factors contribute to their inability to interact with other children in fantasy and cooperative play. Thus, these children are not viewed as valuable playmates to preschool children whose play is normally focused on fantasy and cooperative play (Diamond, 1993). Despite inclusion efforts and hopes for increased social competency, children with autism and other disabilities continue to experience difficulties with socialization skills.

Opposing Points

Inclusion in the regular classroom for children with disabilities has become increasingly common. However, other educational models are necessary and may be currently utilized. Mainstreaming children into the regular classroom refers to students with disabilities, such as autism, spending part of the day in a self-contained classroom and part of the day in the regular classroom (Hinch-Ownby, 2008). When referring to mainstreamed placements at the preschool level it is often assumed that the placement will include teachers who are certified in Early Childhood Education (ECE), a larger student to teacher ratio, and a curriculum developed within ECE (Odom & McEvoy, 1990). Typically, children with disabilities are mainstreamed into the special classes, such as art, music, library, and physical education. Children who are mainstreamed into the regular classroom are able to receive the individual educational support and assistance they need, while at the same time they are given the opportunity to engage with their typically developing peers (Hinch-Ownby, 2008). However, since children with disabilities are typically included only in the special classes, which usually meet just about one hour per day, they still spend most of their day segregated from their typically developing peers. Thus, mainstreaming children into the regular classroom does not provide much opportunity for social competency building in children with disabilities, such as autism.

The self-contained classroom is another placement within the public school system in which children with disabilities can receive education. The self-contained classroom is the most restrictive classroom in which children with disabilities can be educated (Hinch-Ownby, 2008). Educating children in such a segregated when they are

capable of being in a less restrictive environment does not meet the federal requirements under the IDEA (Early Development, Care and Education, 2007). Children who are educated in the most restrictive classroom spend the entire day learning in a classroom with other children with disabilities, such as autism, Down Syndrome, cerebral palsy, and other developmental disorders (Hincha-Ownby, 2008). Many children with disabilities require other services such as occupational therapy and speech therapy. Professionals come into the special education classroom to provide such services to the entire class (Crutchfield, 1997).

When placing a child in a self-contained classroom, the main assumption is that the placement is in the best interest of the child's academic and social needs (Manwaring, 2008). Other assumptions of the self-contained classroom include a classroom teacher who is certified in special education, an educational curriculum developmentally appropriate to meet each individual child's needs and assurance that all needs of the child will be met in the self-contained environment (Manwaring, 2008). In order to meet each child's individual needs, the student to teacher ratio is very small, allowing for individualized attention and maximum academic support (Hincha-Ownby, 2008).

In this type of classroom, there usually no typically developing children. Consequently, the children with disabilities cannot observe and imitate language, play with or engage in peer interaction with their typically developing peers (Manwaring, 2008). There are some instances in which there is room for one or two typically developing children to be included in the self-contained classroom at the preschool level (Manwaring, 2008). However, as the number of children with disabilities increases, there is diminished opportunity to include typically developing children into the self-contained

preschool classroom (Manwaring, 2008). Thus, children in the self-contained classroom are separated from their typically developing peers throughout the school day. Since children with disabilities are deprived of the opportunity to interact with their typically developing peers, they are also deprived of the opportunity to learn new social and communicative skills from them.

Home schooling is an alternative choice parents may make in which children with disabilities can receive an education. Home schooling is defined as the “practice of educating children primarily at home in a family setting, with a parent or guardian as teacher” (Reinhiller & Thomas, 1996 as cited in Duffey, 1999). Home schooling children started in the colonial times and within the last two decades has seen an increase in popularity, for children with disabilities as well as typically developing children (Duffey, 2002). According to Duffey (2002) there are currently between 500,000 and 1.6 million children being home schooled. Since the literature on home schooling children with disabilities is scarce, it is difficult to determine the number of students with disabilities being home schooled (Duffey, 2002). However, it can be concluded that there is a significant number of children with disabilities that are home schooled, which is verified by the numerous support organizations and internet sites designed for families home schooling children with disabilities (Duffey, 2002).

Many parents of children with disabilities, such as autism, decide to home school their child because they do not feel confident that the school is satisfying the IEP goals and providing appropriate services to their child (Council for Exceptional Children, 2000). Additionally, parents often fear that their child is not receiving adequate individualized attention and thus their child is not able to advance at his or her own pace

(Duffey, 1999). Accordingly, parents believe there to be many advantages to home schooling their child with a disability. For one, the parent, as the teacher, is able to provide individualized attention to their child (Duffey, 1999). Furthermore, home schooling provides the flexibility to meet the individual child's particular needs. For instance, parents often utilize the teaching techniques to which the child best responds (Duffey, 2002). With an individualized focus in the home school environment, children with disabilities are able to explore their interests in depth. In addition, the flexibility of home schooling allows children to progress at their own pace in accomplishing particular skills (Council for Exceptional Children, 2000). Lastly, since many children with disabilities such as autism, often have medical appointments, parents find it easier to incorporate such appointments into each day without disrupting the child's education (Council for Exceptional Children, 2000).

Regardless of the advantages of home schooling children with disabilities, such as autism, there are also disadvantages that also must be considered. Home schooling a child, especially a child with a disability, is an extremely exhausting task to undertake (Council for Exceptional Children, 2000). In addition to providing their child with an adequate education, parents must educate themselves about their child's particular disability. Furthermore, it is probable that the parent will have to meet with several professionals in order to have the child tested and to formulate a suitable educational plan (Council for Exceptional Children, 2000). Since educating a child, especially a child with a disability, consumes a lot of time and energy, many families are forced to sacrifice a second income (Council for Exceptional Children, 2000). Thus, it is possible that the family will encounter financial difficulties.

One assumed disadvantage to home schooling children, especially children with disabilities, is the lack of opportunity for social interactions with other children with and without disabilities (Council for Exceptional Children, 2000). Contrary to common belief, the literature indicates that home schooled children with disabilities are more involved in extra-curricular activities than children in public school (Council for Exceptional Children, 2000). Furthermore, it has been found that children with disabilities who are home schooled interact with people of all ages, which allow them to build confidence in interacting with a variety of individuals (Council for Exceptional Children, 2000).

While the literature indicates that children with disabilities are provided with opportunities to socialize with other children, these opportunities must be initiated by the parent. If the parent neglects to involve the child in such extra-curricular activities, the child is not given the opportunity to engage with other children. Additionally, the literature does not indicate whether the parents, as teachers, are able to incorporate social building skills into the educational plan for their child. Considering the individualized one on one attention, it would seem doubtful that such necessary social skills are not being practiced with other children. However, in the inclusion classroom setting, social skill building is incorporated into the educational curriculum and is a part of the child's every day learning experience. Thus, in an inclusive classroom, children with disabilities are immersed into a setting that allows them to socially interact with other children while learning, rather than putting extra responsibility on the parent to ensure opportunities for social competency building.

Hypothesis

After reviewing the literature relating to all of the different settings available for educating the autistic child—the inclusion classroom, mainstreaming, the self-contained classroom, and homeschooling—the inclusion classroom appears to be the best environment to help children with autism to build social competency. However, despite the opportunity that the inclusion classroom provides for social competency building, children with autism continue to experience difficulty with gaining social skills. This study hopes to reveal new conclusions about autistic children's enhanced social skills due to being placed in the inclusive preschool classroom. It is hypothesized that autistic children who are educated in an inclusive classroom will become more socially competent than autistic children who are educated in a self-contained classroom.

Methodology

This is a qualitative/descriptive study which attempted to determine whether the self-contained classroom or the inclusive classroom is a better setting in which to promote social competency building in preschoolers with autism.

Sample

A sample of three preschool teachers from a public school system in the state of Rhode Island participated in this study. The three teachers chosen to participate in this study were teachers who either taught in the self-contained classroom or the inclusion classroom at the preschool level. A convenience sample was utilized in this study because the researcher was forced to interview only those teachers who were available and willing to be interviewed. Two of the interviewees teach preschool students in a self-contained classroom and the other teacher teaches in the inclusion classroom. The inclusion teacher

interviewed was from another public school system district, while the two self-contained teachers are from the same school district. The two self-contained teachers and the inclusion classroom teacher currently have autistic students in their classroom.

Data Collection

This study consists of qualitative inquiry in which the researcher interviewed the three teachers and asked the same questions of each. The interview included questions that will help the researcher determine which classroom is best the environment for social competency building in preschool children with autism. The interview questions were formulated by the researcher based upon the definition of social competency. In addition, the literature on peer relations and social skills in children with disabilities (autism) assisted the researcher in formulating the questions for the interview (See Appendix A).

Data Analysis

Once each of the interviews were completed, the researcher examined each question and answer of the two self-contained teacher interviews and the inclusion teacher interview. By examining each of the interview answers, the researcher was able to compare the answers in order to determine overall themes presented. From the answers of the questions in the interview, the researcher was able to determine which classroom environment promotes social competency building in autistic children.

Results

In this study, the researcher investigated questions relating to the definition of social competency found in the literature. Three preschool classroom teachers were interviewed, two of whom teach in the self-contained classroom and one in the inclusion classroom. A total of seven questions were asked during each of the individual

interviews. There were a few added questions during the interviews, dependent upon the flow of the interview and whether any clarification was needed. Qualitative data analysis of the interview questions and answers produced four themes among autistic preschoolers in the self-contained classroom and in the inclusive classroom. These themes include: (a) type of play, (b) type of interactions, (c) social acceptance, and (d) social competency. Taken together, these themes describe the difference in social competency among the children in the self-contained classroom and the children in the inclusive preschool classroom. Each of these themes will be described using the teacher's responses to the interview questions.

Type of Play

When asked about the autistic child's type of play, both of the self-contained teachers responded very similarly. In this classroom setting the autistic children will play by themselves next to another child but will not interact with the child. According to teacher one, "Autistic children will engage in parallel play, which is playing right next to each other, but without really realizing that the other child is there. For example, if another child asked to play with a toy elephant with them the autistic child would just look at them because they would not be able to understand what the child was asking him." Teacher two also noted that autistic children in her classroom "will not do dramatic play. They will not play dress up or pretend play. Rather, they enjoy playing with something concrete such as cars on a track." While teacher one did not indicate whether or not the autistic children in her classroom use dramatic play, she did imply that her children also like concrete play: "The children enjoy playing with a self-stimulating toy and something they continually repeat because it is familiar to them; like a toy that lights

up.” According to the results of these two interviews, the autistic child’s type of play in the self-contained classroom consists of solitary, self-stimulating, concrete and parallel play.

Teacher three, the inclusion classroom teacher, also responded very similarly when asked about the autistic children’s type of play. According to teacher three, the autistic children in the inclusion classroom will typically play by themselves. Autistic children in the inclusion classroom also engage in parallel play in which they will play next to their classmates without interacting with one another. However, teacher three stated that the autistic children in the inclusion classroom will play with their typically developing peers with teacher-guidance: “If I guide an autistic student to play with a typically developing peer, the two children will play. The autistic child and another student, either autistic or typically developing, will not usually initiate playing with one another without a teacher’s assistance.” Teacher three also indicated that autistic children will become very engaged with a particular toy. She provided an example: “I have a student who is fascinated with a water grid and will repeatedly run the water through the grid. She never becomes bored with it.” As indicated by teacher three, the autistic children in the inclusion classroom engage in solitary, parallel, concrete, and some interactive play with teacher assistance. The play of the autistic children in the inclusion classroom is very similar to the play of the autistic children in the self-contained classroom. The difference between the play of the autistic children in the self-contained and the inclusion classroom is that the autistic children in the inclusion classroom will play with other children in the classroom if guided by the teacher.

Interactions

According to both of the self-contained teachers, autistic children generally interact with familiar adults. In school, the familiar adults include the teacher, teacher aides, occupational therapist, speech therapist and any other professional who comes into the classroom regularly. While the children will interact with familiar adults, these interactions are non-conversational and very short lived. Teacher two stated: “The autistic children do not know how to respond when asked a conversational question such as, ‘What did you do this weekend?’ They may not respond at all, or they might repeat what you just asked them.” Both teachers indicated that the autistic children will engage with one another in short, familiar interactions after having repeated adult guidance. Teacher one provided an example: “If a child says ‘hello’ or ‘goodbye’ to another child, the autistic child will just look at him until the teacher guides the child to say ‘hello’ or ‘goodbye’ in response. The children are now able to say ‘hello’ and ‘goodbye’ to one another because this is something that has become routine for them through repeated teacher-guidance.”

The inclusion classroom teacher indicated that the children with autism will also typically engage with familiar adults within the classroom. These interactions are often short-lived and involve minimal conversation from the autistic child. In addition to interacting with familiar adults in the classroom, teacher three noted that the autistic children will engage with other children in the classroom: “If the autistic children are playing with another child, it is more typical for them to be engaging with another child with either autism or another disability.” While it is more typical for the autistic child to interact with another child with a disability, autistic children are provided with the

opportunity to engage with their typically developing peers. According to teacher three, these interactions must be teacher-initiated: “To make sure that the autistic children have an opportunity to interact with their typically developing peers, I will pair an autistic child with a typically developing peer during classroom activities. While the children are not usually able to engage in a conversation, they are still able to interact by working together on an activity or game.” In the inclusion classroom the autistic children are given more of an opportunity to engage with all types of children, those with and without disabilities.

Social Acceptance

The self-contained classroom teachers and the inclusion classroom teacher responded with the same answers when asked about the social acceptance of the autistic children in their classroom. All three teachers indicated that young children do not see one another as different and view them as friends within their classroom. However, teacher three, the inclusion classroom teacher, indicated that some of the typically developing children in her classroom would take advantage of the autistic children: “I have a few boys that will tease some of the autistic children, one girl in particular. They will also say inappropriate things to her and she will then repeat the phrases because she does not know any better.” Overall, according to the two self-contained classroom teachers and the inclusion classroom teacher, the autistic children are generally accepted by their classmates.

Social Competency

In the interview, there were three questions that relate to the theme of social competency. When asked from whom the autistic children learn social skills, both of the

self-contained classroom teachers responded that autistic children generally learn social skills from higher functioning children. Teacher one further indicated that the autistic children in her classroom learn social skills through the observation and guidance of adults within the classroom. When asked this same question, the inclusion classroom teacher indicated that the autistic children do observe and imitate some social behaviors of typically developing peers: “The autistic children see what the other children are doing and will imitate them. They hear a phrase that another child has said and will repeat it. They will also imitate some facial expressions. While they are learning from their classmates, I don’t think that the autistic children completely comprehend what they are imitating.” Since the autistic children do not fully understand the behaviors that they imitate, the inclusion classroom teacher states that they must be taught certain social skills by the teachers: “In order to help the autistic children learn the needed social skills, I and the other staff are constantly working with the children to teach them eye contact, appropriate responses and facial expressions. Through a lot of repetition, the children are slowly learning these skills.” The autistic children in the inclusion classroom gain social skills by being taught by their teachers and observing and imitating their typically developing peers.

In addition to learning social skills through observations, the two self-contained teachers confirmed that they both implement social building skills into the daily routine of the classroom to help the children gain appropriate social skills. A lot of the social building skills the teachers implement are teacher-guided. Teacher one provided this example: “I will ask a student to tell another student something. For instance, I will say, ‘Daniel, go tell Janie to come see me.’ While the interaction is not initiated by the child,

the children become more familiar and comfortable with interacting with one another, which hopefully turns into a learned behavior through continued repetition.” The social building skills implemented in the inclusion classroom are similar those of the self-contained classrooms. Teacher three stated that to help build social skills amongst the autistic children, she will pair up an autistic child with a typically developing peer during classroom activities and as reading buddies.

Taking into account the social skills the children learn through observing and the implementation of social building skills, the teachers were asked if the autistic children had gained more social skills since the beginning of the year. In response to this question both of the self-contained teachers believed that their autistic students had gained some social skills throughout the school year. Teacher one noted that the children are more comfortable and familiar with their peers, which has allowed them to improve their social skills. Teacher two indicated that the autistic children in her classroom have increased their social skills through observation and routine: “For example, if a child falls another child will now try help that child up versus in the beginning of the year myself or another teacher would have to assist the child who fell. Also the children have learned and gained the ability not to grab or hit other students.” The inclusion classroom teacher also believed that the autistic children have gained social skills since the beginning of the school year. Teacher three indicated: “The children have become familiar with one another and the autistic children are beginning to initiate saying ‘hello’ and ‘goodbye’ to other students. In addition, when I ask the autistic students who they would like to work with, they are able to point to or give me a name of another child. That indicates to me that they consider that child their friend.” While the autistic children in both self-

contained classrooms and the inclusion classroom have gained social skills throughout the year, the teachers recognize that the children still require a lot of guidance in performing appropriate social skills.

In the last question of the interview, the teachers were given a definition of social competency and asked if they would consider the autistic children in their current classroom socially competent. All three teachers did not believe that the autistic children in their classroom could be considered socially competent at this point. Teacher two and teacher three (the inclusion classroom teacher) indicated that it was possible that the higher functioning autistic children might be considered socially competent at the end of the school year. However, teacher one disagreed, stating that the autistic children in her classroom would not be socially competent at the end of the school year. In addition, teacher one stated: "Children at the preschool level are not at the developmental age to be able to be socially competent. They are still too young."

Discussion

The purpose of this study is to determine which classroom setting is best suited for children with autism in terms of acquiring appropriate social skills and interacting with other children. The researcher compared the social skills gained in autistic preschool children in the self-contained classroom with those of autistic children in the inclusion classroom. It was hypothesized that autistic preschool children who are educated in an inclusive classroom would become more socially competent than autistic children who are educated in a self-contained classroom. The data gathered in the study offered limited support for this hypothesis. The results of this study were fairly consistent with the existing literature on the topic.

The results were divided into four themes: type of play, type of interactions, social acceptance and social competency. According to the three teachers interviewed, the autistic children in their classrooms engage in solitary, self-stimulating, concrete and parallel play. This finding is consistent with Diamond's (1993) research, in which he found children with disabilities to engage in solitary and simple play. In addition, the finding that children with autism generally engage in self-stimulating play is consistent with the research done by the Autism Society of America (2008). The current study demonstrated that the autistic children in the inclusion classroom engage in some interactive play with other students. However, this pair or group play was only observed when initiated by teacher-guidance.

The next theme considered was the type of interaction in which the autistic children engage within the classroom setting. The autistic children in the self-contained classrooms generally interact with familiar adults. Two self-contained teachers described these interactions as very short-lived and non-conversational, which is a characteristic of autism (Autism Society of America, 2008). The autistic children in the self-contained classroom interact with other students only when the interaction is teacher-guided. Conversely, in the inclusion classroom it was found that autistic children initiate interaction with other children. As Guralnick and Groom (1987) reported, the autistic children in the inclusion classroom are more likely to interact with other children with autism and other disabilities, as compared to their typically developing peers. Even though the autistic children generally choose to interact with other children with disabilities, the inclusion classroom teacher pairs a typically developing peer with an autistic child during an activity to encourage interaction between the typically developing

peers and the autistic children. This finding is consistent with Wolrey and Wilbers' (1994) research, in which they concluded that the inclusion classroom setting provides the opportunity for autistic children to interact with their typically developing peers.

Social acceptance of the autistic children in the classroom was another theme that was revealed during the analysis of the data. According to both self-contained teachers and the inclusion teacher, the autistic children in both classroom settings are generally accepted by their peers. This finding is inconsistent with the literature. Odom et al (2006) found that social rejection is associated with three characteristics: social withdrawal, aggression and lack of communication. The autistic children in both classrooms have two of these characteristics—social withdrawal and lack of communication— yet they are accepted by their peers. The social acceptance of the autistic children in the inclusion classroom is inconsistent with Diamond's (1993) "like me or not like me" schema, which he believes children tend to follow in choosing friends. The typically developing children in the inclusion classroom might regard the autistic children as different from them, but they nevertheless accept the autistic children within the classroom setting.

The last theme revealed from the data analysis of this study was the social competency gained among the autistic children. In the self-contained classroom, the autistic children generally learn social skills from higher functioning students, but mostly with the observation and guidance of adults. In addition to learning social skills from the adults in the classroom, the autistic children can also observe and imitate the social behaviors of their typically developing peers. In the inclusion classroom the autistic children are provided with the opportunity to learn the appropriate social skills through

the observation of their typically developing peers, a finding consistent with Bergen's research (2000).

While the autistic children in the self-contained classrooms learn social skills primarily through observation and guidance of adults and the autistic children in the inclusion classroom learn social skills through observation of their typically developing peers, the children in both classroom settings are thought to have improved their social skills since the beginning of the school year. Although the autistic children in both classroom settings have gained some social skills, they are still not considered socially competent by their teachers' evaluations. Thus, from the analysis of the results, it is difficult to determine from this study whether the inclusion classroom is the best environment to promote social skills for autistic preschool children.

Strengths and Limitations

This study has some strengths which should be considered when reviewing the results. First, the results of this study are very rich in content due to the researcher's ability to interview three classroom teachers for about thirty minutes each. During the thirty minute interview the researcher had the undivided attention of each teacher and was able to ask the necessary questions. Second, the one on one interviews allowed the researcher to ask relevant follow-up questions and seek further clarification when needed. Third, all three of the teachers currently have autistic children in their classrooms and were able to base their answers to the questions on very recent observations of autistic children.

Certain limitations of this study must also be considered. Since the participants of this study were chosen based upon availability, it was only possible to interview one

inclusion classroom teacher. It would have been better to interview two inclusion classroom teachers in order to be consistent in comparing the results of the two self-contained teacher interviews with two inclusion classroom interviews. Furthermore, the preschool teachers interviewed were not from the same school district due to the lack of availability of an inclusion preschool classroom teacher in that school system. Having to interview just one inclusion teacher from a single school district contributes to the difficulty in making broad-based conclusions from the study. In addition, it was difficult to compare and interpret which children, either in the self-contained or the inclusion classroom, had gained the most social skills. It would have been beneficial for the researcher to have formulated a scale from which the teachers could have indicated where they thought their autistic children fell based upon their social skills. Lastly, it might be difficult to generalize the results of this study to all teachers' perceptions of social skills gained in the self-contained and inclusion classroom because of the small number of teachers interviewed. Future studies should increase the number of participants in order to validate the results of the study.

Implications

It remains unclear whether the inclusion classroom is indeed the best classroom environment for children with autism in terms of helping them gain social competency. Even though the main hypothesis of this study received little support, there are still some implications that can be reached. It is clear that autistic children continue to have difficulty gaining the social skills to interact with other children. It would be appropriate to implement a policy in which all school systems are mandated to have an autistic specialist present to faculty and staff different methods of helping autistic children gain

social skills. It would also be advisable to implement activities to promote social building skills in the preschool classroom through specific curriculum initiatives. The school social worker could facilitate this process by working with the classroom teachers to generate relevant interventions to assist the autistic preschoolers as they begin to develop their social skills and form relationships with their classmates.

Further research is needed on this subject in order to determine the best classroom environment for helping autistic preschool children to become as successful as possible in developing social competency. As noted above, a larger number of teacher participants would serve to validate the results of this study. There should also be consistency throughout the study in terms of interviewing teachers from the same school district, and the same number of inclusion classroom teachers and self-contained classroom teachers. Formulation of a rating scale to be utilized by the teachers in assessing the students' social skills would also be useful. This would assist the researcher in determining which classroom environment—the self-contained or the inclusive classroom—is best suited for preschool children with autism.

Appendix A

Interview Questions

- 1) How would you describe the autistic children's type of play?
- 2) Who do the autistic children typically interact with? Can you describe the interactions? How long are the interactions? Are they positive?
- 3) A. Do you think children with autism learn social skills through observing their typically developing peers?

B. Do you think children with autism learn social skills through observing other children with autism (or other disabilities)?
- 4) Are the autistic children in your classroom socially rejected or accepted by their peers?
- 5) Do you implement any social building skills within your class room? If so, what activities do you specifically implement?
- 6) Have the autistic children in your classroom gained more social skills since the beginning of the year? How do you know?
- 7) Given the definition of social competency, "initiating and maintaining successful interactions and mutually satisfying relationships with others and refer to the dimensions of effectiveness and situational appropriateness of children's social skills," would you say that the autistic children in your classroom are socially competent?

References

- American Youth Policy Forum and Center on Education Policy. (2002). Twenty-five years of education children with disabilities: The good news and the work ahead. Washington D.C.
- Autism Society of America. (2008). About autism. Retrieved October 12, 2008 from www.autism-society.org
- Bandyk, J. E., & Diamond, K.E. (1997). Changes in preschool children's social interactions with and without disabilities [Electronic Version]. *Department of Child Development & Family Studies*.
- Bergen, D. (2002). Play and social interaction of children with disabilities at learning/activity centers in an inclusive preschool [Electronic Version]. *Journal of Research in Childhood Education*.
- Bloch, J.S. (1997). Promoting Friendships for preschool children with special needs [Electronic Version]. NYU Child Study Center.
- Council For Exceptional Children (2000). Home schooling: A viable alternative for students with special needs? Retrieved on November 25, 2008 from www.cec.sped.org.
- Crutchfield, M. (1997). Who's teaching our children with disabilities? [Electronic Version]. *National Informational Center for Children and Youth With Disabilities: News Digest*, 27.
- Diamond, K.E. (1993). Attitudes of preschool children toward their peers with disabilities: A year-long investigation in integrated classrooms [Electronic Version]. *The Journal of Genetic Psychology*, 154, 215-221.
- Duffey, J.G. (1999). Home schooling and students in special education: Sorting out the options for parents [Electronic Version]. *Preventing School Failure*, 43, 57-63.
- Duffey, J.G. (2002). Home schooling children with special needs [Electronic Version] *Journal of Special Educaiton Leadership*, 15, 25-32.
- Early Development, Care and Education (2007). Classrooms for preschoolers with disabilities [Electronic Version]. Iowa State University.

- Guralnick, M.J., & Groom, J.M. (1987). The peer relations of mildly delayed and nonhandicapped preschool children in mainstreamed playgroups. [Electronic Version]. *Child Development*, 58, 1556-1572.
- Guralnick M.J., & Groom, J.M. (1988). Friendships of preschool children in mainstreamed playgroups [Electronic Version]. *Developmental Psychology*, 24, 595-604.
- Helper, J.B. (1994). Mainstreaming children with learning disabilities: Have we improved their social environment? [Electronic Version]. *Social Work Education*, 16, 143-154.
- Hincha-Ownby, M. (2008). Autism education models: Self-contained classrooms mainstreaming, and inclusion. Retrieved on October 12, 2008 from http://autism.suite101.com/article.cfm/autism_education_models
- Kutscher, M.L. (2006). Autistic spectrum disorders: Sorting it out. Retrieved on October 12, 2008 from <http://www.pediatricneurology.com/autism.htm>
- Manwaring, J.S. (2008). How the under representation of girls impacts gender roles in preschool special education [Electronic Version]. *Council for Exceptional Children*.
- National Institute of Neurological Disorder and Stroke. (2006). Autism information page. Retrieved on October 12, 2008 from <http://www.ninds.nih.gov/disorders/autism/autism.htm>
- Odom, S.L., Peck, C.A., Hanson, M., Beckman, P.J., Kaiser, A.P., Lieber, J., et al. (2002) Inclusion at the preschool level: An ecological systems analysis [Electronic Version]. *New Horizons for Learning*.
- Odom, S.L. (2000). Preschool inclusion: What we know and where we go from here. *Topics in Early Childhood Special Education* [Electronic Version]. 20, 20-27.
- Odom, S.L., Zercher, C., Shouming, L., Marquart, J.M., Sandall, S., & Brown, W.H. (2006). Social acceptance and rejection of preschool children with disabilities: A mixed-method analysis [Electronic Version]. *Journal of Educational Psychology*, 98 (4), 807-823.
- Odom, S.L., & McEvoy, M.A. (1990). Mainstreaming at the preschool level: Potential Barriers and tasks for the field [Electronic Version]. *Topics in Early Childhood Special Educaiton*, 10.
- Rodriguez, D., Smith-Canter, L.L., & Voytecki, K.S. (2007). Freedom from social isolation for young students with disabilities [Electronic Version]. *Childhood Education*.

- Sherman, D. (2007). Autism: Your child's legal rights to a special education. Retrieved October 12, 2008 from www.aboutautismlaw.com
- Stout, K. (2001). Special education inclusion [Electronic Version]. Wisconsin Educational Association Council.
- Strain, P.S. & Hoyson, M. (2000). The need for longitudinal, intensive social skill intervention: LEAP follow-up outcomes for children with autism [Electronic Version]. *Topics in Early Childhood Special Education*, 20(2), 116-126.
- Wolrey, M. & Wilbers, J.S. (1994). Introduction to the inclusion of young children with special needs in early childhood programs [Electronic Version]. National Association for the Education of Young Children.