2008

Educational Class for Parents of a Child Recently Diagnosed with Autism

Sarah Haugen  
University of North Dakota

Marcie Sandeen  
University of North Dakota

Follow this and additional works at: https://commons.und.edu/ot-grad

Part of the Occupational Therapy Commons

Recommended Citation
Haugen, Sarah and Sandeen, Marcie, "Educational Class for Parents of a Child Recently Diagnosed with Autism" (2008). Occupational Therapy Capstones. 78.  
https://commons.und.edu/ot-grad/78

This Scholarly Project is brought to you for free and open access by the Department of Occupational Therapy at UND Scholarly Commons. It has been accepted for inclusion in Occupational Therapy Capstones by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.
Educational Class for Parents of a Child Recently Diagnosed with Autism

by

Sarah Haugen, MOTS & Marcie Sandeen, MOTS

Advisor: Gail Bass, Ph.D, OTR/L

A Scholarly Project

Submitted to the Occupational Therapy Department

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master’s of Occupational Therapy

Grand Forks, North Dakota

May 10, 2008
This Scholarly Project Paper, submitted by Sarah Haugen and Marcie Sandeen in partial fulfillment of the requirement for the Degree of Master’s of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

____________________________________
Faculty Advisor

____________________________________
Date
Permission

Title Educational Class for Parents of a Child Recently Diagnosed with Autism

Department Occupational Therapy

Degree Master’s of Occupational Therapy

In presenting this Scholarly Project for partial fulfillment of the requirements for a graduate degree from the University of North Dakota, we agree that the Department of Occupational Therapy shall make it freely available for inspection. We further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised our work or, in her absence, by the Chairperson of the Department. It is understood that any copying or publication or other use of this Scholarly Project or part thereof for financial gain shall not be allowed without our written permission. It is also understood that due recognition shall be given to us and the University of North Dakota in any scholarly use which may be made of any material in our Scholarly Project.

Signature __________________________ Date ______________

Signature __________________________ Date ______________
Table of Contents
ABSTRACT

The purpose of this scholarly project was to develop an education class for parents of children with autism. When discussing the term autism with parents it can lead to confusion, the term autism has changed greatly in the past few decades and today agreement on what the term means is still lacking. With a diagnosis of autism the parents are also going to face many challenges and added stress throughout their daily lives. These known problems helped to determine the need to create the product of this scholarly project. A review of literature and research was conducted to collect accurate and current information on autism and the stressors having a child with the diagnosis of autism places on parents. Following the literature review the product was developed.

The product includes a power point presentation containing all information presented in the class for the instructor. The class provides information on the different issues that their child will face, the most common learning style of children with autism, interventions that can be utilized to address the issues, and coping skills for the parents. A handout is provided for parents with the pertinent information provided in the class and allows space for notes. The handout also includes a number of discussion questions to be utilized throughout the class, example interventions, activities to develop interventions, coping strategies for the parents, and a list of resources.

The intended results of the class are that the parents should be able to more effectively identify the specific difficulties and behaviors that their child exhibits and
understand the causes of the problems. By providing intervention strategies to the parents, it is also hoped that these can be utilized to help the parents better manage the difficulties faced and reduce the behaviors exhibited by their child.
# TABLE OF CONTENTS

ABSTRACT ................................................................. IV

CHAPTER

I. INTRODUCTION ......................................................... 1

II. REVIEW OF LITERATURE ............................................. 4

   Definition of Autism ................................................. 4
   Issues Faced ......................................................... 7
   Learning Style ...................................................... 18
   Intervention Strategies ........................................... 19
   Effects on Parents .................................................. 24

III. METHODOLOGY ....................................................... 28

IV. PRODUCT ............................................................. 30

V. SUMMARY ............................................................. 124

REFERENCES ............................................................. 126
CHAPTER I
INTRODUCTION

When raising a child, parents can experience many challenges. There are a variety of disorders that may contribute to the challenges faced by parents and autism is one of the major developmental disorders that can put additional stress on the lives of the parents and families. The challenges of having a child with autism can include having a child who is unable to interact socially or effectively communicate with others, and who participates in fixed interests and repetitive behaviors. In order to protect themselves from dealing with difficult situations that may arise, children with autism tend to act out by displaying socially inappropriate behavior.

The disorder of autism was first described in 1943, by a childhood psychiatrist Leo Kanner. In 1944, a pediatrician by the name of Hans Asperger was the second to utilize the term autistic in describing four individuals in his study. These individuals noted the children had “developed special interests, but also had deficits in the areas of communication and social interaction” (Sicile-Kira, 2004, p. 7). Kanner in Sicile-Kira (2004) went on describe autism as a “disastrous condition” (p. 7); while Asperger felt that not all factors associated with autism were negative and that as adults these individuals may be successful.

When discussing the term autism with parents it can lead to confusion, the term autism has changed greatly in the past few decades and today agreement on what the term
means is still lacking. According to O’Brien and Daggett (2006), confusion has also resulted from the breakdown of the autism spectrum disorders (ASD) into Asperger Syndrome, Pervasive Developmental Disorder—Not Otherwise Specified, Autistic Disorder, Rett Syndrome, and Childhood Disintegrative Disorder. When looking at all of these different categories, there are a wide variety of opinions on what is included in each category and there does not seem to be one definite definition for each of the variations. O’Brien and Daggett described how “the growing body of valid and invalid information on ASDs has resulted in frustration among parents, clinicians, and educators who struggle to understand one another’s decision-making processes for children” (p. 3).

With the growing confusion about the disorder and frustration of parents it becomes pertinent to provide them with accurate information on what autism is. When provided with this type of information, it increases the parents’ ability to understand, communicate, and interact with their child effectively. As parents are able to do this, positive changes may be seen in both the child’s and parents’ lives. The parents may not feel as stressed and may become more confident in effectively raising their child.

Based on these findings and the need for parent education, the product of this scholarly project will be the development of an educational class for parents. The first part of the educational class will include information on what autism is and an in-depth description of the characteristics that may be seen in a child with this disorder. After learning about the different characteristics, the parents will then learn about different intervention strategies that can be implemented in the home to help manage the child’s challenges. By creating this educational class, the authors hope to increase the parents
understanding of their child’s disorder and to help the family function more effectively as a whole.

The model utilized for this scholarly project was Occupational Adaptation (OA), which was created by Schkade and Schultz (2003). OA looks at the occupation of an individual, their ability to know that there is a need for change to occur within these occupations, and the mastery of this occupation that has meaning to the individual. The entire model encompasses the OA process, where the person is faced with a challenge that occurs due to interactions of the person and their environments. The whole process then involves the individuals’ ability to adapt to these challenges and achieve mastery of the occupation.

The educational class about autism will help parents become the agent of change for their child. They will be better informed on what challenges the child is facing, and therefore become better equipped to help their child to handle the challenges they experience with the interventions provided. By knowing the information provided in the class, the parents lives should also improve because they should be more able to adapt to the challenges faced when raising a child with autism.

Chapter II of this document is a review of literature and chapter III of this document is a description of the methodology used to develop the parent educational class and materials for the class. Chapter IV contains the product in its entirety and chapter V includes a summary and recommendations.
CHAPTER II
REVIEW OF LITERATURE

In order to develop an educational class for parents of children with autism it is essential to conduct a review of literature; this helps set the framework for what is to be included in the class. This chapter will help readers gain a better understanding of what autism is and its possible causes. The chapter will describe different behaviors that may be observed in children with autism, along with strategies that can be implemented in the home to deal with the behaviors. The first section of this chapter will include an overview of autism and its prevalence. The second section will describe the various issues, such as: social interaction, communication difficulties, sensory dysfunction, and sequential deficits. The third section discusses the learning style that works best for children with autism. The fourth section includes different strategies that parents can implement at home to manage the issues discussed in section three. The final section of the review of literature deals with the effects that having a child with autism has on families.

Definition of Autism

Autism or Autism Spectrum Disorder (ASD) is one of the pervasive developmental disorders that children can endure. Pervasive developmental disorders are a category of childhood diagnoses that incorporate social and communication disorders (Walter, 2004). Autism itself is “a severe form of psychopathology evident before the age of 3 years” (Schreibman, 2005, p. 2). Children who suffer from autism exhibit unusual behaviors which are both severe and persistent in type.
When a child is diagnosed with autism, there are many different levels of severity of the disorder. When people talk about autism there are a number of terms that can be heard which incorporate: “autistic-like, autistic tendencies, autism spectrum, high-functioning or low-functioning autism, more-abled or less-abled” (Autism Society of America, 2006). With each of these terms the severity of how the child exhibits the behaviors or traits varies. The main traits that must be present for a diagnosis of autism are “difficulties with social interaction, communication deficits, and restrictive interests and repetitive behaviors” (O’Brien & Daggett, 2006, p. 7).

The diagnosis of autism can be a long, hard process. Frequently during infancy the child may not exhibit signs or characteristics of the disorder (Autism Society of America, 2006). A child may be progressing developmentally in a normal pattern when they begin to start regressing around the age of 18 to 24 months (O’Brien & Daggett, 2006). One example of this is the child who may have started to develop language and gradually stopped using words. The meeting of developmental milestones can be looked at during a child’s doctor’s visit; if the child has not been meeting specific milestones does not automatically mean a diagnosis of autism. Instead, the developmental milestones are markers that need to be further looked into and discussed with other professionals (Autism Society of America, 2006).

When determining the cause of autism, there is no certain factor that contributes to the development of this disorder, but there are a few possibilities researchers have found that may contribute to the development of autism (Sicile-Kira, 2004). One possibility is that there is a genetic predisposition to autism. There are certain chromosomes that have been found to have areas of interest, which are believed to be
linked to the autism spectrum disorder. The neurotransmitter, serotonin, has been found to have above normal levels in children with autism, this has been identified since the 1960’s. Some other researchers have discovered that toxins such as lead, antimony, and aluminum are at elevated levels in children with autism. This discovery has lead experts to believe “that some children with ASDs cannot detoxicate, and thus accumulate toxins in their bodies” (Sicile-Kira, 2004, p. 36).

Vaccinations have been a major concern for experts as a possible cause of autism. This topic has undergone extensive research and the outcome is still to be determined. One vaccination that has been studied in particular is the measles, mumps, and rubella vaccine (Frith, 2003). Parents have blamed vaccinations because of knowledge that past vaccinations have been found “to induce brain damage with the terrible consequences of severe brain damage” (Frith, 2003, p. 74). Another factor that has lead to this belief is the late onset of autism; often this late onset occurs after a child has received their childhood vaccinations. With more research being done it is still unclear whether this is a definite cause of the disorder (Sicile-Kira, 2004). It is evident that further research needs to be conducted.

The prevalence of autism in children has been steadily increasing. Current research shows that “1 in 150” (Center for Disease Control as cited on Autism Society of America, 2006) children in the US are affected with autism, compared to what was written by Simpson and Zionts (1992), which was “4 to 5 times per 10,000 births” (p. 9).

With the prevalence of autism increasing, not only are children being affected but so are the parents of these children. When a child receives a diagnosis of autism the parents must begin to cope with the difficulties that will be faced. Not only do they need
Issues Faced

Children with autism face many of the same issues. As mentioned earlier, the three main areas that children face difficulties in are social interaction, communication, and interests and repetitive behaviors (O’Brien & Daggett, 2006). When a child is faced with these issues it can lead to several behavioral problems. The behavioral problems result from the child’s own frustration at not being able to express their personal needs in an effective manner so others can understand them. The problems of these children can be compared to those of children without autism who are able to verbalize their desires and therefore do not need to act out.

Sensory deficits are often found in children with ASD, this limits the child’s ability to interpret their surrounding environment correctly (O’Brien & Daggett, 2006). Children with sensory deficits may often engage in unusual behaviors to stimulate themselves, “including rocking, spinning, or flapping their hands” (Case-Smith & Bryan, 1999, p 490).

Social Interaction

It has been widely recognized that children with autism have difficulties developing social interaction skills with others in their lives. Problems with interactions can start to appear early on in life; however, many children who develop signs of autism later on show normal signs of interaction during their first year (Frith, 2003). However if signs of autism appear during infancy, they may display inappropriate interactions. These
interactions may include not initiating the desire to be held or cuddle with parents or others (Sicile-Kira, 2004).

For many children the problems with social interactions skills start to develop around age three to five (Frith, 2003). Some of the most notable tribulations may start to surface when a child is at the developmental age where they should be interacting with others. Parents may note their child does not maintain eye contact with others, frequently spends time alone, does not develop relationships with peers, and does not initiate interaction with others (Sicile-Kira, 2004).

Parents may find it difficult to deal with these social interaction problems. Frith (2003) noted the difficulty parents face when trying to apply “social praise and disapproval” (p. 103). It can be difficult to determine how a child will react to these simple statements due to the child’s inability to decipher the message.

When it comes to determining why these children are misunderstanding these messages, it is important to look at all the factors of the interactions such as body language, through examining the face, eyes, and hands (Frith, 2003). Children with autism may misunderstand a message being sent because of difficulties with recognizing and gazing at human faces. When focusing on eyes, these children are unable to understand the message being sent with the eyes; therefore the message will be disregarded or misinterpreted. Children with autism typically can decipher gestures that are more commonly used among individuals such as pointing up, bye, or quiet; however, they display more difficulty when it comes to translating gestures that are not typically used on a daily basis.
When social interaction difficulties are present it not only affects those around the child, but it can begin to affect the child themselves. Bellini (2004) conducted a study to look at the level of anxiety that is experienced in children and adolescents with autism as compared to those without autism. Study results showed that the children with autism exhibited symptoms of anxiety more frequently than those without autism and “assertion and empathy skills were related to social anxiety” (p. 85). These results are consistent with other research that shows levels of anxiety being greater in children with autism. By examining these results, one can see the impact that a lack of social interaction skills can have on children with autism as they age (Bellini, 2004).

Communication

In addition to not interacting socially with others in their environment, children with autism experience difficulties with communication skills. Schreibman (2005) reports “approximately half of children with autism fail to develop functional speech. Those children who do acquire speech often develop noncommunicative speech patterns that are qualitatively different from those of ordinary children or those with other specific language disorders.” (p. 32). The speech patterns that children with autism begin to develop often involve the repetition of words, otherwise known as echolalia, or they stick to limited information (Sicile-Kira, 2004). Schreibman (2005) reports another form of speech difficulty which is characterized by dysprosody, meaning that the melodic features of the speech are irregular. Their speech may be monotonic (often described as similar to the speech of the deaf), poorly articulated, and unusual in rhythm, pace, or inflection. Thus the speech may be too rapid or too slow, may have incorrect emphasis on syllables within a word, or may otherwise be abnormal. Unfortunately, even those autistic individuals who have relatively good language skills may still sound abnormal because of the prosodic errors in their speech. (p. 35)
In a study by VanMeter, Fein, Morris, Waterhouse, and Allen (1997) the researchers found that when compared to children without a diagnosis of autism those with autism had difficulties in “items relating to attention to language and pragmatic use of language” (p. 566). Children with autism tend to learn language in a different way then normally developing children. Children who are developing normally take in words and associate meanings without having attended to that specific object, but some children with autism need to be physically involved with the object, such as touching it, in order to develop the correct meaning of an object. This phenomenon then leads to the misuse of words or the child’s own individual formation of words, also known as idiosyncratic speech (Frith, 2003).

When children are unable to communicate with others, it starts to lead to frustration and difficulties in their daily functioning. School age children may find it difficult to function in this setting and achieve academically. These same children may also find it difficult to find and maintain friends when they are unable to communicate with their peers (Thiemann & Goldstein, 2001).

Many of the behaviors exhibited by children with autism may also stem from their lack of communication (Sicile-Kira, 2004). The behaviors that children with autism develop may become their only way of communicating with others. Behaviors that are shown by the child can vary from avoiding certain situations to them trying to figure out their surroundings by being over involved with the environment. It is important to remember that “a meltdown is a clear message from a child who is at that moment not able to tell you in any other way: something is happening in his environment that has caused his delicate neurology to go haywire.” (Notbohm, 2005, p. 77). Notbohm (2005)
writes that during these times it is best to remember, “it is not within his control” (p. 77) and “he does not make a conscious choice to throw a tantrum.” (p. 77).

Even with the noted difficulties in communication, it is important to remember that some communication skills are still intact. VanMeter et al. (1997) found that children with autism when compared to normally developing children showed better skills in “rote memorization, such as stating one’s telephone number, and in written language skills ” (p. 566) more often on the tests given. There are also those children who have the innate ability to communicate in ways other than verbally. Frith (2003) describes this in the following example:

There is, for instance, the case of a young man who never used language until he was given a computerized communicator, which he took to and used effectively almost straight away. Normal language acquisition is undoubtedly aided by an innate desire to communicate. (p. 119).

Interests and Repetitive Behaviors

Another area that children with autism struggle with is fixing their interests and the use of repetitive behaviors. Interests of children with autism are also affected; they tend to look at one particular interest and do not deviate from that (Sicile-Kira, 2004). Some examples of the fixed interests include a child who only talks about or focuses their attention on motor vehicles or is fascinated with the look, sound, and feel of paper. With the preoccupation that children with autism have on certain objects or behaviors others may think that the child has reduced attention (Frith, 2003). However, instead of referring to their attention in this way the child with autism has “peculiar attention” (Frith, 2003, p. 171). The difficulty with the focused attention of these children is that they tend to focus it on odd and unimportant objects, rather than those that hold more importance to the
individuals’ environment (Frith, 2003). Examples of these odd objects may be cars, spoons, or an article of clothing.

When looking at the use of repetitive behaviors this is one of the main areas examined when a diagnosis of autism is being considered (Frith, 2003). These repetitive actions have not only been associated with autism, but also found common in individuals where the brain has been affected. Repetitive behaviors are thought to be associated with the constant activity of the brain, which can lead to the person completing actions that are thought to be “undirectional and appears as endlessly repeated loops of behavior” (Frith, 2003, 174). The thoughts resulting from the brain impairment are repeated because it is hard for the brain to respond to changes in the environment efficiently (Frith, 2003).

When observing the repetitive behaviors of children with autism, the behaviors may present in different ways (Schreibman, 2005). These behaviors may be found at the fine or gross motor levels, may involve the use of a certain object, or may come out verbally. Schreibman (2005) identified repetitive behaviors used as the following:

At the gross-motor level, one often sees rhythmic body rocking, rocking from foot to foot, head bobbing or weaving, arm and/or hand flapping, jumping, spinning, pace or posturing. At a fine-motor level one might observe finger wiggling, gazing at or “regarding “ the cupped hand at the side of the face, grimacing, finger posturing, eye crossing, saliva swishing, or hair twirling. (p. 37)

With many of these actions, one may see the child incorporating behaviors such as taping, waving, or spinning the object (Schreibman, 2005).

Along with repetitive behaviors, a child with autism may exhibit compulsive behaviors (Schreibman, 2005). These compulsive behaviors may come out especially during play. One characteristic that is often seen during play is that the child may take the toys they are playing with and put them in a perfect line and within this line the toys are
categorized in other ways such as by color or shape (Schreibman, 2005; Sicile-Kira, 2004). Compulsions might also include having to complete certain steps before a task can be completed (Schreibman, 2005). An example of a compulsion is that they may have to turn a light on and off several times before entering a room. Another area where compulsions may become evident is at the dinner table. While eating, some children may have to eat all of one food first, may not allow food to touch, or may eat foods of only one color. All of the repetitive and compulsive behaviors a child with autism may display can be very disruptive to the families’ life.

When looking at the fixed interests and repetitive behaviors of children with autism, it becomes important to incorporate a schedule or routine into the child’s life (Schreibman, 2005). The child is going to be able to function better when their day is predictable. By incorporating schedules, the parents of these children will also benefit because predictability helps’ reduce the tantrums and discord that are experienced (O’Brien & Daggett, 2006).

Schreibman (2005) described how these fixed interests and repetitive behaviors are used to help the child self-stimulate themselves. Self-stimulation is utilized to show “that the function of the behavior is to provide sensory stimulation” (Schreibman, 2005, p. 37). Participation in the self-stimulation behaviors may have a negative effect on the child if they spend a great deal of time on the behaviors. Stereotypes can be placed on these individuals, because of the behaviors, and they can interfere with the child’s function in their environments (Schreibman, 2005).

A first hand account of how a child with autism perceives their world around these interests and behaviors is given by Bemporad (as cited in Frith, 2003) based on an
interview with one of his patients. This account was given when the individual was an adult looking back on his life as a child with autism. The individual reported that,

   Elementary school was remembered as a horrifying experience. The classroom was total confusion and he always felt he “would go to pieces.” There were also enjoyable experiences. He liked going to the grocery stores with his mother so he could look at the labels of canned goods as well as the prices of objects. He also remembered liking to spin objects but could not describe the pleasure this activity gave him. His life seemed to have markedly changed when he discovered multiplication tables at around age 8. He denied that arithmetic helped give his world a sense of order; he said he simply liked working with numbers. Similarly, he could give no reason for his need for sameness or rituals beyond stating that that was how things should be. (Bemporad as cited in Frith, 2003, p. 169)

Sensory

One final area that children with autism may have difficulties in is that of sensory integration. Ayres (1979) described sensory integration as “the organization of sensation for use; our senses give us information about the physical conditions of our body and the environment around us” (p. 5). According to Ayres, as humans we have sensory information entering us at all times of the day, from all of the different senses. When this sensory information comes in it is the brain’s responsibility to arrange these sensations to allow a person to interact in their environment. For a young child, the ability to process all of the sensory information correctly is important to interacting appropriately in their environment. If a child is able to appropriately process sensory information it helps the child “to focus on relevant stimuli, assimilate incoming sensory information, and respond in developmentally appropriate ways” (Case-Smith & Bryan, 1999, p. 490).

When a person has poor sensory integration it is going to impact many areas of their lives (Ayres, 1979). The difficulty with poor sensory integration is that there is no test to determine if a child or individual has the disorder. Williamson and Anzalone (1997) reported that the best way to gain information about a child’s sensory processing
is through interviews with parents and observations of the child. Ayres (1979) stated that some of the early signs of sensory integration difficulties are that children do not roll over, creep, sit, or stand at the same age as other children. Later on they may have trouble learning to tie their shoes or ride a bicycle without training wheels. But other infants with poor sensory integration seem to develop on schedule, and only have trouble later on. They may seem clumsy and frequently fall or stumble. (p. 8)

As the child ages, they may have difficulty playing or completing simple art tasks as efficiently as their peers. When a child enters school, even more difficulties are going to be present. The child may have difficulties completing classroom tasks, may become distracted during class, and can be easily confused. All of these difficulties may lead the child to becoming frustrated and acting out in inappropriate ways (Ayres, 1979).

When a child has difficulties processing sensory information it may be referred to as “sensory integrative dysfunction” (Ayres, 1979, p. 51), which “means that the brain is not functioning in a natural, efficient manner” (p. 51). When a child experiences this, he/she may struggle to interact appropriately in his/her environment. Ayres (1979) gave the following description to help explain the dysfunction that may be occurring in the brain of an individual with sensory difficulties:

We can think of the brain as a large city and of neural impulses as the automatic traffic in that city. Good sensory processing enables all the impulses to flow easily and reach their destination quickly. Sensory integrative dysfunction is a sort of “traffic jam” in the brain. Some bits of sensory information get “tied up in traffic,” and certain parts of the brain do not get the sensory information they need to do their jobs. (p. 51)

The sensory dysfunction that the child may experience can occur in two ways, either a low sensory threshold or a high sensory threshold (Williamson & Anzalone, 1997; Dunn, 1997). Williamson and Anzalone (1997) defined sensory threshold as “the point at which summed sensory input activates the central nervous system” (p. 29). The
child’s sensory threshold “may be faulty because the central nervous system does not perceive novel stimuli or finds them threatening” (Williamson & Anzalone, 1997, p. 30).

When a child has a low sensory threshold, this may also be referred to as hyperreactivity (Williamson & Anzalone, 1997). These children are sensitive to the stimuli around them (Dunn, 1997). An individual may notice the child with autism becoming over sensitive in situations that involve loud noises. For others they may realize certain situations may be encountered that will arouse their sensations, the child may then act out behaviorally to try and avoid that situation. The child may also learn to manage the sensations that are encountered by following “rigid routines, compulsions, and stereotypic patterns that help to keep them in control” (Williamson & Anzalone, 1997, p. 31).

Other children may have the opposite reaction to sensory stimuli, which is known as a high sensory threshold or hyporeactivity (Williamson & Anzalone, 1997). The child with hyporeactivity tends to seek out different sensory stimuli to help start to feel more organized. Dunn (1997) reported that children who are seeking more sensory input may “add movement, touch, sound, and visual stimuli to every experience. They might make noises continuously, fidget in their seats, touch everything, handle objects or people, or chew on things in an attempt to meet their high thresholds” (p. 32). When a child with a high sensory threshold is utilizing these techniques they may be seen as being more organized and enjoyable, however as soon as the stimuli is removed the child will appear to be detached from the environment once again (Williamson & Anzalone, 1997).

The standard senses that most individuals are familiar with include those of vision, hearing, touch, taste, and smell. However, when looking at sensory dysfunction it
is also important to observe the vestibular and proprioception systems, which are those senses related to the body (Williamson & Anzalone, 1997). In sensory dysfunction the important systems to observe are those of vestibular, proprioception, and tactile.

The tactile system services a protector by allowing us to be aware of our environment and what is going on around us. This system also helps individuals to discriminate the different components of objects or substances to help plan movements and use objects. The vestibular system contributes to a child’s ability to maintain their balance, ability to attend, and ability to control his/her emotional state. The proprioceptive system “consists of the receptors in the muscles, tendons, and joints that provide the perception of movement and position of the body in space” (Williamson & Anzalone, 1997, p. 32). When discussing proprioception, Ayres (1979) reported that this is a sense that a child usually does not think about. The sensations we obtain through our proprioceptive system are vital to allowing us to know where our body parts are in space in relation to different movements.

When observing the symptoms that a child with autism may exhibit, many of these are similar to those associated with poor sensory processing (Ayres, 1979). Some of the symptoms that are commonly seen in children with autism include difficulties with localizing where tactile stimuli is occurring and being able to know where there hands are in space. Children with autism may also exhibit a low to a high sensory threshold; this can be seen in the child that may “seek movement and vestibular stimulation strenuously or reject it entirely” (Ayres, p. 125). Another main symptom that may be observed is related to the vestibular system. A high number of children with sensory processing
dysfunction may avoid certain movements and dislike being in insecure positions, such as being on a swing, due to the sensations that are felt (Ayres, 1979).

The impact of sensory processing difficulties and sensory integration techniques for children with autism has been shown by different researchers. Kern et al. (2007) found that the more severe a child’s autism is, the more likely they are to have increased severity in sensory deficits. The use of sensory integration techniques was also shown to have improved goal-directed play in children with autism and improve behaviors that were non-engaging (Case-Smith & Bryan, 1999). This study showed the improvements that can be made in children with autism when their treatment is focused around sensory integration.

Learning Style

Everyone learns in different ways and individuals tend to utilize a variety of learning styles (Savner & Myles, 2000). The way individuals learn can incorporate hearing, seeing, and direct interactions with a situation. However, current research has shown that children with autism learn best through the use of the visual system. Individuals with autism display “strengths in visual perception, memory, and spatial relationships” (Preis, 2006, p. 194).

Notbohm (2005) described how children with autism “think in images, not words” (p. 52) and how their “primary ‘language’ is pictorial, not verbal” (p. 52). Because children with autism are visual learners it is important to make sure visual cues and teaching methods are incorporated into the everyday learning process (Notbohm, 2005). Visual learning can be incorporated into different types of interventions, as addressed later in this chapter.
Intervention Strategies

There are a number of interventions that can be utilized in the home, at school, or during therapy that help address difficulties faced in social interaction, communication, interests and repetitive behaviors, and sensory deficits. Many of these interventions do not only address a single area of impairment, but deal with a variety of the issues that are faced. This section of the literature review will address a number of interventions that can be utilized for children with autism.

Social Stories

Children with autism face many difficulties in social settings, which include “impairments that impede their ability to ‘read’ and understand social situations and to formulate appropriate responses” (Gray & Garand, 1993, p. 2). New research on the social cognition of children with autism has helped to look at the usefulness of social stories as a treatment technique for children with autism. Social stories are intended to present social information to children with autism in an easy to understand format that fits each specific child’s abilities and impairments. Children with autism find it difficult to listen to instructions that are given, however social stories provide the child with the information straightforwardly and allow the child to practice the information that is being presented (Gray & Garand, 1993). The social stories address the cues that the child with autism may not see and then discuss proper social interactions to allow the child to be more socially appropriate (O’Brien & Daggett, 2006).

Social stories are written using three types of sentences, descriptive, directive, and perspective. Along with these sentences pictures may be included to provide a visual cue for the child (Gray & Garand, 1993). When using pictures it is important to carefully
observe the pictures used to make sure the child will not pick something inappropriate in
the situation to associate with. Gray & Garand (1993) described three ways that social
stories can be implemented with children. The first is based on if the student is able to
read, if they are able to read the individual working with the child will first read the story
to the child and then the child will read the story each day until the information is
utilized. Secondly, the story can be recorded and the child can listen to the story until it
has been utilized. Finally, the story may be video taped and the child will view the video
each day.

There are a variety of reasons that social stories may be implemented with a child
with autism. Sicile-Kira (2004) reported that social stories can be “particularly useful for
learning how to deal with unstructured time such as recess and lunchtime” (p. 108).
Social stories may also be utilized to help a child with change that may be occurring, to
incorporate routines, address academic situations, or to learn more appropriate ways to
dealing with feelings (Gray & Garand, 1993).

In current research social stories have been found to be effective for children with
autism in helping them develop more appropriate social behavior. Norris and Dattilo
(1999) and Kuttler, Myles, and Carlson (1998) completed single cases studies on children
with autism and the effectiveness of social stories on reducing behaviors. Both of these
studies observed the child before social stories were incorporated and again after the
intervention had been implemented. In both studies, the researchers found that the
children’s inappropriate behaviors decreased while in social situations at school.

Thiemann and Goldstein (2001) completed a study that dealt with the use of
social stories, written text, and pictorial cuing on the social communication of individuals
with autism. During the intervention phase the researchers included two peers with each child with autism; the children were presented with a social story, written text, or pictorial cues about a specific social skill and were given the opportunity to learn that skill and then utilize it in a social activity with their peers. If the child was not utilizing the skill, the examiner would provide written or verbal cues to the child with autism. After completion of the social activity, the children would watch their interaction on video and rate how well they incorporated the skill. The results of the study showed improved social skills in the children with autism after the intervention.

Visual Cuing

As discussed earlier, children with autism tend to learn best visually (Savner & Myles 2000). Utilization of seeing in teaching can be referred to as visual cuing or visual supports. Studies have shown that children with autism are able to “learn more quickly, reduce aggressive or self-injurious behavior, decrease frustration and anxiety, learn to adjust to changes at home and school, complete tasks by themselves and gain independence” (Savner & Myles, 2000, p i). The visual supports that are provided to children with autism can include creating a visual schedule with pictures of what is to be completed, sharing information with others by incorporating pictures of what was completed during the child’s day, and utilizing pictures to display appropriate behavior that is to be shown during certain situations (Savner & Myles, 2000).

One of the main visual cues that can be utilized with children with autism is that of an activity schedule. McClannahan and Krantz (1999) stated an “activity schedule is a set of pictures or words that cues someone to engage in a sequence of activities” (p. 3). The schedules for a child can vary based on his/her own individual needs and routine. For
example, the schedule may break one big task down into several smaller parts or have just one single cue for the whole task (McClannahan & Krantz, 1999). Savner and Myles (2000) also gave the example of having to break the schedule down into times of the day, before breakfast, before lunch, before dinner, and after dinner.

A study conducted by Bryan and Gast (2000) helped show the effectiveness of the use of a picture activity schedule on children’s on-task and on-schedule behaviors. Each participant was a child with autism who was provided with his/her own picture activity schedule of academic activities in a photo album. Results showed that the children were easily able to learn the use of the picture activity schedule; they showed increased independence in the classroom and increased scheduled behaviors, while unscheduled behaviors decreased. Prior to this study, other researchers found the use of picture activity schedules helped in on-task and on-schedule behavior. MacDuff, Krantz, and McClannahan (1993) found that the children were able to stay engaged in activities and would carry the skills learned into a new picture activity schedule. This shows that the children in the study were able to generalize the use of picture activity schedules into different settings and for the completion of different activities.

Another form of visual cuing can be utilized in order to help children with autism communicate with others. This form of communication is known as picture exchange communication system (PECS), which Sicile-Kira (2004) described as “a practical communication system that allows a person to express his needs and desires without being prompted by another person, by using pictures or a series of pictures to form a sentence” (p. 101). The use of PECS is most useful with autistic children who are non-
verbal (O’Brien & Daggett, 2006). These children are able to help show what they want from others without the use of words.

Ganz and Simpson (2004) conducted a study to determine the effectiveness of implementing PECS with children who have autism to see the effects it would have on improving their use of words, phrases, and non-word vocalizations. The results showed that the children were able to progress in using PECS correctly and its use affected their number of words spoken. The use of PECS was also able to be used with adults other than those they were trained to utilize it with.

_Routines_

One of the most effective ways to manage behaviors that may be exhibited by children with autism is creating a daily routine. O’Brien and Daggett (2006) describe five steps that are useful in developing a daily routine: “prepare for routine activities,” “get the child’s attention,” “define what is expected of the child,” “communicate expectations clearly,” and “reward cooperation” (pp. 229-230). By following these steps an individual is able to create a routine that is recognizable for the child and helps to put their day in order.

One group of researchers (O’Reilly, Sigafoos, Lancioni, Edrisinha, & Andrews, 2005) examined the effect having a classroom schedule had on a child’s level of self-injurious behavior and their engagement in classroom activities. The participant in the study was given an individualized schedule to follow for thirty minute periods. Observations were taken when the schedule was implemented and not implemented to record the child’s engagement in the class room and the self-injurious behaviors that were occurring. Results indicated that the participants’ self-injurious behaviors decreased when
a schedule was utilized. It was also shown that his engagement in the classroom was increased when the schedule was implemented.

Sensory Integration

In order to address the sensory issues children with autism face, sensory integration interventions can be utilized, “in which a set of activities involving body movement and vestibular stimulation are used for the purpose of helping a child integrate information from different sensory modalities or to improve attention and behavioral control” (O’Brien & Daggett, 2006, p. 172). When discussing sensory integration therapy, Ayres (1979) stated

The central idea of this therapy is to provide and control sensory input, especially the input from the vestibular system, muscles and joints, and skin in such a way that the child spontaneously forms the adaptive responses that integrate those sensations. (p. 140)

One method of sensory integration intervention that has been utilized is the use of weighted vests. Olson and Moulton (2004) conducted a survey with pediatric occupational therapists in order to determine the effect the use of weighted vests had on the behaviors of children with sensory deficits. Results showed that weighted vests help children with on-task behaviors and completion of tasks the therapists felt the use of the weighted vests help to reach their expectations of the child related to on-task behaviors.

Effects on Parents

Parents of children with autism can face many stressors which contribute to anxiety, depression, agitation, and becoming worn out. When an individual finds out they are going to be a parent it can be one of the most exciting times of their lives and are looking toward the future. Parents of children with autism then spend the first few years of their lives with a child who appears to be developing normally. When parents start to
notice problems, there is usually a significant amount of time spent waiting for the
diagnosis to be made. As the diagnosis of autism becomes more definite these parents
may start to blame themselves and feel as though they are failing as parents (O’Brien &
Daggett, 2006).

When a child is diagnosed with autism, the perspective of what this child’s life
and the family’s life was going to be has changed. DeGrace (2004) reported one mother
stating “her family was ‘on hold’ because of the significant needs of their child with
autism” (p. 543). Parents of children with autism have identified a number of other issues
that affect their families. DeGrace (2004) found that

For the families, autism is an entity of its own. It, “autism,” controls their daily
lives. A significant part of the family’s day revolves around the needs of the child
with autism. The families describe their days as “insane” and “hectic” where
“every second counts.” From the time the children rise until the time they go to
sleep, they require the attention of a family member. For example, the children
require prompting and assistance to get dressed, to get a bath, and to brush their
teeth. (p. 545)

The families in this study also reported feeling robbed of feeling like a family, being able
to participate in “normal” family activities, knowing what the future holds, and the
unpredictability of every situation throughout the day (DeGrace, 2004).

When parents describe their everyday function in occupations, they report “the
experiences were ‘overwhelming’ and ‘stressful’” (DeGrace, 2004, p. 548). The added
stress that parents encounter may be “related to the child’s challenges in communicating,
difficult behaviors, social isolation, difficulties in self-care, and lack of community
understanding” (Schieve, Blumberg, Rice, Visser, & Boyle, 2007, p. S115). Due to the
higher level of stress that is experienced, research has been conducted to identify what
aspects of the parents’ life are most affected and ways that parents are trying to cope with the additional stress to their life.

Higgins, Bailey, and Pearce (2005) conducted a survey with parents of children with autism to gain information on the “relationship between ASD characteristics, family functioning and coping strategies” (p. 125). The study more specifically focused on the family functioning, factors about the marriage, self-esteem, and coping strategies. The results showed that the parents in the study “reported lower marital happiness, family adaptability and family cohesion than normative data” (p. 133). Among parents that experience stress, Montes and Halterman (2007) found that the mothers of children with autism “have high levels of parenting stress and were more likely to report poor or fair mental and emotional health than mothers in the general population” (p. e1044).

To overcome the stressors that are faced when parenting a child with autism, families utilize a number of coping strategies (Twoy, Connolly, & Novak, 2007). The strategies that were found to be effective were having social support from friends and family. However, the researchers also found that a majority of the parents report using passive coping strategies as described in the following passage:

Fifty-one percent of the parents responded to the question in the tool that “no matter what we do to prepare, we will have difficulty handling problems”, and as high as 87% responded to another question in the tool that “if we wait long enough, the problem will go away.” Watching television was a coping response for 69% of the participants, suggesting avoidance or passive behaviors. (p. 258)

Instead of coping passively with the stress, it is thought that more active coping strategies are helpful.

DeGrace (2004) reports that there is a “need for comprehensive family interventions and support for families who have children with severe autism that
deemphasize controlling behavior and emphasize supporting the meaningful, shared occupations of the family” (p. 548). This can be done through the use of educational or training classes for parents. It is important to implement these classes directly following a diagnosis to help lower the chances of parent experiencing high levels of stress as shown in a study by Tonge et al. (2006). The researchers found that the use of parent training classes aided “to improve parental mental health and adjustment in parents, particularly those with preexisting mental health problems” (p. 568).

The purpose of this project is to develop an educational class for parents of children who were recently diagnosed with autism based on the findings in the review of literature.
CHAPTER III

METHODOLOGY

Autism is a developmental disorder that can affect the daily lives of the child as well as the family of the child who has autism. A child with autism may display deficits in communication skills, social interaction, and fixed interests and repetitive behaviors. The deficits that are faced can lead the child to acting out behaviorally and making it difficult to know how the child is going to respond in certain situations. In order to help the parents of these children develop strategies to manage these difficult times, the authors of this scholarly project felt it was important to develop an educational class for parents. The purpose of the educational class is to help parents understand their child with autism as well as learn strategies to help manage the difficulties that are faced on a daily basis.

A review of literature and research was conducted to collect accurate and current information on autism and the stressors having a child with the diagnosis of autism places on parents. The search engines of PubMed, SCOPUS, and OT Search were utilized to find relevant journal articles. The first body of literature that was reviewed described the actual disorder of autism and the difficulties that are faced by the child and family; this body of literature was foundational for the product. The second body of literature included descriptions of various interventions that can be utilized for children with autism. The final area of literature reviewed dealt with the stressors and difficulties that parents of children with autism encounter.
The product of this scholarly project, an educational class for parents, contains an overview of autism and the difficulties that parents may observe their child experiencing. A number of strategies have been provided for the parents that may help them to more effectively handle these situations. The information contained in the product was based on current journal articles, research, and books developed about autism.

An *Educational Class for Parents of Children Recently Diagnosed with Autism* was developed by incorporating two adult learning theories: cognitive and constructivism adult learning theories. The cognitive learning theory (Braungart & Braungart, 2006) was utilized in order for the learners to be able to incorporate their own perceptions, thoughts, and memories from their own past experiences in order to enhance the materials being learned in the educational class. This aids the parents in applying the information learned to their own lives and experiences, and which makes it meaningful. The constructivism learning theory (class notes, October 10, 2007) was incorporated into the product in order for the parents to link the new information learned to prior knowledge they have acquired. This helps the parents remember the new knowledge. The theories together will facilitate discussion among the parents about their own personal experiences.
Chapter IV

Product

The authors have created an educational class for parents of children with autism. Parenting children can be a difficult task for anyone. The added diagnosis of autism can add even more stress and difficulties. This educational class was designed to help parents understand autism and how it affects their child. It covers the three main issues that are faced by children with autism including: social interaction, communication, and fixed interests and repetitive behaviors. The conclusion of the class provides parents with different intervention strategies that could be incorporated for their child.

The product includes a power point presentation containing all information presented in the class. There is a separate page for each power point, containing notes to guide the instructor through the class. A handout is provided for parents with the pertinent information provided in the class and allows space for notes. The handout also includes a number of discussion questions to be utilized throughout the class. In order to help the parents deal with the stressors associated with raising a child with autism, a sheet of coping strategies has been included. The final part of the handout is a list of resources on autism for parents.

The instructor of this class should be well versed on the diagnosis of autism. Instructors for this class could include an occupational therapist, teacher, social worker, or other individual who has worked with children with autism for some period of time.
To adequately prepare for the class, the instructor could also read the resources that were utilized when preparing the class.
Educational Class for Parents of a Child Recently Diagnosed with Autism

Authors: Sarah Haugen, MOTS & Marcie Sandeen, MOTS
Advisor: Gail Bass, PH.D. OTR/L
Instructors Packet
Introduction for Instructor

The instructor of this class should be well versed on the diagnosis of autism. Instructors for this class could include an occupational therapist, teacher, social worker, or other individual who has worked with children with autism for some period of time. Materials are provided for both the instructor and the parents involved in the class. The class is presented through the use of power point. For the instructor each slide is included individually with notes on the bottom to help enhance knowledge of additional information should be discussed other than what is presented on the slide.

A separate handout is provided for those parents taking the class. The handout contains much of the information that is on the power point, but in a more condensed manor. The handout allows space for parents to take their own notes on the information provided. The parents’ handout includes discussion questions that are utilized throughout the class in order to facilitate sharing of information between parents. Parents will be presented with a list of resources that they can obtain independently to gain more information on autism and issues faced by their child.

The class is intended to encompass either one entire day or to be split up between two separate days lasting about 3 hours each. The instructor can decide how to conduct the class depending on their own needs. When making this decision it is also important to take the parents input into consideration on the best times for them.
Educational Class for Parents of a Child Recently Diagnosed with Autism
Parents Handout for:
Educational Class for Parents of a Child Recently Diagnosed with Autism

Brief Overview of Autism
- Pervasive Developmental Disorder
  - Characterized by social and communication difficulties
- Autism affects 1 in 150 children
- Autistic children have behaviors that are both severe and constant
- Level of severity will vary from individual to individual
- Life long developmental disorder

Brief Overview of Autism
- Diagnosis
  - Normal development during infancy
  - At ages 18 to 24 months parents may notice the child starting to regress
    - Child started to develop language abilities but starts to lose words
  - Check developmental milestones during routine doctors visits
- No one known cause

Brief Overview of Autism
- Main traits that lead to a diagnosis of autism
  - Social interaction difficulties
  - Communication difficulties
  - Restrictive (limited) interests
  - Repetitive behaviors
- Other characteristics
  - Difficulty with processing sensory information
  - Difficulty dealing with changes in the environment

Social Interaction
- A child with autism has difficulties developing the skills to interact appropriately with others.
- When do difficulties appear?
  - During infancy
  - Ages 3 to 5
Social Interaction
- Signs that may be present:
  - Infancy
    - Do not like to be held
    - Do not like to be cuddled
  - Preschool and school age years
    - Do not maintain eye contact
    - Spend time alone
    - Do not make friends
    - Does not make the first move towards interactions with others

Social Interaction: Challenges
- Unable to understand messages being sent with the eyes
- Unable to read human faces and the messages that are being sent by facial expressions
- Motions and gestures

Poor Social Interaction: Effects
- The child with autism
- Parents
- Siblings
- Teachers/Professions working with the child
- Friends
- Other family members
Small Group Discussion on Social Interaction

1. At what age do you feel your child started to show signs of social interaction difficulties?

2. Which of these signs are ones that you have noticed your child doing?

3. Knowing what social interactions are, are there any other signs that your child has shown that may be related to social interaction difficulties?
Communication

“Approximately half of children with autism fail to develop functional speech. Those children who do acquire speech often develop noncommunicative speech patterns that are qualitatively different from those of ordinary children or those with other specific language disorders.” (Schreibman, 2005, p. 32)

Communication

- Speech Difficulties
  - Repetition of words or sticking to limited information (echolalia)
  - Irregular rhythm; can be too fast, too slow, wrong pitch, emphasis in wrong places (dysprosody)

Communication

- Children with autism are unable to pay attention to the use of language and use language appropriately.
- Language is learned differently
  - Learn by sound and sight
  - Misuse of words or applying own meaning to words (idiosyncratic speech)

Communication

- Problems that a child with autism may face due to communication difficulties
  - Frustration
  - Academic achievement
  - Making friends
  - Communicating daily needs

Communication

- Lack of communication leads to inappropriate behaviors
  - Avoiding situations
  - Throwing tantrums
Communication
“A meltdown is a clear message from a child who is at that moment not able to tell you in any other way: something is happening in his environment that has caused his delicate neurology to go haywire.” (Notbhom, 2005, p. 77)

Communication
● Some communication skills may be intact, such as information that is learned through repetition, like ABC’s or a phone number
● Others may not be able to speak verbally but can use alternative communication devices
Small Group Discussion on Communication

1. When did you first notice your child had difficulties communicating with others?

2. How does your child communicate with you and with others?
   - Provide examples such as gestures, sounds, expressions

3. As a parent what is the most difficult aspect of having a child who has difficulties communicating?

4. What do you feel are the difficulties your child experiences due to communication difficulties?

5. What types of behaviors has your child exhibited, if any, that you feel may relate to difficulties in communication?
Interests
- May limit interests to few items/ideas
  - Focus on one interest area
  - Difficulty changing tasks
  - Focus may be on odd objects that hold little importance

Repetitive Behaviors
- Movements
  - Clapping hands, spinning in circles
- Objects
  - Continuously tapping or spinning an object
- Verbally
  - Repeating the same word or noises over and over

Compulsive Behaviors
- Completing unnecessary tasks in a certain order or time of day
- May occur during
  - Play
  - Mealtimes
  - Certain times of the day

Interests/Repetitive Behaviors
- Why are the fixed interests and repetitive behaviors present?
  - Helps a child self-stimulate
- Is self-stimulation helpful for the child?
  - Yes to organize self
  - No due to stereotypes and time

Interests/Repetitive Behaviors
- Routines or schedules can reduce behaviors
- Tantrums and conflicts experienced may be reduced with the predictability of the day
Small Group Discussion on Fixed Interests and Repetitive Behaviors

Please read the following passage and answer the discussion questions

Elementary school was remembered as a horrifying experience. The classroom was total confusion and he always felt he “would go to pieces.” There were also enjoyable experiences. He liked going to the grocery stores with his mother so he could look at the labels of canned goods as well as the prices of objects. He also remembered liking to spin objects but could not describe the pleasure this activity gave him. His life seemed to have markedly changed when he discovered multiplication tables at around age 8. He denied that arithmetic helped give his world a sense of order; he said he simply liked working with numbers. Similarly, he could give no reason for his need for sameness or rituals beyond stating that that was how things should be. (Bemporad as cited in Frith, 2003, p. 169)

1. Can you relate your child to the above description in anyway and if so how?

2. What are some of the fixed interests, repetitive or compulsive behaviors, if any, that you have seen your child exhibit?

3. What have you noticed your child participating in for self stimulation?
Sensory Integration
- “organization of sensation for use; our senses give us information about the physical conditions of our body and the environment around us” (Ayres, 1979, p 5)
- Sensory information is coming in during all times of the day

Sensory Integration
- Brain organizes this information allowing one to interact with their environment appropriately
- Children need to process this information correctly in order to interact in all environments

Sensory Integration Traits
- During infancy one may observe that they “do not roll over, creep, sit, or stand at the same age as other children. Later on they may have trouble learning to tie their shoes or ride a bicycle without training wheels. But other infants with poor sensory integration seem to develop on schedule, and only have trouble later on. They may seem clumsy and frequently fall or stumble.” (Ayres, 1979, p. 8)

Sensory Integration Traits
- As the child reaches school age more difficulties arise, which may include
  - Playing as effectively as others
  - Completing art tasks
  - Completing classroom tasks, such as utilizing a pencil correctly
  - Easily distracted and confused

Sensory Integration
- No one specific test to determine if difficulties are present
- To gain information observations are conducted and parents, caregivers, teachers, etc. may be interviewed
Sensory Integration
• “Sensory integrative dysfunction” (Aryes, 1979, p. 51) is the term used when there are difficulties processing sensory information
• Difficulties can be experienced in two ways
  - High sensory threshold
  - Low sensory threshold

Low Sensory Threshold
• Referred to as hyperractivity
• Would observe these children:
  - Reacting inappropriately to loud noises
  - Reacting inappropriately to touch and textures
  - Reacting inappropriately to movement
  - Avoiding situations that activate sensations, which may lead to inappropriate behaviors

High Sensory Threshold
• Referred to as hyporeactivity
• Would observe these children:
  - Engaging in sensory fulfilling activities
    • Additional movements
    • Fidgeting
    • Touching
    • Self-abusive behaviors

Senses Affected
• Vision
• Hearing
• Touch
• Taste
• Smell
• Vestibular
  - Maintain balance
  - Attend
  - Emotional State
• Proprioception
  - Knowing where body parts are in space
Small Group Discussion on Sensory Integration

1. Would you say your child has a high or low threshold and why?

2. Which of the senses do you think affects your child the most?
Learning Style
- Children with autism learn best through visual methods
- Incorporate visual cuing and teaching methods into everyday life

Intervention Strategies
- Interventions can be used at home, school, or during therapy
- Utilized to address
  - Social interaction difficulties
  - Communication difficulties
  - Fixed interests and repetitive behaviors

Social Stories
- Utilized for children who have difficulties functioning in social settings
- Help children by using cues to make appropriate responses in social situations
- Information is provided in an easy to understand format
- Each social story is created specifically based on the child’s needs

Social Stories
- Types of sentences used
  - Descriptive
  - Directive
  - Perspective
- Pictures can be utilized

Social Stories
- Ways to implement
  - Child reads story daily until implementation occurs, after having the story read to them once
  - Story recorded and child listens until implemented
  - Story may be video taped and then the child watches the video until implementation
Social Stories
- Reasons for implementation
  - To deal with unstructured times
  - Free time, recess
  - Help learn new routine
  - Participation in school activities
  - Ways of expressing and handling feelings

Social Stories
- Research Findings
  - Develop appropriate social behavior
  - Reducing unwanted behaviors
  - Increase communication skills
Activity: Creating a Social Story

Read the following example and write your own social story for a situation pertaining to your child.

Example: Getting Angry

Everyone gets angry sometimes. When Mommy gets angry, she might yell. When Daddy gets angry, he might make mean faces. When Henny gets angry, she might say, "No!" They don't hit or push when they are mad. They say words to tell people how they feel.

If I get mad, I should say, "I'm very mad!" Then a grown up can help me talk about what is making me mad. This will help me feel better. It is okay to be angry. It is not okay to hit or push. It is better to say, "That makes me mad!" I will try to use my words and not my hands.

The End

Vignola, 1998
Visual Cuing
- Children with autism learn best with visuals
- “learn more quickly, reduce aggressive or self-injurious behavior, decrease frustration and anxiety, learn to adjust to changes at home and school, complete tasks by themselves and gain independence” (Savner & Myles, 2000, p i).

Visual Cuing
- Visuals that can be utilized:
  - Activity schedule
  - Picture Exchange communication System (PECS)
- Visuals are used to:
  - share information with others
  - display appropriate behavior for certain situations
Example of a visual cue that can be utilized for informing others about what was done during the day.

Savner & Myles, 2000, p.10
Example of a visual cue that can be utilized to show appropriate ways to act in a certain situation.

Savner & Myles, 2000, p. 20
Example of using visual cues for activities the child can complete at home.

Savner & Myles, 2000, p. 9
Activity Schedule

- Use of pictures or words to show what the child is to complete throughout the day or in an activity
- Research findings:
  - Child is able to focus on tasks for a longer amount of time
  - Reduce unwanted behaviors that may result from laps in routine
Example of an activity schedule for the afternoon.

Afternoon

1. Hang up coat and book bag

2. Eat a snack

3. Leisure time
   - Watch TV
   - Play video game
   - Listen to stereo
   - Read a book
   - Jump on trampoline
   - Swing

4. Eat dinner

5. Take a bath

6. Go to bed

Savner & Myles, 2000, p. 5
Activity: Create an activity schedule you could utilize with your child.
PECS
• Picture exchange communication system
  - Use of a sequence of pictures to express needs and desires
  - Used by children who are unable to communicate verbally
• Research findings:
  - Use of PECS can increase number of words spoken

Routines
• Use of routines helps manage behaviors
• O’Brien & Daggett (2006, pp. 229-230) describe 5 steps to successfully using a routine
  - Prepare for routine activities
  - Get the child’s attention
  - Define what is expected of the child
  - Communicate expressions clearly
  - Reward cooperation

Sensory Integration
• Use of body movements and position to activate different sensory systems
  - These activities help improve difficulties seen with hyperreactivity and hyporeactivity
• There are a variety of techniques that are utilized during therapy and may be carried over to school and home

Who will help my child?
• Occupational therapists
• Social workers
• Teachers
• Teacher assistants
• Physical therapists
• Speech pathologists

Who will help me?
• Find a support system of your choice to discuss any stressors you may have from raising a child with autism
• If needed enroll yourself in a support group with other parents of child with autism in order to learn more about the disorder.
Coping Strategies

• Take time for yourself.
  o Allowing all time to be allotted to the child can lead to stress and one becoming worn out. Make sure to spend time doing activities you enjoy.

• Talk to family members or friends.
  o Talking to others can help to relieve some of the stress you are feeling. Do not feel bad to share your worries and stresses with others.

• Join support groups.
  o Join a local autism support group if available. See attached resource list to find look for groups near you.
  o Ask your child’s medical professionals about local support groups.

• Learn about the disorder.
  o By learning about the disorder you will be better able to deal with the challenges that arise.
  o Keep up to date on the latest research so you know what is being done for your child.

• Join a national association that advocates for autism.
  o This will allow you to have a closer look at what is being done for your child regarding research and treatment. It will also provide you with a network of individuals having the same challenges.
Resources

Books


Websites

Autism Society of America
http://www.autism-society.org/site/PageServer?page=homepage
This website provides information on the diagnosis of autism, characteristics of autism, treatment education, and resources related to living with autism.

Autism Speaks and Cure Autism Now Foundation
http://www.autismspeaks.org/
This website provides the public with information on autism. It allows for donations to be made to help with research in order to find a cure for autism. Information on the website is also given on fundraising events, including where and when they are held.

Mayo Clinic
http://www.mayoclinic.com
This website provides information on the signs and symptoms, causes, treatment, when it is appropriate to seek medical advice, and coping skills to dealing with the disorder.
National Autism Association
http://www.nationalautismassociation.org/
This website provides information on research that is being conducted on autism. It also provides help for families and provides individuals with the opportunity to make donations to help with the cause of autism. There is information on the disorder of autism itself, including diagnosis, causes, and treatments.
Survey

1. How old is your child?
2. How long has your child been diagnosed with autism?
3. How did you learn about this class?
4. What did you like most about this class?
5. What information did you find most useful?
6. What information would like to learn more about that was not available in this class?
7. Would you recommend this class to other parents of a child with autism, why or why not?
8. Additional Comments
References


Educational Class for Parents of a Child Recently Diagnosed With Autism
Introduction

- Brief overview of autism
- Issues faced
  - Social Interaction
  - Communication
  - Fixed Interests
  - Repetitive Behaviors
  - Sensory Integration
- Learning style
Introduction

- Intervention strategies
  - Social Stories
  - Visual Cuing
  - Activity Schedule
  - Picture Exchange Communication System
  - Routine
  - Sensory Integration
Warm-Up

- Introduce Self
  - Age of child
  - How long diagnosed with autism
  - Brief information about child
Brief Overview of Autism

- Pervasive Developmental Disorder
  - Characterized by social and communication difficulties
- Autism affects 1 in 150 children
- Autistic children have behaviors that are both severe and constant
- Level of severity will vary from individual to individual
- Life long developmental disorder

Autism Society of America, 2006; Walter, 2004
Brief Overview of Autism

- **Diagnosis**
  - Normal development during infancy
  - At ages 18 to 24 months parents may notice the child starting to regress
    - Child started to develop language abilities but starts to lose words
    - Check developmental milestones during routine doctors visits
- **No one known cause**

Autism Society of America, 2006; O’Brien & Daggett, 2006; Sicile-Kira, 2004
Brief Overview of Autism

● Main traits that lead to a diagnosis of autism
  – Social interaction difficulties
  – Communication difficulties
  – Restrictive (limited) interests
  – Repetitive behaviors

● Other characteristics
  – Difficulty with processing sensory information
  – Difficulty dealing with changes in the environment

O’Brien & Daggett, 2006
Social Interaction

- A child with autism has difficulties developing the skills to interact appropriately with others.
- When do difficulties appear?
  - During infancy
  - Ages 3 to 5

Frith, 2003
Social Interaction

- Signs that may be present:
  - Infancy
    - Do not like to be held
    - Do not like to be cuddled
  - Preschool and school age years
    - Do not maintain eye contact
    - Spend time alone
    - Do not make friends
    - Does not make the first move towards interactions with others

Sicile-Kira, 2004
Social Interaction: Challenges

- Unable to understand messages being sent with the eyes
- Unable to read human faces and the messages that are being sent by facial expressions
- Motions and gestures

Frith, 2003
Poor Social Interaction: Effects

- The child with autism
- Parents
- Siblings
- Teachers/Professions working with the child
- Friends
- Other family members
Small Group Discussion
Communication

• “Approximately half of children with autism fail to develop functional speech. Those children who do acquire speech often develop noncommunicative speech patterns that are qualitatively different from those of ordinary children or those with other specific language disorders.” (Schreibman, 2005, p. 32)
Communication

● Speech Difficulties
  - Repetition of words or sticking to limited information (echolalia)
  - Irregular rhythm; can be too fast, too slow, wrong pitch, emphasis in wrong places (dysprosody)

Schreibman, 2005; Sicile-Kira, 2004
Communication

- Children with autism are unable to pay attention to the use of language and use language appropriately.
- Language is learned differently
  - Learn by sound and sight
  - Misuse of words or applying own meaning to words (idiosyncratic speech)

Frith, 2003; VanMeter, Fein, Morris, Waterhouse, & Allen, 1997
Communication

- Problems that a child with autism may face due to communication difficulties
  - Frustration
  - Academic achievement
  - Making friends
  - Communicating daily needs

Thiemann & Goldstein, 2001
Communication

- Lack of communication leads to inappropriate behaviors
  - Avoiding situations
  - Throwing tantrums

Sicile-Kira, 2004
Communication

“A meltdown is a clear message from a child who is at that moment not able to tell you in any other way: something is happening in his environment that has caused his delicate neurology to go haywire.” (Notbhom, 2005, p. 77)
Communication

- Some communication skills may be intact, such as information that is learned through repetition, like ABC’s or a phone number.
- Others may not be able to speak verbally but can use alternative communication devices.

Frith, 2003; VanMeter, Fein, Morris, Waterhouse, & Allen, 1997
Small Group Discussion
Interests

- May limit interests to few items/ideas
  - Focus on one interest area
  - Difficulty changing tasks
  - Focus may be on odd objects that hold little importance

Frith, 2003; Sicile-Kira, 2004
Repetitive Behaviors

- **Movements**
  - Clapping hands, spinning in circles

- **Objects**
  - Continuously tapping or spinning an object

- **Verbally**
  - Repeating the same word or noises over and over

Schreibman, 2005
Compulsive Behaviors

- Completing unnecessary tasks in a certain order or time of day
- May occur during
  - Play
  - Mealtimes
  - Certain times of the day

Schreibman, 2005; Sicile-Kira, 2004
Interests/Repetitive Behaviors

- Why are the fixed interests and repetitive behaviors present?
  - Helps a child self-stimulate

- Is self-stimulation helpful for the child?
  - Yes to organize self
  - No due to stereotypes and time

Schreibman, 2005
Interests/Repetitive Behaviors

- Routines or schedules can reduce behaviors
- Tantrums and conflicts experienced may be reduced with the predictability of the day

O’Brien & Daggett, 2006; Schreibman, 2005
Small Group Discussion
Sensory Integration

- “organization of sensation for use; our senses give us information about the physical conditions of our body and the environment around us” (Ayres, 1979, p 5)
- Sensory information is coming in during all times of the day

Ayres, 1979
Sensory Integration

- Brain organizes this information allowing one to interact with their environment appropriately
- Children need to process this information correctly in order to interact in all environments

Ayres, 1979
Sensory Integration Traits

- During infancy one may observe that they “do not roll over, creep, sit, or stand at the same age as other children. Later on they may have trouble learning to tie their shoes or ride a bicycle without training wheels. But other infants with poor sensory integration seem to develop on schedule, and only have trouble later on. They may seem clumsy and frequently fall or stumble.” (Ayres, 1979, p. 8)
Sensory Integration Traits

- As the child reaches school age more difficulties arise, which may include
  - Playing as effectively as others
  - Completing art tasks
  - Completing classroom tasks, such as utilizing a pencil correctly
  - Easily distracted and confused

Ayres, 1979
Sensory Integration

- No one specific test to determine if difficulties are present
- To gain information observations are conducted and parents, caregivers, teachers, etc. may be interviewed

Ayres, 1979; Williamson & Anzalone, 1997
“Sensory integrative dysfunction” (Aryes, 1979, p. 51) is the term used when there are difficulties processing sensory information. Difficulties can be experienced in two ways:
- High sensory threshold
- Low sensory threshold

Dunn, 1997; Williamson & Anzalone, 1997;
Low Sensory Threshold

- Referred to as hypperractivity
- Would observe these children:
  - Reacting inappropriately to loud noises
  - Reacting inappropriately to touch and textures
  - Reacting inappropriately to movement
  - Avoiding situations that activate sensations, which may lead to inappropriate behaviors

Dunn, 1997; Williamson & Anzalone, 1997
High Sensory Threshold

- Referred to as hyporeactivity
- Would observe these children:
  - Engaging in sensory fulfilling activities
    - Additional movements
    - Fidgeting
    - Touching
    - Self-abusive behaviors

Dunn, 1997; Williamson & Anzalone, 1997
Senses Effected

- Vision
- Hearing
- Touch
- Taste
- Smell
- Vestibular
  - Maintain balance
  - Attend
  - Emotional State
- Proprioception
  - Knowing where body parts are in space

Ayres, 1979; Williamson & Anzalone, 1997
Small Group Discussion
Learning Style

- Children with autism learn best through visual methods
- Incorporate visual cuing and teaching methods into everyday life

Notbohm, 2005; Preis, 2006
Intervention Strategies

- Interventions can be used at home, school, or during therapy
- Utilized to address
  - Social interaction difficulties
  - Communication difficulties
  - Fixed interests and repetitive behaviors
Social Stories

- Utilized for children who have difficulties functioning in social settings
- Help children by using cues to make appropriate responses in social situations
- Information is provided in an easy to understand format
- Each social story is created specifically based on the child’s needs

Gray & Garand, 1993; O’Brien & Daggett, 2006
Social Stories

- Types of sentences used
  - Descriptive
  - Directive
  - Perspective

- Pictures can be utilized

Gray & Garand, 1993
Social Stories

- Ways to implement
  1. Child reads story daily until implementation occurs, after having the story read to them once
  2. Story recorded and child listen’s until implemented
  3. Story may be video taped and then the child watches the video until implementation

Gray & Garand, 1993
Social Stories

- Reasons for implementation
  - To deal with unstructured times
    - Free time, recess
  - Help learn new routine
  - Participation in school activities
  - Ways of expressing and handling feelings

Gray & Garand, 1993; Sicile-Kira, 2004
Social Stories

• Research Findings
  - Develop appropriate social behavior
  - Reducing unwanted behaviors
  - Increase communication skills

Kuttler, Myles, & Carlson, 1998; Norris & Dattilo, 1999; Thiemann & Goldstein, 2001
Activity

- Creating a social story
Visual Cuing

- Children with autism learn best with visuals
- “learn more quickly, reduce aggressive or self-injurious behavior, decrease frustration and anxiety, learn to adjust to changes at home and school, complete tasks by themselves and gain independence” (Savner & Myles, 2000, p i).
Visual Cuing

- Visuals that can be utilized:
  - Activity schedule
  - Picture Exchange communication System (PECS)

- Visual are used to:
  - share information with others
  - display appropriate behavior for certain situations

Savner & Myles, 2000
Today At School

circle time
calendar
grocery store
lunch
Spelling
counting
shape sorter
science
sort
gym class
special activity
cooking

Savner & Myles, 2000, p. 10
Manners for Eating

1. Use my fork or spoon to eat.

Take one bite at a time.

Chew my food with my mouth closed.

Chew my food and swallow it before taking another bite.

Wipe my face with my napkin.

Do not talk with food in my mouth.
Activity Schedule

- Use of pictures or words to show what the child is to complete throughout the day or in an activity

- Research findings:
  - Child is able to focus on tasks for a longer amount of time
  - Reduce unwanted behaviors that may result from laps in routine

Bryan & Gast, 2000; MacDuff, Krantz, & McClannahan, 1994
Afternoon

1. Hang up coat and book bag

2. Eat a snack

3. Leisure time
   - watch TV
   - play video game
   - listen to stereo
   - read a book
   - jump on trampoline
   - swing

4. Eat dinner

5. Take a bath

6. Go to bed

Savner & Myles, 2000, p. 5
Activity

- Create a list of activity schedule ideas that your child would benefit from.
PECS

- Picture exchange communication system
  - Use of a sequence of pictures to express needs and desires
  - Used by children who are unable to communicate verbally

- Research findings:
  - Use of PECS can increase number of words spoken

Ganz & Simpson, 2004; Sicile-Kira, 2004; O’Brien & Daggett, 2006;
Routines

- Use of routines helps manage behaviors
- O’Brien & Daggett (2006, pp. 229-230) describe 5 steps to successfully using a routine
  - Prepare for routine activities
  - Get the child’s attention
  - Define what is expected of the child
  - Communicate expressions clearly
  - Reward cooperation
Sensory Integration

- Use of body movements and position to activate different sensory systems
  - These activities help improve difficulties seen with hyperreactivity and hyporeactivity

- There are a variety of techniques that are utilized during therapy and may be carried over to school and home

O’Brien & Daggett, 2006
Who will help my child?

- Occupational therapists
- Social workers
- Teachers
- Teacher assistants
- Physical therapists
- Speech pathologists
Who will help me?

- Find a support system of your choice to discuss any stressors you may have from raising a child with autism.
- If needed enroll yourself in a support group with other parents of child with autism in order to learn more about the disorder.
Questions or Comments?

- Please fill out the survey at the end of your handout.
References


