

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

ASPERGER'S SYNDROME: A HANDBOOK FOR TEACHERS

A graduate project submitted in partial fulfillment of the requirements
for the degree of Masters of Science in
Counseling, Marriage and Family Therapy

by

Dalia Frank

May 2012

The graduate project of Dalia Frank is approved:

Charles Hansen, Ph.D., Committee Member

Date

Gila Frank, M.A., Committee Member

Date

Rie Rogers Mitchell, Ph.D., Chair

Date

California State University, Northridge

DEDICATION

This graduate project is dedicated to parents and teachers who work and live with children who have Asperger's Syndrome/Disorder. I commend you for your hard work and the sacrifices you make in changing the lives of these children.

ACKNOWLEDGMENT

I would like to thank my committee members who supported my efforts in writing this graduate project:

To my chair, Dr. Rie Rogers Mitchell

To Dr. Charles Hanson, my committee member

To Gila Frank M.A., my committee member

I would like to thank my chair and readers for providing me with feedback and guidance on my project. Thank you for spending time and effort in helping me achieve this goal.

TABLE OF CONTENTS

Signature Page	ii
Dedication	iii
Acknowledgment	iv
List of Tables	v
Abstract	vii
CHAPTER I – INTRODUCTION	1
Statement of the Problem	2
Purpose	3
Definitions	4
CHAPTER II – REVIEW OF LITERATURE	4
Asperger’s Disorder	4
The Effects of Asperger Syndrome on Families, Parents, and Siblings	8
Moving Towards Normalization	9
Effects on the Family as a System	10
Effects on Siblings	11
Affects on Family Dynamic	12
Families of a Child with a Learning Disability (LD)	14
Teachers and Schools	26
Social Interactions	26
Repetitive Types of Behaviors	27
Structure and Organization	28
Motor Skills	28
Concrete Thinkers/Intelligence	29
Emotional Vulnerability	30
Programming Suggestions	30
Intervention Strategies	31
Behavioral/Emotional Interventions	32
Academic/Cognitive Interventions	32
Sensory/Motor Interventions	32
Social Interactions	36
Repetitive Stereotype Behaviors	37
Language and Communication	38
CHAPTER III – METHODOLOGY	45
Project Outline	46
Websites	46
Evaluation by Experts in Asperger’s Syndrome	46
Expert Evaluation Procedures	47
Expert Evaluation Measurement	47
Expert Characteristics	48
Evaluation by Members of Target Population	48
Target Population Evaluation Measurement	48

CHAPTER IV – CONCLUSION	50
Discussion of Findings and Modifications	53
Discussion of the Expert Evaluation	53
Implications	53
Conclusion	54
REFERENCES	55
APPENDIX-HANDBOOK	57

ABSTRACT

ASPERGER'S SYNDROME: A HANDBOOK FOR TEACHERS

By

Dalia Frank

Master's of Science in

Counseling, Marriage and Family Therapy

The purpose of this graduate project is to develop a handbook to (1) educate teachers and other educational professionals about Asperger's Syndrome (AS), also known as Asperger's Disorder (AD); (2) increase teachers understanding of the daily lives of parents and their children with Asperger's Syndrome; and (3) provide strategies for helping these children learn by providing insight to teaching professionals.

The project was evaluated by pre-school teachers as well as the director of the department. The teachers were given a copy of the handbook and were asked questions based upon the information given to them. The questions focused on the handbook utility, whether the teachers had experience working with children who had Asperger's Syndrome or other learning disabilities, and what other information would be helpful to them in the classroom. Through the evaluation, I have learned that the handbook was useful to the teachers, specifically the strategies. Teachers reported these strategies to be practical and effective in the classroom.

CHAPTER I

INTRODUCTION

Approximately 0.2% - 0.5% of individuals in the general population have been diagnosed with Autism, with Asperger's Disorder accounting for 0.48% of these individuals (Lasser & Corley, 2008). With the numbers increasing over time it appears necessary to adequately equip parents and teachers to manage and be responsive to the needs of youth diagnosed with Asperger's. On a personal note, the reason for developing this project is that I have witnessed firsthand how students with Asperger's Disorder, as well as other learning disabilities, have been treated poorly in the school system based solely on the fact that they have a disability. The poor treatment of children with Asperger's Syndrome (AS) is due to lack of knowledge and direction on how to successfully teach children with AS. Therefore, I felt it was imperative to develop a manual to help teachers better understand Asperger's Syndrome as a means to aid them in the classroom and their teaching. Based upon my observations, those with such disabilities have been much more successful when mainstreamed in a regular classroom, rather than being placed in a special education classroom. When given a chance to learn, with teachers who are knowledgeable about how to effectively teach children with AS, I believe these children can find success and excel.

This project will offer school professionals the tools needed to aid Asperger's students in school. Additionally, it will enrich teachers with awareness as to what stressors and barriers families of children with AS face. Furthermore, it will shed light on the impact AS has on these children and the resiliency they must embody to overcome hurdles and obstacles that stand in their way.

Statement of the Problem

Often, when teachers have a student with Asperger's Syndrome (AS) or other learning disabilities they may feel ill equipped to teach the child because they have little knowledge or understanding regarding the specific condition. Furthermore, due to personal biases, perhaps, they may also feel that students with disabilities should not be mainstreamed into a regular classroom. Thus, the development and use of a handbook for teachers to help children with AS is necessary as it will help clarify misconceptions and myths of AS. This will inform teachers and other school professionals about what these children and parents go through everyday due to this disorder, as well as equip them with the tools to better assist them in the classroom. Furthermore, it will help empower teachers and school professionals to make a difference in these children's lives to aid them in actualizing their potential of succeeding in school. Finally, these tools generalize across various populations this handbook will benefit a wide array of students struggling with academic, social, and behavioral difficulties often seen in classroom settings.

Purpose

The purpose of this project is to develop a handbook to (1) educate teachers and other educational professionals about Asperger's Syndrome (AS), also known as Asperger's Disorder (AD); (2) increase teachers understanding of the daily lives of parents and their children with Asperger's Syndrome; and (3) provide strategies for helping these children learn by providing insight to teaching professionals.

This project contributes to the field of education by providing detailed information about the disorder, identifying effective teaching approaches, creating awareness of what parents of these children go through, and providing strategies of how

teachers (or school personnel, or educators) can support parents and their child(ren). There are many who automatically perceive children with disabilities, such as Asperger's, as incapable of learning or behaving similarly to ordinary children. It is important that these individuals gain awareness that with care, support, faith, commitment, and dedication children with AS are capable and entitled to an education the same as any other student.

Definitions

For this paper, Asperger's Disorder and Asperger's Syndrome refer to the same condition and will be used interchangeably. According to Myles and Simpson (2002), Asperger's Disorder is a disorder at the higher end of the autistic spectrum. As described by Simpson (2002), children with this disorder lack social skills, an understanding of human relationships, and the rules of social convention. Additionally, there appears to be a deficit in common sense, inflexibility with thought and behavior, and an inability to cope with change, causing them to be easily stressed and emotionally vulnerable (Volkman & Klin, 2000). They often have average to above-average intelligence, and superior remote memories. Their verbal and nonverbal communication is qualitative impaired, and they have difficulty reading social cues, lack eye contact, don't understand the idea of proximity with others, and show repetitive behaviors (Simpson, 2002). In order to better understand AS, it is necessary to review research regarding multiple areas including: (a) support systems or resources for parents who have children with Asperger's Disorder, (b) how families deal with the disorder, (c) and tools teachers need in order to teach these students more effectively and efficiently so they can be successful in the classroom. A review of literature will be presented in the following chapter.

CHAPTER II

REVIEW OF LITERATURE

This chapter will first focus on Asperger's Disorder, followed by family dynamics, and teaching tools necessary to assist students with this disability.

Asperger's Disorder

According to Sweeney (2010), Asperger's syndrome (AS), which was first described by the Austrian pediatrician Hans Asperger, is one of the Autistic Spectrum Disorders (ASD) alongside of Autism and the rare Pervasive Developmental Disorder Not Otherwise Specified (PDDNOS; Sweeney, 2010). Children with these disorders experience disruptions within the normal cycle of development, and therefore have difficulty with social reciprocity, communication, and display unusual behavior. The symptoms vary in severity, with Asperger's syndrome (AS) at the milder end of the spectrum. Although the understanding of AS and its developmental implications have improved in recent years, there is still uncertainty about how it is caused and how it should be managed. According to the criteria in the *International Classification of Diseases System* (WHO, 1992, & Sweeny, 2010), there are four primary criteria for the diagnosis of AS. Three of the criteria are known as the triad of impairments, which consist of: (a) abnormality in social interaction, (b) abnormality in the development of communication skills, including language, and (c) restricted, repetitive interests and activities often associated with a deficit in imagination skills. The fourth criterion is the onset of these behavioral features by thirty-six months (Sweeney, 2010, p.2).

According to Sweeny (2010), one of the earliest social deficits in children with Asperger's Syndrome is the absence of joint attention, in which the child shows

enjoyment in sharing an observation, object, or event with another person. For example, a child with AS at the age of ten months might not respond to his or her name, which, in turn may leave parents or caretakers frustrated. The absence of joint attention manifests in the child's development as difficulty forming peer relationships and a lack of social or emotional engagement. Children with AS respond to others in a particular way, focusing on appearance rather than seeing that person as a social being that they can engage with. Instead of sustaining or making eye contact, they look briefly at all things without particular attention to the eyes of another person (Volkman & Klin, 2000). Sweeney (2010) "Reaction to eye contact is fundamental to social interaction and is thought to be related to the ability in normally developing children to conceive others as having mental states also known as having 'theory of mind'. Children with AS might not fully understand that others have their own thoughts and emotions, which may explain their hesitation to interact socially" (p. 2).

Abnormalities in communication are one of the most discernable characteristics that might lead to the diagnosis of AS. "Children with AS display abnormal communication in the form of unusual pre-verbal communication, such as a failure of the child to recognize his/her mother's voice by three months, the absence of alternation 'to and from' patterns of vocalization between infant and parent, and delayed onset of babbling and an absence of expressive babbling" (Sweeney, 2010, p. 3).

Children with Asperger's syndrome tend to favor individual play either out of preference or because they lack the social skills to initiate social interaction. This is usually noticed by the time the child is two years old, when the child usually display abnormalities of 'play,' including the tendency to adhere to certain rituals, such as

arranging toys in a particular order repeatedly. As children with AS get older, they show rituals in other activities of daily living such as strict eating habits. For example, they might prefer the same meals eaten in the same sitting position everyday. Other restricted or repetitive behavior are: dislike of change in household arrangements, repetitive body movements, such as hand flapping, and problems taking part in activities that are outside of their normal routine (Sweeney, 2010).

Children with AS often have an unusual ability to remember many facts on a particular subject. Their behavior can be both hyperactive and hypoactive, having intolerance to loud noises or an insensitivity to pain. When the child is between twelve and eighteen months, parents often seek advice and help because of delays in the child's speech. An initial extensive assessment should be done in the child's home so that his or her behavior and communication can be observed in a familiar environment. Then an assessment will often take place in a specialized clinic to see how the child plays and interacts in an unfamiliar environment. The assessment might include basic IQ testing, formal verbal assessment, and other clinical testing (Sweeney, 2010).

There has been an increase in diagnoses of AS in recent years possibly because of the increased surveillance among health professionals, increased media attention, and a decrease in stigma attached to the syndrome, which has encouraged more parents to come forward looking for a diagnosis for their child. Sweeney (2010) states, "The prevalence of all ASDs is estimated at about six per one thousand of which two cases will be AS" (p.4). Sweeney (2010) found that "Children with AS have been found to have high levels of serotonin in their central nervous systems, suggesting that a genetic abnormality in neurotransmitter production may be a contributor" (p.4).

The aim in educating autistic children is to develop skills of communication, social interaction, and cognition, to improve their adaptive skills for independent life and to reduce maladaptive behaviors. Types of therapy might be behavioral therapy, social skills training, and speech and language therapy. Sweeney (2010) says, “Although there has been an increase in the understanding of the biological basis of autism, no drug has been found to be effective against the core psychological features of the disorder. There has been no long-term studies of children with AS, but evidence suggests that about one-fifth of children with AS grow out of it. This means that in adult life they no longer meet the diagnostic criteria for the syndrome” (p. 6). Adolescents with AS usually need more support with self-care, relationships, and job seeking. Many have high cognitive abilities but remain living with their parents and do not marry (Sweeney, 2010).

Griffin, Fitch, Albera, and Gingras (2006) discuss educational interventions for individuals with Asperger’s syndrome. “The rate of autism spectrum disorders is approaching one percent of school age children. Autism is three to four times more common in boys than it is in girls. Autism may affect one in one hundred fifty children age ten or younger. If adults are included in this data then more than one million people in the United States have autism or an autistic related disorder” (p.150). Many feel that AS is either at the higher functioning end of the autism spectrum or a separate autism-related disability. Possible causes of Asperger syndrome may be that genetics and neurobiology play a role. Griffin et al. (2006) found, “Genes regulating glutamate, serotonin, and gamma-aminobutyric acid and their interactions may relate to possible causative factors in autism” (p.151). Asperger’s syndrome can be passed directly from father to son. Brothers and sisters of autistic children may exhibit autistic tendencies as

well. If one child in a family has autism there is a 3% to 4.5% chance of having a second child with autism (Griffin et al, 2006).

The Effects of Asperger's Syndrome on Families, Parents, and Siblings

According to Seligman and Darling (2007), becoming parents of a child with a disability turns into a traumatic event for parents when they first learn their child has a disability. When a child is first diagnosed with a disability, it is the time they need the greatest support. According to stage theory (Seligman & Darling, 2007), parents progress through a series of stages in adapting to a child's diagnosis. Rejection is the first reaction parents have when they hear that their child has a disability. It is at this time that parents need emotional support to alleviate the stress due to the child's disability. Parents' personal well being, perceptions of child's functioning, and family integration are positively influenced by a family's social support network. Negative consequences associated with the birth and dealing with the child's developmental delays can be lessened or alleviated to the extent that the members of a family's support network are mobilized to strengthen personal and familial well being and buffer negative effects. Having a child with a disability can cause a rift in the family. Families also need support from those who are going through the same situation. It is also difficult for families to tell friends and other relatives about their child's disability because they don't understand what the family is going through. It is helpful when parents have support groups because of their important functions, such as alleviating loneliness and isolation, and providing information for parents, role models, and a basis for comparison. Parents have reported that the technical aspect is the easiest part of the disability, while how to raise the child on a day-to-day basis is the most difficult. Parents can get courage and hope through

support groups and professionals can help parents find support groups. Another challenge for parents is watching normal children and comparing those children to theirs (Seligman & Darling, 2007).

Moving Towards Normalization

The meanings parents attach to their child's disability will change as the child grows and he or she encounters new interaction situations. Defining the situation is the most difficult task when facing new parents, because of the degree of meaninglessness and powerlessness they feel. Because the disability isn't anticipated, parents need to rely on others to establish meaning for them. Professionals can provide diagnostic, prognostic, and treatment information. Towards the end of infancy, parents begin to understand their child. Parents worry how the child will be as an adult. Will this affect them in their career, social, and/or personal areas? Families develop an ideology of normalization, such as acceptance of the inevitable (it could happen to anyone), partial loss of the taken for granted (take it day to day), redefinition of good and evil (there's always someone worse off), discovery of true values, the positive value of suffering, and the positive value of differentness. They start moving on and living normal lives when they get used to the disability.

Components of normalization are: employment for both parents, appropriate placement for children, access to appropriate medical care, adequate housing, social relationships with family and friends, leisure time, freedom of movement in public places, and financial resources to maintain basic lifestyle. Obstacles to normalization include practical problems to replace coping difficulties and parents concern as their children age. Examples of such concerns include financial hardships, stigmas, demand on

time, social isolation, less time for activities (recreational), difficulties managing behaviors, and performing household chores. Children with disabilities need more medical attention and tend to display a wide array of behavioral problems, such as behavior management difficulties or a child's dependency on his or her parents. They can have obsessive-compulsive behaviors and emotional outbursts (Seligman & Darling, 2007).

Effects on the Family System

Mothers are more vulnerable when they have family stress and try to protect their family, and these families have more marital stress. At first there is a period of disequilibrium and adjustment (shock and denial). They deny the existence of the child's disability and, therefore, they ignore getting early intervention. Mothers tend to blame themselves for the child's disability; fathers are more removed. There is emotional disorganization and helplessness. Professionals should communicate the diagnosis as early as possible so parents can ease into the idea that their child has a disability. When parents accept the disability, depression may set in and they can become angry when they don't receive the necessary support. With acceptance, parents are able to discuss the disability, balance between encouraging independence and showing love, collaborate with professionals to make plans, pursue personal interests unrelated to the child, discipline appropriately without undue guilt, and abandon overprotective or harsh behavioral patterns towards the child. They begin to learn skillful ways to alter negative effects of the condition. They know that what will be done will make a difference. One of the hardest parts of having a child with a disability is the chronicity of care, and siblings may have to help with care taking. A supportive husband, even if he doesn't participate in

the child's care is an important predictor of the mother's sense of well-being. Stress is also a major factor in the family's life when dealing with a disability. Emotional and social support reduces stress and improves emotional well-being. Factors contributing to reduced stress are support within the family, family-to-family support, and parent-to-parent program support (Seligman & Darling, 2007).

Effects on Siblings

There can be psychological effects on siblings of children with a disability, and parents' lack of communication to the siblings about the disability results in ambiguity, which can make the children feel that they contributed to the disability. Younger children may think their behavior caused the disability. Excessive care giving to the child with a disability can result in anger, resentment, guilt, anxiety, and depression, especially if combined with limited parental attention. Many times the siblings take on a great deal of responsibility because of the disability. Parents need to ask themselves to what extent have the other children taken on responsibilities, how much of a choice did the children have in the matter, what responsibility gradually shifted onto the children out of convenience or necessity, what has been the parent's response when the children have been helpful, such as offering praise for a job well done? One of the difficulties for these siblings is the fact that they cannot compare their own experiences with the child who has the disability (Seligman & Darling, 2007).

Siblings experience survivor's guilt for not having the disability, which can result in sabotaging one's efforts so that achievements do not surpass those of the child with a disability. They may think that they are the one to achieve and be perfect, that they have to compensate for the child when other siblings in other families may not have that

burden. Young children fear that they will catch the disability. They can have fears or phobias, can have anger when teased that their sibling has a disability, and the disability can cause others to inhibit communicating talk about any bad feelings. They may feel lonely or detached from close ones. “With out open communication within the family, everyone can get bound up in a cycle of protecting one another from real feelings. This only adds to the intensity of those feelings. It is difficult enough putting on a mask for the outside world without feeling it necessary to do so inside the family as well” (Seligman & Darling, 2007, p. 254). Communication guidelines to help parent-child relationship suggest: show active listening, take the time to be with all your children, secure needed knowledge, be aware of non-verbal communication, sincerity and honesty, respond in a comprehensive fashion, provide balanced information, and follow up earlier communication (Seligman & Darling, 2007).

Affects on Family Dynamic

Asperger’s Syndrome affects the dynamics within a family, how siblings relate to the child with the disorder, and how others view the family and the child with the disorder. Are there enough support systems for these families in terms of social support and services needed to function in a normal and healthy manner? A study conducted by Heiman and Berger (2008) on family support and the family environment for parents of children with Asperger’s syndrome or with learning disabilities focused on two main aspects, the family environment and social support, as perceived by parents from the three different groups: a child diagnosed with AS, with a child with learning disabilities and, as the control group, families with a child with no specific difficulties. The study examined thirty-three parents with a child diagnosed with Asperger syndrome and forty-

three parents with a child with learning disability, which were compared to forty-five parents of children without disabilities as a control group. Parents completed the Family Environment Scale and Social Support Scale questionnaires. The comparison showed significant differences for expressiveness and family system organization and for social support. Parents who had a child with AS perceived their family's expressive feelings as lower and the family organization as higher and perceived their friendships and other support as lower than the other groups of parents. Parents of the control group reported the highest family support. The study demonstrated the need for additional social support for parents with a child with special needs and the importance of developing awareness and intervention programs to facilitate parents' coping abilities and their family interactions (Heiman & Berger, 2008).

A child with special needs has a significant affect on family functioning and on family relationships, which may create changes in the family's routines. Parents of a child with special needs experience many care giving challenges, such as more health problems, greater feelings of restriction, and higher levels of parental stress or depression than parents of children with out specific disabilities (Heiman & Berger, 2008).

Various studies have been conducted on parental adjustment and the coping process in families with a child with special needs. One study by Marvin and Pianta (1996) found that the crisis engendered by the diagnosis that something is wrong with their child is the parents' most difficult experience. The difficulties encountered by parents due to the child's disability, has been cited as a source of anxiety, overprotection, and rigidity (Heiman & Berger, 2008).

Parents raising a child with Asperger's syndrome face numerous difficulties.

Parents have to provide not only the general care needed for the child but also structure their child's daily routines, creating opportunities for socializing, daily activities and further education, and providing companionship. Families may experience a higher level of stress and may find a lack of appropriate services and insufficient special education. Families with a child diagnosed with autism, including AS, compared to families in the control group, those who did not have a child with AS were found to have differences in their pattern of coping behavior. Lower levels of coping were associated with higher levels of strain on the family system. The level of strain on the family system was greater in the families with a child with an autistic spectrum disorder. In addition, mothers with a child with Asperger's were found to experience more stress than fathers. They also perceived greater stress for other family members, and were more likely to seek professional help, to take medication for depression, and to be more pessimistic about their child's future (Little, 2003). Parenting a child with Asperger's syndrome was found to be positively related to adaptive coping processes like social support, self-efficacy, and problem focused and emotional approach coping strategies (Heiman & Berger, 2008).

Families of a Child with a Learning Disability (LD)

Three main factors can influence the development of children with disabilities: the child's characteristics, familial aspects, and the social environment. Interactions between parents and their children with a LD may have an essential influence on the social perception and family relationships and on the social development of children with a LD. Families with a LD child are more rigid and less flexible, are more controlling, organized, authoritarian, and less encouraging and supportive compared to mothers of normally achieving children. The concept of family climate is considered an important

family dynamic, consisting of cognitive, social, and emotional aspects (Heiman & Berger, 2008).

Studies, that have examined family factors associated with successful outcomes in children with a LD, have emphasized the importance of family support. Family is an important and healthy source of support for children with a LD. Few studies have examined the family climate or the social support of children diagnosed with Asperger's. Support is very important for parents, to allow them to be heard and to share personal stories, feelings, frustration, and expectations. Disabilities, caused by Asperger's syndrome, have a significant effect on family functioning (Heiman & Berger, 2008).

Heiman and Berger (2008) compared families with a child with AS or with a LD. Children with a LD have obstacles in the academic areas, such as reading, writing, or calculating, while children with AS have significant deficiencies in skills involving translating social cues and communication. Children with a LD may have difficulties in social and/or emotional areas but children in both areas have a normal range of intelligence and are included in mainstream classes. The study examines the following concerning the effect of disabilities on the family system and the parent's perceived support: family environment will differ in families with and with out disabilities, parents of children with AS will report significantly higher on family environment related to independence, control and organization affiliation than will parents of a child with LD, and parents with children with AS will need more support from family members of friends compared to parents of a child with LD. Parents were asked to complete a questionnaire based upon relationships, personal growth, and system maintenance. The results showed that parents of an Asperger's child view their family climate as less

enabling of the open expression of emotions, and rate their family with higher system maintenance orientation and more organized compared to the LD and control groups. Parents of the control group also reported the highest degree of family support and parents of an Asperger child reported the lowest degree of support compared to LD and control groups. These findings emphasize the importance of social resources of support with and outside the family and the need for effective programs of intervention for parental support. These results encourage the efforts to help parents with a child diagnosed with AS or LD to develop more adequate coping behaviors and to enable parents to better meet their own needs and those of the children (Heiman & Berger, 2008).

Lasser and Corley (2008) discuss the experiences of parents of children with AS. Interviews were conducted with twenty parents. The interviews were taped, transcribed, and coded using Grounded Theory. Parents interviewed described a process of meaning making with respect to standards of 'normalcy' and an effort to create adaptive environments for their children. The purpose of the study was to examine the challenges faced by parents of children with AS, to find how parents of children with AS meet these challenges, and parents make meaning of their parenting experiences (Lasser & Corley, 2008).

In recent years, the prevalence of autism spectrum disorders has increased. Approximately 0.2%-.5% of individuals in the general population have autism and 0.48% of individuals have AS. The aim of this study was to investigate the experiences of parents of children diagnosed with Asperger's Disorder (AD) and to determine more effective ways to serve these families. In Asperger's disorder, there are a number of

deficiencies: impaired development of social interactions, lack of social reciprocity, and restricted repertoire of activities, behaviors, and interests. In Asperger's disorder there are no clinically significant delays in language acquisition by two years of age. Many parents go through a period of resistance, where they deny or question the presence of the disorder. There are some that describe this as clinging onto the idea that their child was just going through a stage. Another aspect of this grieving process is the tendency for parents to blame themselves for the disorder. Many parents experience periods of self-blame, in which they look back at possible contributions they may have made to their child's disorder. Some parents experience moments of relief when they finally receive a definitive diagnosis. Once parents knew what was wrong with their child they had a better sense of what to do but this was also paired with a new worry about their child's well being (Lasser & Corley, 2008).

There are parental perceptions of an uneven development of children with developmental disorders that is demonstrated by periods of advancement followed by the loss of certain skills (Lasser & Corley, 2008). This leads to parental confusion about the current state and future of their child. For some parents focusing only on the positive made it difficult for them to accept the diagnosis. Channeling the child's strengths as a coping strategy has also become a theme. By focusing on the child's unique gifts and thought process, rather than their weaknesses, parents are more likely to develop solutions and aid in increasing their child's self-esteem. Many times parents are told to consider their child's behavior in different contexts and question themselves on what it is their child enjoys when they are successful and what they dislike. It is also suggested that parents keep a journal of these routines in search of themes to be incorporated on a daily

basis into their routines. Parenting children on the autism spectrum is a stressful experience when compared to children with other disorders (Lasser & Corley, 2008).

The study followed a qualitative, Grounded Theory based primarily on interviews with parents. Participants were gathered by emailed invitations sent to five school-based support groups for parents with children diagnosed with autism spectrum disorders. There were a total of fifteen to twenty five participants and a mean age of the children with AD was 11.98 years. The interviews were conducted to explore the parenting experiences of participants. Questions were developed to understand the parents' point of view and the investigators incorporated questions about parenting challenges and developed questions about coping and positive attributes. Each participant completed background questionnaires and information about the family. Parents were given the option of conducting the interview in their home or at a different location. These interviews were tape-recorded, transcribed, and coded according to the Grounded Theory method which according to Strauss and Corbin means beginning with the area of study and what is relevant to that area will come out. If the hypotheses are supported by the data then they are verified as grounded theories. The second phase happened during the final interviews, where the narrative was shared with participants to determine whether the results were true with the participant's experiences (Lasser & Corley, 2008).

The results were as follows: The core concept that as garnered from the qualitative data was *constructing normalcy*, which refers to the parents' process of meaning making, as well as efforts to create adaptive outcomes for their children. Participants in the study reported that they actively worked to make meaning of their experiences by developing an understanding of what is considered normal for themselves

and their children. The research participant's narratives demonstrated what it means to raise a child with AD. Children with AD often appear 'normal' to outsiders until their behavior suggests otherwise. Participants also reported that they worked hard to create positive social experiences for their children, which involved an effort to construct normalcy. Parents reported in interviews that they either noticed something different about their child's development or received feedback from others regarding concerns they may have. In order to understand deviations from normality, parents compared their child to their siblings and to children in other families. In this context, normalcy was constructed as relative to some external standard. Parents also searched for evaluations from specialists as another indicator of relative normalcy. Parents experienced critical moments, also known as *normalcy incongruities*, in social settings that result in a variety of normalcy construction. These moments occur in social settings in which an individual that does not know the child with AD and, therefore assumes, that he is disabled and begins to notice the disabilities. The parents also stated that these normalcy incongruities are a significant source of stress. For example, many times outsiders chastise parents for failing to provide sufficient discipline. As a result, parents feel that they need to explain their child's disorder in order to rectify the situation. The normalcy incongruity creates social tension and the purpose of the parent's response is to return to the state of homeostasis. Participants also said that they anticipated the normalcy incongruity every time they prepared for social encounters with strangers (Lasser & Corley, 2008).

The qualitative Grounded Theory study explored the experiences of parents of children with AD. By learning how parents have made meaning of their experiences and worked to construct normalcy in their lives, those who are newly aware of their child's

disability may be better prepared for what is to come. The awareness that others have similar experiences and have developed coping strategies can help parents feel less isolated and motivate them to try new interventions and strategies for them to be successful (Lasser & Corley, 2008).

Little (2003) talks about the stress and coping differences between mothers and fathers of children with AS and nonverbal learning disorders (NLD). Research shows that family cohesion and positive family outcomes are influenced by how mothers and fathers cope with raising their child with disabilities. A repeated measure design was used to compare how mothers and fathers cope with caring for a particular child to control for differences in the severity and nature of the disability across children. Responses showed that mothers had higher rates of stress related to family problems and a negative outlook about their child's future, higher rates of antidepressant use, and higher rates of therapy use than did fathers (Little, 2003).

Parental stress and coping are related to many important family issues, such as child abuse. Children with disabilities are twice as likely to be victimized in their homes as children without disabilities. Children with disabilities do not have the severity of behavior and social skill deficits of children with autism and are mostly mainstreamed in public schools. Autistic children struggle with the demands of school and home life. Parents report a lack of professional understanding of the disorder, behavioral issues, and a lack of services, which may contribute to the stress for these families (Little, 2003).

Research on families of children with disabilities has focused on the impact that a child's disability has on the family, different responses of family members, variables that influence overall family adaptation, and prevention of negative outcomes. Researchers

who have compared the stress and coping of mothers and fathers have focused primarily on children with autism and Down's syndrome. Findings from these studies suggest that mothers experience more stress than their spouses, and high maternal stress may be linked to variables such as limited spousal support and negatively affect family cohesion. Fathers may be less involved with direct care of their child with disabilities than their spouses and therefore, be less stressed. Mothers may internalize their child's social deficits as a personal failure, be more empathetically attuned to their child's difficulties and feel more distressed. These differences demonstrate that stress may be related to different perceptions of responsibility for the child. Recent studies that have found no differences in stress for mothers and fathers may reflect a growing number of fathers who are more involved with the daily care of their child (Little, 2003).

Family problems include stress due to time demands, severity of the child's symptoms, and the presence of family supports. Parental attitudes toward the sacrifices they must make and their attitudes toward their child's disabilities are important dimensions as well. Researchers have stated important parental coping factors, such as coping to maintain family integration and stability, or coping by using communication and consultation strategies. Elevated rates of depression have also been recorded in mothers of children with disabilities. Child and maternal characteristics also have been important areas of measurement. Salient characteristics include the severity of a child's diagnosis, gender, and age. Maternal characteristics such as age, education, and income also have been significant. This study designed to find information that would help nurses to plan appropriate intervention programs for families of AS and NLD (Nonverbal leaning disability) have posed the following hypotheses: Mothers of children with AS and

NLD will report more stress than fathers, mothers will report searching out professional help and taking medication for depression more often than fathers, and fathers of children with AS and NLD will report their coping strategies to be more helpful than mothers will (Little, 2003).

The method used in this study was via sample and survey. Parents of children with AS and NLD were invited to this study via email. This study was measured through questionnaires on the age of the child, the age of the parent, income, education level, gender of child, and diagnosis of the child; whether the child has AS with or without NLD versus children with only NLD. The questionnaire on parental stress consisted of four factors: parent and family problems, parental pessimism, and child characteristics, and physical incapacitation. In terms of coping, parental coping was measured using two subscales from the Coping Health Inventory for Parents that measures the helpfulness of different coping strategies that parents may use to cope with children with chronic illnesses and disabilities. Parents were asked to record how helpful various coping strategies were. With taking anti-depressants and seeking professional help the questions were whether they were taking medicine for depression or are they seeking professional help. The results were as follows: Mothers reported significantly more stress than fathers did on the subscale of 'Parent and family problems'. Mothers perceived greater stress for themselves, other family members and the family as a whole in caring for their child with AS or NLD. When mothers were examined alone they reported more stress in terms of higher pessimism scores than fathers did. The child's age was positively correlated with pessimism scores (Little, 2003).

These findings suggest that parents were more pessimistic about older children.

Maternal education also was correlated with pessimism. Mothers with less education reported more pessimism than those with higher level of education. However, there were no significant differences between mothers and fathers on how helpful they found coping strategies that measured maintaining family integration and stability. There was no correlation between child and parent characteristics with the communication scale and forty-five percent of mothers said they have taken medication for depression compared to twenty-six of the fathers. The findings support the hypotheses that mothers of children with AS and NLD will report more stress than fathers and that mothers will report looking for professional help and taking medication for depression more often than fathers. Mothers of these children experienced more stress, took medication, sought professional help, and were more pessimistic. These mothers may be experiencing caregiver burden and may view their child's difficulties as reflections on themselves and be more susceptible to stress and seek treatment for depression (women are twice as likely as men to be diagnosed with depression). A key role for family pediatric nurses is to assess and respond to the overall adaptation of families of children with disabilities by understanding and relating to each parent's reactions and experiences (Little, 2003).

Dellve, Cernerud, and Hallberg (2000) discuss how siblings of children with DAMP (deficits in attention, motor control and perception) and AS may experience difficulties in coping with their siblings' disability. The article speaks about how siblings of children with DAMP and AS cope with their life situation and discusses the perspective and experiences of these siblings. Fifteen adolescent females twelve to eighteen years old, siblings of boys with DAMP (8 subjects), and AS (7 subjects) were interviewed. These findings may aid in the development of preventive programs for

siblings of children with DAMP and AS (Dellve, Cernerud & Halberg et al, 2000).

Dellve, Cernerud, and Hallberg (2000) describe the concept of coping as a process of cognitive and behavioral efforts to master psychological stress. He says that humans act on the basis of experienced meanings, which come from social interactions. As children interact with each other and influence the emotional and social context in which they grow and develop. Around sixty percent of the studies report an increase in sibling risk while thirty percent report no risk. Negative effects include greater risk of developing psychosocial problems, fear of being defective like the child with the handicap, and feelings of anger and/or guilt toward increased parental demands for assistance and/or achievement. However, many positive effects among healthy siblings of a child with a chronic disease have been described. These include maturity, sensitivity, and enhanced compassion. Interviews revealed a high level of involvement, strong feelings of responsibility and an emphasis on positive aspects of family life. Three quarters of children diagnosed with, AS are boys. The aim of this study was to describe from the perspective and experiences, how siblings with DAMP and AS cope with their life situations in their families (Dellve et al, 2000).

The study sample consisted of fourteen adolescents each a sibling to a boy diagnosed with DAMP or AS. Information was gathered through interviews, which contained a guide that covered experienced life situations related to the role of sibling at home, at school and during leisure time, and process of coping with the life situation. The results showed two core concepts: one about siblings' life situations as affected by siblings with DAMP and/or AS and the other about coping processes. The subjects described their life situations as a dilemma of requirements and concerns, which they try

to harmonize through their coping efforts. Requirements include dimensions of adaptation, conditions and self-preservation. Subjects describing the process as 'gaining independence' were more likely to have a self-concerned focus in relation to their families. Subjects expressed protest due to a lack of interest in adapting to their sibling's needs. For instance, they might say that they would have never gotten along anyways because they are so different. Siblings describing processes of 'balancing' and 'gaining understanding' were more likely to have family oriented focus in their process of coping. Subjects may have to delay their goals since their sibling had a central role in the family. Subjects are striving to gain understanding of the life situations of their siblings, themselves and their parents but often times fail to adapt and mature. Subjects also described the coping process as 'following a bonding responsibility' were more likely to have a sibling oriented focus. Subjects described that they tried to act like a mother toward their disabled siblings; they felt a sense of responsibility for them. Siblings reported that they had support from their parents and made general attempts within the family to increase their knowledge about the siblings' disability among all family members. Subjects showing the extreme opposite of 'following a bonding responsibility' did not demonstrate empathic feelings towards themselves. Sibling's empathy is not a protective factor for psychosocial adjustment for children with physical illness or for their siblings. Siblings of children with DAMP or AS may fail to differentiate the siblings' needs from their own needs and may experience a lack of reciprocity. The role of the healthy sibling in the family, which includes her lack of influence and rights in decision-making due to age and role, is experienced as a source of dilemma and complicates her attempts in relation to attachment behavior (Dellve et al, 2000).

Teachers and Schools

Some teachers are unaware about how to deal with children who have learning disabilities and, therefore, these children are being treated as though they are different from other children or are being told that they would be more successful in a special education class rather than being mainstreamed in a regular classroom (Dellve et al, 2000).

According to Williams (2001), no exact recipe for classroom approaches can be provided for every youngster with Asperger's Syndrome. Children with AS are easily overwhelmed by minimal change, are highly sensitive to environmental stressors, and often times engage in rituals. They are anxious and tend to worry obsessively when they do not know what to expect. Teachers need to provide a predictable and safe environment, minimize transitions, offer consistent daily routines. Children with AS need to understand each day's routine and know what to expect in order to be able to concentrate on the task at hand, avoid surprises. Teachers need to prepare the children thoroughly and in advance for special activities, altered schedules, or other changes in routine, and expose them to new activities. Williams discusses guidelines to help teachers understand students who have Asperger's syndrome (Williams, 2001).

Social Interactions

Children with AS have an inability to understand complex rules of social interaction such as having eye contact during a conversation or understanding irony and metaphors, and are unable to sustain reciprocal conversation. When dealing with social interactions amongst students' teachers can protect the child from bullying or teasing, attempt to educate peers about the child with AS when social ineptness is severe by

describing his or her social problems as a disability. Teachers should praise classmates when they treat the child with compassion. They may prevent scapegoating while promoting empathy and tolerance in other children. Teachers and school professionals need to emphasize the proficient academic skills with the child AS by creating cooperative learning situations. Since children don't know how to interact with others, teach children with AS how to interact with their peers such as how to react to social cues and appropriate repertoires or responses to use in various social situations. Teachers should model two-way interactions and let them role-play and foster involvement with others since children with AS tend to be reclusive (Williams, 2001).

Repetitive Types of Behaviors

Children with AS tend to ask repetitive questions about interests, have trouble letting go of ideas, follow their own inclinations regardless of external demands and at times refuse to learn about anything outside their limited field of interest (Williams, 2001).

Teachers shouldn't allow the child to discuss or ask questions about isolated interests. Designate a specific time during the day when the child can talk about the subject. Use positive reinforcement selectively directed to shape a desired behavior because they respond to compliments. Some children with AS do not want to do assignments outside their area of interest. Firm expectations need to be set for completion of class work. There needs to be clear rules and an understanding of what is expected from them. It may be necessary to initially individualize all assignments around their interest area and gradually introduce other topics into assignments. Students can be given assignments that connect their interest to the subject being studied. Teachers should use

the child's fixation as a way to broaden their repertoire of interests (Williams, 2001).

Structure and Organization

Children with AS are usually off task, distracted by internal stimuli, are disorganized, have difficulty sustaining focus on classroom activities, they tend to daydream, and have difficulty learning in a group situation (Williams, 2001).

Children with Asperger's syndrome need a tremendous amount of regimented external structure for them to be productive in the classroom. Assignments need to be broken down into small units and teachers must provide feedback and redirection when necessary. Children with concentration problems need timed worked sessions, which will help them organize themselves. With mainstreaming students with, AS teachers might need to lessen the child's homework/class work load to provide time for the child to complete the work. The child should be seated at the front of the class and direct questions to them so they will attend to the lesson. Teachers should work out a nonverbal signal with the child, create a buddy system for the child so they can have that extra assistance, and teachers must actively encourage the child to leave their inner thoughts behind and refocus on the lesson at hand (Williams, 2001).

Motor Skills

Children with AS are physically clumsy and awkward. They are unsuccessful in games involving motor skills and experience fine-motor deficits that can cause them to have penmanship problems and they have slow clerical speed. When working with these children, teachers should refer the child for an adaptive physical education program if their gross motor problems are severe. They should involve the child in a health/fitness curriculum in physical education rather than in a competitive sports program, the child

shouldn't be pushed to participate in competitive sports because their poor motor skills might frustrate them in the process. Younger children with AS benefit from guidelines drawn on paper that help them control the size and uniformity of letter they write. This forces them to take the time to write carefully. When assigning timed assignments teachers should make sure the child's slower writing speed is taken into account. Teachers must also be aware that individuals with AS may need more time than their peers to complete exams (Williams, 2001).

Concrete Thinkers/Intelligence

Children with Asperger's syndrome usually have average to above-average intelligence but lack higher-level thinking and comprehension skills. They are often times more literal, their images are concrete and abstraction is poor. Their higher level of vocabulary give the false impression that they understand what they are talking about when in reality they are just repeating what they have heard or read. They frequently have excellent rote memory but it's mechanical in nature. Their problem solving skills are poor as well (Williams, 2001).

Schools should provide an individualized academic program geared to offer consistent successes. Children with Asperger's syndrome need great motivation to not follow their impulses. Teachers and school professionals shouldn't assume that these children understand something just because they repeat what they have heard, they need added explanation and simplified lesson concepts when they are abstract, teachers should understand the relationship issues that these students might have, and teachers should not assume that the child understands what they have read in class. Academic work may be poor quality because the child is not motivated to put forth the effort in areas in which

they are not interested. There needs to be firm expectations for the quality of work produced by the student, and the child should be expected to correct poorly executed class work during the time they usually pursue their own interests (Williams, 2001).

Emotional Vulnerability

Children with AS have the intelligence to be in a regular classroom but they are easily stressed due to their inflexibility. Their self-esteem is low and they are often self critical and unable to tolerate making mistakes. Outbursts are common in response to stress and frustration and they may seem relaxed and are easily overwhelmed when things are not what they view them to be (Williams, 2001).

Programming Suggestions

School professionals should try to prevent outbursts by offering a high level of consistency. Prepare the child for changes in daily routines to lower stress, teach the child how to cope when stress overwhelms them, affect in the teachers voice should be kept at a minimum, do not expect the child to acknowledge certain feelings their peers might have, teachers need to be aware of changes in behavior that may indicate depression such as greater level of disorganization, inattentiveness, and isolation, teachers should report symptoms to the child's therapist so treatment is given if needed, and teachers must be aware that adolescents with AS are especially prone to depression. It is critical that adolescents with AS who are mainstreamed have an identified support staff member with whom they can check in with everyday. Children with AS need to receive academic assistance as soon as difficulties in a specific area are noted and these children who are very fragile emotionally may need placement in a highly structured special education classroom that can offer an individualized academic program. Teachers can play a vital

role in helping children with AS learn to negotiate the world around them. Teaching these children strategies is important to facilitate academic success and to help them feel less alienated from others and less overwhelmed by the demands of every day life (Williams, 2001).

Assessment of children with AS can be formal and informal drawn from the child's developmental history, use of rating scales, psychological evaluations, assessment of language and communication, and evaluation of social interactions. A developmental history may consist of information on early development of social, communication, and motor skills, the awareness of the presence of seizures and sensory deficits, and a family history of developmental or psychiatric disorders. Specific rating scales are helpful in diagnosing autism spectrum disorders including the Checklist for Autism in Toddler (CHAT), the Autism Behavior Checklist (Griffin et al, 2006).

Intervention Strategies

Children with Asperger's syndrome can benefit from educational programming and related services. The most effective school-based programming stresses a highly consistent and well-structured school day, a systematic social skill and language training, social mentoring, and modified instruction and assignments. Social interaction problems can be helped through protecting the child from bullying, teasing, teaching peers about AS, and creating cooperative learning groups. Using a buddy system and limiting time spent in isolated activities. A consistent school day provides predictability and minimized schedule deviation. Systematic social skills training can stress using communication skills in social situations and assist in the development of social problem-solving skills. Mentors can cue the child concerning the implementation of social skills in new

environments. Modified instruction may include pre teaching skills before they are introduced to the class reducing anxiety (Griffin et al, 2006).

Behavioral/Emotional Interventions

Helping the child cope with in the learning setting: Intervention strategies would be listing a familiar behavior pattern on a card so the student will feel comforted by reading it, using consistency through out the day, being patient in interactions with the child, and using social stories to assist the student in knowing the flow and expectations of social interactions. Interventions focus on the problems of sameness, academic problems, poor motor coordination skills, and so forth (Griffin et al, 2006).

Academic /Cognitive Interventions

Children with AS often have above-average intelligence. They lack skills in comprehension and abstract thinking. Using rewards and motivation to help keep them involved in the learning process, providing graphic organizer to help in organizing and sequencing writing, and providing additional explanations in simpler terms in discussing concepts of a lesson. Other interventions are modifying assignments and providing enriching activities that are structured (Griffin et al, 2006).

Sensory/Motor Interventions

Children with AS have problems in sensory processing and poor motor coordinating. Interventions in motor coordination can stress participation in activities and motor skill development. Activities should include health and fitness programs rather than competitive sports. There are five strategies to assist these children in the area of sensory processing: priming (becoming familiar with setting or tasks through exploration), working independently, visual supports, home base, and social stories

(Griffin et al, 2006).

Support from teachers, therapists, parents, and appropriate interventions can help children with AS to cope more effectively with their difficulties and function more independently in home, school, and community settings (Griffin et al, 2006).

Phemister (2005) discusses how to reach kids with Asperger's syndrome. Asperger's syndrome affects students by reducing their capability to understand a broad array of classroom interaction with the student and the teacher. Most children diagnosed with Asperger's syndrome results in early misdiagnosis for many students. The need for an early diagnosis becomes apparent since the later the diagnosis the greater the likelihood that patterns of social interactions and learning become ingrained. Because teachers expect acuity between cognition and social interaction the student with AS usually appears deliberately aggravating and exacerbating problems with teacher/student relationships. Some sources suggest social learning in an operant behavior consequence strategy because children with AS experience deficits in social competencies. Some researchers indicate that these children have the potential to learn social competencies through a strategy called SODA (stop, observe, deliberate, and act). Stop helps students develop an organizational plan for the setting where the social interaction occurs, observe allows students to note the social cues used by people in the setting, deliberate helps students consider what one says or does and the perception of the actions of others, and act helps students interact with others by identifying a person or group of people with which to socialize (Phemister, 2005).

Another strategy to help students with AS is social mentoring, utilizing pragmatic social skills learned in therapy sessions to respond effectively in real life social

situations. One should also use the strengths of the child in social situations. For instance, students with interests in the Internet provide an avenue for doing computer research for the classroom or as a self-directed study. These students should also be seating in the front row of a classroom to allow tactile cuing from the teacher and to avoid causing any unnecessary distractions. Strategies for teaching social competencies to these students are modeling and role-playing social situations to allow internalization of socially acceptable behaviors. Teach specific socially appropriate phrases for use in certain situations and allow the student to practice in responding during role-playing. Other options are avoiding abstract ideas when possible in classroom presentations or other contact with children with AS, pre-teaching by privately exposing new tasks or content prior to instruction given in class, lessening the amount of homework, a home-school notebook to allow parents and teachers to communicate freely, and strong collaboration among school specialists, teachers, parents, and school administrators. Everyone working with the child agrees as to how the goals and objectives, which have been outlined to meet the needs of the child, will be achieved. Finally, it is crucial for those who are working with children with AS to have patience and compassion and are willing to teach academic and social skills over and over again (Phemister, 2005).

Educators must be careful not to take outburst or misbehavior personally; instead they should strive to construct a safe environment of learning for the child. An effective deterrent to failure continues to be a classroom environment that promotes acceptance of every child regardless of their status or difference in learning (Phemister, 2005).

Bellando and Pulliam (2009) discuss how to help students with Asperger's syndrome with social and behavioral issues in school. The typical individual with

Asperger's disorder (AD) has a desire for social contact but has deficits in social interactional skills such as lack of eye contact, reading or understanding others facial expressions, showing empathy, etc. Difficulties with social interactions can have a negative impact in the classroom. If a student does not make eye contact with a teacher, it is often seen as a sign of disrespect. Recent imaging studies show that the amygdala lights up indicating increased activity in this area for individuals on the autism spectrum during direct eye gaze from a face. This reaction shows that avoidance of eye contact is not a defiant act but a way to avoid a negative physiological response. Making teachers and school personnel aware of this can help prevent inadvertent power struggles between the student and school staff. It can also help adults not label the student in a negative manner. There has been a great deal of information presented verbally in the classroom there is also a significant amount of nonverbal information occurring constantly. To be successful in the classroom a student needs to read the nonverbal communication of others. For instance, teachers often use their body language or facial expressions to give over important information to the student to help them understand what is expected in the classroom. A student with AD who is unable to pick up on these nonverbal cues will miss the important lessons that other students easily understand. The ability to think about the world from another person's point of view and understand another's thoughts, desires, and intentions is Theory of Mind. People typically regulate behavior depending on the emotional responses of other people. For example, if a teacher appears frustrated the neurotypical child will know to leave the teacher alone and avoid asking for unreasonable requests however, the student with AD might not even be aware of the teacher's emotional state of mind and might push for this request with a possible negative outcome

(Bellando & Pulliam, 2009).

Social Interactions

Positive reinforcement of desired social behaviors as they happen can increase the frequency of those behaviors in the classroom. Eye contact can be anxiety provoking for the student with AD it should not be forced rather if the student is observed making eye contact during an interaction, recognition and praise for the behavior can encourage its recurrence. Other inappropriate social interactions or attempts such as initiating conversation or play with others should be reinforced. Students with AD will need adult guidance in attending to and understanding social variables in their world. These students need help with social decision making when they begin to attend and understand social information. School nurses and psychologists can help educate teachers about the student's difficulty in reading nonverbal cues and help the staff learn how to interact with the students. Teachers should not assume the student with AD would read and understand subtle cues, such as disapproving glance or tone of voice. Teachers and staff members should be verbally explicit in their emotions and facial expressions and nonverbal cues should be accompanied by descriptive verbal information. Teachers can also learn to teach students with AD what the expectations are of them in the classroom. Students with AD may need more explicit feedback about others emotional states and how they impact a situation. There are times when verbal explanations of the emotional state will suffice. For complex situations story boards or social stories can be used. Story boards and social stories create scripts that allow the student to see visual representations of social interactions, which help them to better understand the emotions happening in a given situation. Pointing out specific personal examples and praising the student with AD helps

increase these skills (Bellando & Pulliam, 2009).

Repetitive/Stereotype Behaviors

Many students with Asperger's syndrome (AS) are highly verbal and often precocious in their knowledge in restricted areas and tend to focus on their interests of activities. These repetitive and stereotypic behaviors are overt ways that the student with AS appears different from other children in the classroom and puts them at risk for being teased or bullied. This may increase in situations with less supervision. The need for sameness and behavioral repetition can also cause difficulties with transitions or changes in routine for these students. Some will become upset with small changes in the classroom or interruptions of their rituals, which may result in emotional meltdowns, tantrums, and the need to start over with a ritual. Due to the fact that change and interruptions are inevitable in the classroom, this can be a problem for the teacher. Students with AD may try to dominate class discussions with their special interests. This may hinder the other student's abilities to learn and the teacher's ability to teach if unchecked. By limiting the number of questions the student is allowed to ask about special interests or allowing the student to talk about them for a specified amount of time a teacher can begin to curtail these conversations in the classroom. When appropriate, incorporating special interest in to the curriculum can facilitate learning. For instance, a teacher may help the student learn to count by allowing him to count items related to his special interest. Teacher may also establish a nonverbal hand signal with the student to discreetly demonstrate that time is over for special interests and it is time to go on to something else (Bellando & Pulliam, 2009).

Stereotyped behaviors can make the student appear different from their peers and

at time may interfere with learning. The teacher will need to take steps to insure that the student with AD is not being teased by the other children for these behaviors. Some of these stereotyped behaviors may be related to stress and may only increase with attention to them. The psychologist can help teach the student ways to decrease anxiety and find alternative behaviors. Using visual schedules, anticipating changes in routine, and helping the student find concrete ways to handle change can help decrease anxiety and emotional outbursts at school. A well-organized and structured classroom with a predictable schedule will help minimize stress for the student. Teachers are encouraged to stick to structured routine and show their weekly routine visually, outlining the schedule for every day of the week. Changes in the routine should be highlighted and discussed in advance and the visual schedule will be a guide for each day and a reminder of changes that can be expected. Even though teachers put forth all this effort there will be situations that are unexpected or over stimulating for the student and may lead to emotional meltdowns. Teachers and staff members should have a plan for handling such situations including designating a quiet, safe place for the student during times of distress or in situations that may lead to sensory overload (Bellando & Pulliam, 2009).

Language and Communication

Individuals with AD have no clinically significant general delays in language. They have delays in speech development, superficial expressive language, pedantic speech, unusual prosody, and impaired comprehension of implicit language (very literal). Being literal can have significant implications in the classroom. For example, if a classroom rule is that children should be honest then the child might be honest all the time, even if the honesty might offend other. Children with AD have difficulties with

metaphors and conceptual thinking that can make transferring concepts from one situation to another quite difficult. Children with AD can master a social situation but cannot generalize it to another similar situation. They have difficulty understanding sarcasm, figures of speech, jokes, and light teasing. Teaching the rules of language and giving the student with AD practice in this area takes an effort between home, school, and therapists. Adults can practice saying the same sentence with different emphasis on words in the sentence or with different voice inflections. This gives the student a chance to practice various ways meaning is inferred based upon the way words are spoken. Encouraging the student to participate in speech or drama activities also gives a chance for them to engage in these types of exercises on a more consistent basis. It is important for the student to be introduced to metaphors and idioms but adults should check to make sure that the student understands the phrase and explains its use if necessary. The student may be encouraged to keep a list of phrases that they did not understand and then talk with a trusted adult about them. Teachers need to think ahead and give specific, clear rules while also explaining how and when these rules apply. Checking via questions to the student with AD can help the teacher get an idea of how the rules were interpreted and allow for clarification if there was misunderstanding. Teachers can make a list of unacceptable infractions and those that can be tolerated. Social stories can be used to help students understand what is expected of them in different situations. Writing down overriding rules for the student can also give them a guide on how to handle new problems when they arise (Bellando & Pulliam, 2009).

Many students with AD are also diagnosed with mood disorders such as depression or anxiety disorders. They are more frequently diagnosed with attention

problems and learning disorders, which complicates the ability to master the school environment. Some students with AD are considered rude or disrespectful but may not be perceived as struggling. Due to the fact that they don't pick up on the nonverbal cues and are not sensitive to what others are thinking or expecting of them teachers easily misinterpret the student as intentionally disregarding what other students would understand as warnings about their behavior. Students with AD might engage in angry outbursts or tantrums that may be disruptive to the classroom if his routine is altered or if frustration builds from an inability to solve a problem (Bellando & Pulliam, 2009).

Teachers should respond to these challenges to ensure a safe and productive learning environment. Knowledge is important for the child, school, and parent and this knowledge starts with a correct diagnosis and treatment plan for the child. It is also important to get the correct professionals involved with treatment decisions. At times this requires the help of the medical and psychological community to implement medication and treatment strategies. Developing an IEP and Individual Health Plan (IHP) for the student helps to formalize interventions that should be used during the school day. This way there is consistency in the student's treatment through out the day, even in non-structured time. A study by Callahan, Henson, and Cowan (2008) found that there is a high degree of consistency among school professional in what constitutes a quality classroom for students on the autism spectrum. The study reports that school professionals think a high quality classroom environment includes individualized programming, ongoing data collection to ensure effective collaboration between the multidisciplinary team members and focus on long term outcome and successful transitioning for the student. All members of the educational team needs to work in

unison to develop and implement a plan that best addresses current and potential academic, behavioral, social, and emotional needs of the child with AD (Bellando & Pulliam, 2009).

Choi and Nieminen (2008) discuss a naturalistic intervention for children with Asperger syndrome. Children with Asperger's syndrome (AS) are attractive candidates for inclusive education. For classroom teachers, effective interventions with class management are critical to facilitate positive social interaction. This was a naturalistic multiple-component intervention used to develop the social skills of a boy with AS in a mainstream school in Australia. Individuals with AS are willing to interact with others but often do so in an odd and self-centered way that demonstrates a lack of understanding of socially governed rules for reciprocal interaction, the lack of satisfactory social relationships which results form social difficulties rather than withdrawing from or avoiding social situations. Life-long social disability is a primary characteristic of Asperger's syndrome as an autistic spectrum disorder. People with AS have difficulty in recognizing or understanding others thoughts, plans, and perspectives that differ from their own. They have difficulty in expressing and understanding their own emotions and in the appreciation of humor. Anxiousness, fearfulness, and solitary behaviors of middle childhood are significantly associated with early social disability including poor peer acceptance. Effective interventions to improve social interactions between children with AS and their peers would be a valuable aid to their development. Peer relationships with children with autism can be influenced either positively or negatively by the ways their peers interact with them (Choi & Nieminen, 2008).

Natural teaching strategies to improve social interaction between children with

AS and their peers were designed on the basis of incidental teaching; social stories and simple peer modeling. By using these strategies, the improvement of social convention skills and social interaction during lunchtime play activities in a boy with AS was qualitatively studied. The child underwent social skills training in order to improve interaction with his classmates and have better integration in his school activities. The intervention provided an opportunity for a qualitative case study in a natural setting, in a third grade classroom in an Australian state primary school. The study was performed with an 8-year-old boy with AS and some of his classmates between the ages of eight to nine years of age. The peer participation was based on session-by-session voluntarism in naturalistic participation during usual classroom and playground activities in their school. Most of the peers who participated did so for only a few sessions, whenever they wanted to, without constraint, reflecting natural school interactions (Choi & Nieminen, 2008).

Jeff, the eight-year-old boy was observed during the course of his usual school activities for three days per week and a four- week intervention phase. Jeff's social behaviors were observed in both the classroom and the playground. After the first two weeks of initial observations a transition was made to the intervention phase. The three activities that were used were social stories, individual lessons, and simple peer modeling. The intervention program for Jeff focused on four areas: greeting other in the morning, playground activities, how to get help in the classroom, and participation in physical education (Choi & Nieminen, 2008).

As a result Jeff showed strengths and weaknesses in particular school subjects. He often used high-level vocabulary; however, he found it difficult to communicate with others; his social communication was usually self-centered and pedantic and his peers

could not understand what he said. Whenever Jeff experienced difficulties in any of the school activities, he often cursed, yelled, blamed classmates or teachers, or threw objects. When the teacher and classmates greeted each other, Jeff didn't greet or respond to them. He did not use social conventions, such as thanking or politely asking. Therefore, the majority of time, Jeff was alone at school. He usually sat apart from other children in the class, and would often read by himself while his classmates were talking or playing together. The comparison of Jeff's social behaviors before and after the intervention indicated that the social skills training program was effective and resulted in improved social interaction. During lunch breaks, Jeff was no longer alone and he rarely had tantrums. He gradually became involved in group play, and he no longer stood at the edge of the playground. There was a noticeable increase in social interaction and response by Jeff. He began greeting and responding to his classmates appropriately. The primary purpose of this study was for Jeff to accommodate in his school context and effective measurement to compare each strategy was not considered. The social stories strategy was a continuation of an effective strategy already being used by Jeff's teacher; however, even though it was used previously by the teacher it did not result in interaction with his peers. Without the peers' interaction with Jeff, the use of social stories by itself would not have been effective in producing interaction. The degree of effectiveness of each strategy for social interaction in an individual with AS should be studied further (Choi & Nieminen, 2008).

In summation, children with Asperger's Syndrome are able to learn in a mainstreamed classroom if teachers believe that they can be successful. When teachers and other school professionals are given the necessary tools to teach these children, then

the academic achievement of these students can be ensured, and teachers feel comfortable teaching them. This workshop will provide teachers with the necessary tools to work effectively with a child with Asperger's and provide insights on the effect a child with Asperger's syndrome has on family members, how family dynamics change, and what tools are needed when helping these families deal in a healthy and productive manner with a child who has this Asperger's syndrome. This workshop should be given to teachers before the beginning of the school year so that teachers will feel comfortable working with these children and have an idea of what to expect from students with this disorder.

CHAPTER III

METHODOLOGY

This graduate project presents a handbook that is needed according to the research that I have found. The project is divided into three parts. The first section provides a brief description of Asperger's Syndrome. The second section steps into the world of what the siblings and parents experience and discusses how the family system and dynamics change when a child in the family has Asperger's Syndrome. The third section discusses interventions or strategies teachers can implement in their classrooms when working with children who have Asperger's Syndrome.

This project was first envisioned when I took a research class, which was supposed to "jump start" students to begin working on their graduate projects or thesis. I had been working with children who had Asperger's Syndrome and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) for a few years, and I noticed that many times teachers were unable to understand these children and didn't know how to accommodate them in the classrooms. It was an area in which many teachers felt uncomfortable. Therefore, I decided that I would like to provide teachers with the tools needed to help students who have Asperger's Syndrome or other learning disabilities. I feel that all children are capable of learning as long as they are being taught in an appropriate environment with teachers who are able to provide the necessary tools to teach these children. I also wanted teachers to be aware of how a child's family system, the parents and siblings, are affected by this syndrome. In the world we live, there is a belief among some that not all children are capable of learning, and I feel that if I can change that thought in any shape or form then I have helped children.

The population I am targeting is elementary school teachers. This project is intended as a guide to help teachers become more aware of the various tools that can be used to help students who have Asperger's Syndrome, and it also provides information to better understand the life of a child with Asperger's Syndrome, as well as the family dynamics involved. It would be helpful for teachers to have some background as to various types of learning disabilities and behavioral problems. In addition to reading this handbook, teachers should attend a workshop or have a professional development day dedicated to learning more about Asperger's Syndrome and other learning disabilities.

Since this is a teacher's handbook on Asperger's Syndrome, the book should be used as a teaching tool in the classroom. The only requirement needed for this product to be effective is for the teacher to be able to use the handbook appropriately.

Project Outline

- I. Introduction
What is Asperger's Syndrome? Potential Risk Factors.
 1. Characteristics of Asperger's Syndrome.
 2. What percentage of the population has Asperger's Syndrome?
 3. Purpose of the handbook and why I decided to create such a handbook.
- II. Effects on the Family System
 1. Siblings.
 2. Parents.
 3. Family System.
 4. Child with Asperger's Syndrome.
- III. Teachers and Schools
 1. What strategies or interventions teachers can use in the classroom to help children with Asperger's Syndrome be successful in the classroom-more general?
 2. Specific strategies or interventions for specific behaviors.
- IV. Resources for teachers to get more information and interventions on Asperger's Syndrome
- V. Websites

Evaluation by Experts in the Field of Asperger's Syndrome

The significance of receiving an expert evaluation on one's project is to see what

aspects of your project is useful and what areas need more information and improvement. Experts in the field can inform you on whether or not the project can be useful to them and if so it can be beneficial to others in the field as well. Since the purpose of this project in particular is to help teachers working with students who have Asperger's Syndrome it would be important to know if they are able to benefit from the project, otherwise it may become insignificant.

Expert Evaluation Procedures

I had been working at an elementary school as a para-professional, also known as a *shadow*, and since I had already established a relationship with the director of the early childhood department at the school I asked her for permission to have her, as well as her teachers, evaluate my handbook.

I first provided a copy of the handbook for the director, and she then handed out copies to the teachers conducting the evaluation. The teachers were given two weeks to read and test the handbook, and to fill out the evaluation. Since the director thought the information in the handbook would be helpful for her teachers, she did not feel compensation for the teachers would be necessary.

Expert Evaluation Measurement

The questions asked regarded the teachers' experience in working with children who have special needs, the amount of experience they have had, and whether or not they found the handbook helpful. There were a variety of open-ended and close-ended questions, such as "how long had they been in the field of education?" Regarding the close-ended questions, a Likert rating scale was used: for example, "knowledgeable, somewhat knowledgeable, and very knowledgeable." Most of the questions were open-

ended to give the teachers an opportunity to explain more about their backgrounds or experiences.

Expert Characteristics

The majority of the experts had between nine and 29 years of experience in education. The director of early childhood program had 40 years of experience in the field of education. Most of the experts had experience working with young children who were typical and those with special needs, but they were not trained to work with children who had special needs.

Evaluation by Members of the Target Population

Target Population Evaluation Procedures

The targeted population for this project is elementary school teachers of students with Asperger's Syndrome. Most of the research I have found on Asperger's Syndrome is based on younger children and the majority of my experience with this syndrome has been with elementary school children.

The evaluation was given to four preschool (teachers?) classrooms and the preschool director. The teachers were given one week to use the handbook and fill out the evaluation below. Since many of the teachers had children with learning or behavioral challenges, the director agreed to give them the handbook to see if it was beneficial for them to use in the classroom.

Target Population Evaluation Measurement

- i. Do you have experience working with children who have Asperger's Syndrome or other learning or behavioral disabilities? (yes or no)
- ii. If your answer is yes, what type of experience do you have?

- a. How many years have you been in education?
- b. Before reading the handbook, did you have previous knowledge about Asperger's Syndrome? If so, how much? (please circle one below)
Very knowledgeable, Some what knowledgeable, No knowledge at all
- c. Which sections, if any, did you find helpful when working in the classroom with a student who has Asperger's syndrome?
- d. Were there strategies in the handbook that you felt would be difficult to carry out in the classroom and, if so, which strategies? Or, did you feel that any of the strategies in the handbook would be difficult to carry out in the classroom and, if so, which strategies?
- e. Is there additional information you need about Asperger's syndrome that would be helpful for use in the classroom?
- f. In the future, would you use the information in this handbook?

CHAPTER IV

DISCUSSION

The purpose of this project is to inform teachers about Asperger's Syndrome, the lifestyle of children who have Asperger's Syndrome, and what the families and siblings go through when there is a child in the family who has Asperger's Syndrome; to help teachers have a better understanding of what it means when a student of theirs has this syndrome; and to provide teachers with practical applications and interventions they could use in the classroom for those students who have Asperger's Syndrome.

Based on my findings, I believe that teachers have a difficult time knowing how to manage their classroom when they have a child with a behavioral or learning disability, as well as how to help students in their classroom who have Asperger's Syndrome. According to Williams (2001), there is no exact recipe for classroom approaches that can be provided for every youngster with Asperger's Syndrome. It is very important for teachers to understand the family dynamics of a child who has this disorder, because it will give them a better understanding of what these children, as well as their families, go through during their everyday life. In order for the child to be successful in the classroom, parents, teachers, and the child need to be "on the same page" in terms of what is expected from the child, as well as what accommodations need to be provided by the teacher for the student. For example, teachers should inform the student(s) what the schedule is for the day, if there are any new events for the day, as well as making sure that the child understands the instructions or directions given to him or her. Teachers could try using a buddy system in the classroom, pairing a child who has difficulty academically in the classroom with a student who is more successful in that

area in the classroom. Teachers can also teach students in their classroom that, when they see children in the school who present certain types of behavior, there is an appropriate way to react or respond to it. Teachers should let their students know that, although some kids may seem different socially or academically, they still deserve respect and acknowledgement, and should not be ignored by their peers. Teachers must also understand that students with Asperger's Syndrome will take what they say literally and, therefore, must be careful with how they word what they are saying to them. Teachers should also try repeating instructions a few times in case it has not been understood by all the students, especially those with learning or behavioral disabilities.

It is important for students, who have Asperger's Syndrome, to feel that they have a support system at school since they spend most of their day in a classroom. This will enable the child to feel comfortable to discuss any difficulties he or she might be having or be open about how he or she is feeling in general about school or peers. Teachers should also use positive reinforcement or rewards to motivate the student to do well in school. For example, using a behavioral chart for recording positive behavior and earning rewards can often be effective. Another type of reinforcement is praise when the child makes eye contact or follows instructions accordingly.

Some researchers have found that these children have the potential to learn social competencies through a strategy called SODA (stop, observe, deliberate, and act). "Stop" helps students develop an organizational plan for the setting where the social interaction occurs, "Observe" allows students to note the social cues used by people in the setting, "Deliberate" helps students consider what one says or does and the perception of the actions of others, and "Act" helps students interact with others by identifying a person or

group of people with which to socialize (Phemister, 2005).

Another strategy to help students with AS is *social mentoring*, utilizing pragmatic social skills learned in therapy sessions to respond effectively in real life social situations. Professionals should also use the strengths of the child in social situations. For instance, students with interests in the Internet provide an avenue for doing computer research for the classroom or as a self-directed study. These students should also be seated in the front row of a classroom to allow tactile cueing from the teacher and to avoid causing any unnecessary distractions.

Strategies for teaching social competencies to these students are modeling and role-playing social situations to allow internalization of socially acceptable behaviors. Teaching specific socially appropriate phrases for use in certain situations and allowing the student to practice in responding during role-playing can also be helpful. Educators must be careful not to take outbursts or misbehavior personally; instead they should strive to construct a safe learning environment for the child. An effective deterrent to failure continues to be a classroom environments that promote acceptance of every child regardless of his or her status or differences in learning (Phemister, 2005).

In summary, children with Asperger's syndrome are able to learn in a mainstreamed classroom, if teachers believe that they can be successful. When teachers and other school professionals are given the necessary tools needed to teach these children, academic achievement for these students will improve and teachers will feel comfortable in teaching them. This handbook provides teachers with the necessary tools and insight to understand the effect a child with Asperger's syndrome has on family members, including how the family dynamics change and what tools are needed when

helping families deal in a healthy and productive manner with a child who has Asperger's syndrome. This handbook should be given to teachers before the beginning of the school year so that teachers will feel comfortable in working with these children and have an idea of what to expect from students with this disorder.

Discussion on the Findings and Modifications

Discussion of the Expert Evaluation

The purpose of this project was to determine whether the information in the handbook would be useful to regular or special education teachers, who have students with Asperger's Syndrome in their classrooms. One of the main concerns of professionals who read the handbook was that it did not describe what to expect and how to help children at specific ages. However, the handbook was designed and written to be used by teachers for a range of ages. The majority of the experts did not have a specialty in the field of education but did have experience in working with children who have learning or behavioral disabilities. Many of the teachers found the strategies useful and practical. They felt that they would be able to carry out the strategies in the classroom, and that the strategies were clear and did not need further explanation.

Implications

Overall, the experts found the handbook helpful, but they would have liked information about how to help children during various developmental stages. They also wanted to have more information on how to deal with students who are having tantrums in the classroom and are having difficulty in paying attention during instruction.

In my opinion, this handbook can be useful to those who are in the field because it provides recent information on AS, as well a variety of strategies that can be useful in the

classroom. In addition, many of the strategies can be used by regular classroom teachers, special education teachers, and parents.

It was important to conduct an evaluation, because the primary purpose of this handbook was to help teachers with their students in the classroom; therefore, if teachers find this information helpful then it is more likely that it would be effective and beneficial, not only for the teachers but for the students as well. Hopefully the handbook can increase the success rates for students with special needs.

Conclusion

In conclusion, this handbook was created to inform teachers about Asperger's Syndrome, to enable teachers to assist and teach students who have AS more effectively by providing them with tools and strategies that can be used in the classroom, and to provide increased understanding of the family dynamics with a child who has Asperger's Syndrome. Teachers can teach students who have AS more efficiently by: (1) providing students with modifications in class work and assignments, (2) explaining the schedule of the day to make transitions easier for the student(s) and help them to know what to expect through out the school day, and (3) having patience with these students and being able to separate the behavior from the child.

REFERENCES

- Bellando, J., & Pulliam, E. (2009). Helping the student with Asperger's disorder with social and behavioral issues in the school: Nursing, psychology, and educators working in unison. *SchoolHealth, 14*(3), 210-214.
- Callahan, K., Henson, R.K., & Cowan, A.K. (2008). Social validation for evidence-based practices in autism by parents, teachers, and administrators. *Journal of Autism and Developmental Disorders, 38*, 678-692.
- Choi, S.H., & Nieminen, T.A. (2008). Naturalistic intervention for Asperger Syndrome-a case study. *British Journal of Special Education, 35*(2), 92-100.
- Dellve, L., Cernerud, L., & Hallberg, L. (2000). Siblings of children with damp and Asperger syndrome's experiences of coping with their life situations. *Harmonizing Dilemmas, 14*, 172-178.
- Griffin, H.C., Griffin, L.W., Fitch, C.W., Albera, V., & Gingras, H. (2006). Educational interventions for individuals with Asperger syndrome. *Interventions in Schools and Clinic, 41*(2), 150-155.
- Heiman, T., & Berger, O. (2008). Parents of children with Asperger syndrome or with learning disabilities: Family environment and social support. *Research in Developmental Disabilities, 29*, 289-300.
- Lasser, J., & Corley, K. (2008). Constructing normalcy: A qualitative study of parenting children with Asperger's disorder. *Education Psychology in Practice, 24*(4), 335-346.
- Little, L. (2003). Differences in stress and coping for mothers and fathers of children with Asperger's syndrome and nonverbal learning disorders. *Continuing Education*

Series, 28(6), 565-570.

- Myles, B. S., & Simpson, R. L. (2002). Asperger syndrome: An overview of characteristics. *Focus on Autism and other Developmental Disabilities*, 17, 132-137.
- Phemister, A. (2005). Reaching kids with Asperger's syndrome. *Education Digest*, 71(2), 1-5.
- Seligman, M., & Darling, R.B. (2007). *Ordinary families, special children*. New York: The Guilford Press.
- Sweeney, K.D., & Sweeney, K.G. (2010). Recognizing and managing Asperger's syndrome. *Mental Health*, 39(1), 1-7.
- Volkman, F.R. & Klin, A. (2000). *Asperger Syndrome*. New York: The Guilford Press.
- Williams, K. (2001). Understanding the student with Asperger syndrome: Guidelines for teachers. *Intervention in School and Clinic*, 36(5), 1-9.
- World Health Organization (1992). *ICD-10 Classification of Mental and Behavioral Disorders*. Geneva: WHO.

APPENDIX HANDBOOK

The following sections in the handbook discuss: What Asperger's is, potential risk factors, affects in the family dynamics, strategies teachers can use in the classroom, and helpful resources for teachers, as well as parents:

What is Asperger's Syndrome (or Asperger' Disorder)?

Asperger's Disorder is one of the autistic spectrum disorders (ASD), alongside of Autism and the rare Pervasive Developmental Disorder Not Otherwise Specified. Children with these disorders do not develop normally and, therefore, have: difficulty understanding and interacting with other people, problems with communication, and unusual behavior. The symptoms vary in severity, with Asperger's Syndrome (AS) at the milder end of the spectrum (Sweeney, 2010).

Potential Risk Factors

Children with AS have been found to have high levels of serotonin in their central nervous systems, suggesting that a genetic abnormality in neurotransmitter production may be a contributor (Sweeney, 2010).

Characteristics of Asperger Syndrome/ Disorder

According to diagnostic criteria, such as the *International Classification of Diseases System* (WHO, 1992), there are four primary criteria for the diagnosis of AS. Three of these criteria are known as the triad of impairments, which consist of: (1) abnormality in social interaction, (2) abnormality in the development of communication skills, including language, and (3) restricted, repetitive interests and activities often associated with a deficit in imagination skills. The fourth criterion is the onset of these behavioral features by thirty-six months (Sweeney, 2010).

According to Sweeny (2010), one of the earliest social deficits in children with Asperger's Syndrome is the absence of "joint attention," where the child shows enjoyment in sharing an observation, object, or event with another person. For example, a child with AS at ten months might not respond to his or her name, which in turn may leave parents or caretakers frustrated. The absence of joint attention manifests in the child's development as difficulty forming peer relationships and a lack of social or emotional engagement. Children with AS respond to others in a particular way, focusing on appearance rather than seeing that person as a social being. Instead of sustaining or making eye contact, they look briefly at all things without particular attention to the eyes of another person. Sweeney (2010) said, "Reaction to eye contact is fundamental to social interaction and is thought to be related to the ability in normally developing children to conceive others as having mental states also known as having 'theory of mind'. Children with AS might not fully understand that others have their own thoughts and emotions, which may explain their hesitation to interact socially" (p. 2).

Abnormalities in communication are one of the most discernable characteristics that might lead to the diagnosis of AS. Sweeney (2010) states, "Children with AS display abnormal communication in the form of unusual pre-verbal communication, such as a failure of the child to recognize his/her mother's voice by three months, the absence of alternation 'to and from' patterns of vocalization between infant and parent, and delayed onset of babbling and an absence of expressive babbling" (p. 3).

Children with Asperger's syndrome will most likely play by themselves, either out of preference or because they lack the social skills. This is usually noticed by the time the child is two years old, when the child usually display abnormalities of 'play,'

including the tendency to adhere to certain rituals, such as arranging toys in a particular order repeatedly. As children with AS get older, they show rituals in other activities of daily living such as having strict eating habits. For example, they might prefer the same meals eaten in the same sitting position everyday. Other restricted or repetitive behavior are: dislike of change in household arrangements, repetitive body movements, such as hand flapping, and problems taking part in activities that are outside of their normal routine (Sweeney, 2010).

Children with AS often have an unusual ability to remember many facts on a particular subject. Their behavior can be both hyperactive and hypoactive, having intolerance to loud noises or an insensitivity to pain. When the child is between twelve and eighteen months, parents often seek advice and help because of delays in the child's speech. An initial extensive assessment should be done in the child's home, so that his or her behavior and communication can be observed in a familiar environment. Then an assessment will often take place in a specialized clinic to see how the child plays and interacts in an unfamiliar environment. The assessment might include basic IQ testing, formal verbal assessment, and other clinical testing (Sweeney, 2010).

Effects on Family Dynamic

Asperger's Syndrome affects the dynamics within a family, how siblings relate to the child with the disorder, and how others view the family and the child with the disorder. Are there enough support systems for these families in terms of social support and services needed to function in a normal and healthy manner? A study conducted by Heiman and Berger (2008) on family support and the family environment for parents of children with Asperger's syndrome or with learning disabilities focused on two main

aspects, the family environment and social support, as perceived by parents from the three different groups: a child diagnosed with AS, with a child with learning disabilities and, as the control group, families with a child with no specific difficulties. The study examined thirty-three parents with a child diagnosed with Asperger syndrome and forty-three parents with a child with learning disability, which were compared to forty-five parents of children without disabilities as a control group. Parents completed the Family Environment Scale and Social Support Scale questionnaires. The comparison showed significant differences for expressiveness and family system organization and for social support. Parents who had a child with AS perceived their family's expressive feelings as lower and the family organization as higher and perceived their friendships and other support as lower than the other groups of parents. Parents of the control group reported the highest family support. The study demonstrated the need for additional social support for parents with a child with special needs and the importance of developing awareness and intervention programs to facilitate parents' coping abilities and their family interactions (Heiman & Berger, 2008).

A child with special needs has a significant affect on family functioning and on family relationships, which may create changes in the family's routines. Parents of a child with special needs experience many care giving challenges, such as more health problems, greater feelings of restriction, and higher levels of parental stress or depression than parents of children with out specific disabilities (Heiman & Berger, 2008).

Various studies have been conducted on parental adjustment and the coping process in families with a child with special needs. One study by Marvin and Pianta (1996) found that, the crisis engendered by the diagnosis that something is wrong with

their child, is the parents' most difficult experience. The difficulties, encountered by parents due to the child's disability, has been cited as a source of anxiety, overprotection, and rigidity (Heiman & Berger, 2008).

Parents, raising a child with Asperger's syndrome, face numerous difficulties. Parents have to provide, not only the general care needed for the child, but also structure their child's daily routines, create opportunities for socializing, daily activities and further education, and provide companionship. Families may experience a higher level of stress and may find a lack of appropriate services and insufficient special education.

Families with a child diagnosed with autism, including AS, compared to families in the control group, those who did not have a child with AS were found to have differences in their pattern of coping behavior. Lower levels of coping were associated with higher levels of strain on the family system. The level of strain on the family system was greater in the families with a child with an autistic spectrum disorder. In addition, mothers with a child with Asperger's were found to experience more stress than fathers. They also perceived greater stress for other family members, and were more likely to seek professional help, to take medication for depression, and to be more pessimistic about their child's future (Little, 2003). Parenting a child with Asperger's syndrome was found to be positively related to adaptive coping processes like social support, self-efficacy, and problem focused and emotional approach coping strategies (Heiman & Berger, 2008).

Teachers and Schools

According to Williams (2001), there is no exact recipe for classroom approaches that can be applied to every youngster with Asperger's Syndrome. However, children

with AS are easily overwhelmed by minimal change, are highly sensitive to environmental stressors, and often engage in rituals. They are anxious, and tend to worry obsessively when they do not know what to expect.

Strategies:

- Provide a predictable and safe environment, minimize transitions, and offer consistent daily routines.
- Prepare children in advance for special activities, altered schedules, or other changes in routine, and expose them to new activities (Williams, 2001).

Social Interactions

Children with AS have an inability to understand complex rules of social interaction, such as having eye contact during a conversation or understanding irony and metaphors, and they are unable to sustain reciprocal conversations (Williams, 2001).

Strategies:

- Educate peers about the child with AS, when social ineptness is severe, by describing his or her social problems as a disability (Williams, 2001).
- Praise classmates when they treat the child with compassion. This may prevent *scapegoating*, while promoting empathy and towards other children (Williams, 2001).
- Teach children with AS how to interact with their peers, such as how to react to social cues and appropriate repertoires and responses to use in various social situations. Teachers should model two-way interactions and foster role-play and involvement with others, since children with AS tend

to be reclusive (Williams, 2001).

- Use SODA (stop, observe, deliberate, and act). “Stop” helps students develop an organizational plan for the setting where the social interaction occurs; “Observe” allows students to note the social cues used by people in the setting; “Deliberate” helps students consider what one says or does and the perception of the actions of others; and “Act” helps students interact with others by identifying a person or group of people with which to socialize (Williams, 2001).

Repetitive Types of Behavior

Children with AS tend to ask repetitive questions about interests, have trouble letting go of ideas, follow their own inclinations regardless of external demands, and at times refuse to learn about anything outside their limited field of interest (Williams, 2001).

Strategies

- Teachers should not allow the student to discuss or talk only about an isolated interest.
- Designate a time during the day when the child can discuss his/her preferred topic.
- Use positive reinforcement selectively directed to shape a desired behavior, because these children respond to compliments.
- Provide clear rules and help the child understand what is expected in terms of course work.
- Individualize the assignments initially around the student’s interests; then

gradually introduce topics into the assignments.

- Use the child's interests as a way to broaden his/her repertoire of interests (Williams, 2001).

Structure and Organization

Children with AS are often off task, distracted by internal stimuli, and disorganized. They have difficulty sustaining focus on classroom activities and learning in a group situation, and they tend to daydream. Children with Asperger's syndrome need a tremendous amount of regimented external structure for them to be productive in the classroom (Williams, 2001).

Strategies:

Teachers are most effective if they can:

- Break assignments into small units.
- Provide feedback and redirection when necessary.
- Give timed worked sessions, which will help the child become organized.
- Lessen the workload in and out of class so the child can finish his or her assignments in a timely fashion.
- Seat the child in the front row of the classroom and direct questions directly to him/her to help attention span.
- Work out a nonverbal signal with the child and create a buddy system so s/he can receive extra assistance.
- Encourage the child to leave his/her inner thoughts behind, and refocus on the lesson at hand (Williams, 2001).

Concrete Thinkers/Intelligence

Children with Asperger's syndrome usually have average to above-average intelligence, but they lack higher-level thinking and comprehension skills. Their thinking is often literal and concrete with poor abstract ability. Their generally fine vocabulary gives the false impression that they understand what they are talking about, when in reality they are just repeating what they have heard or read. They frequently have excellent rote memory, but it is mechanical in nature. Their problem solving skills are poor as well (Williams, 2001).

Strategies:

- Teachers should understand that these students often have relationship issues, and should not assume that the AS children understand what they have read in class.
- Teachers need to uphold firm expectations for these students, with regard to the quality of work they must produce in the classroom (Williams, 2001).

Emotional Vulnerability

Children with AS have the intelligence to be in a regular classroom, but they are easily stressed due to their inflexibility. Their self-esteem is usually low, and they are often self critical and unable to tolerate making mistakes. Outbursts are common in response to stress and frustration, and they may seem relaxed, but they can be easily overwhelmed when things are not what they view them to be (Williams, 2001).

Resources/Websites

Cheerfulhelpers.org- Cheerful Helpers is a school catered to preschool through kindergarten children between the ages of three and six with high functioning Autism

Asperger's Syndrome, Attachment Disorder, developmental delays, and learning and emotional difficulties. For treatment the school uses a combination of educational, sensory-motor, communication, psychodynamic, and family systems orientation. The children attend the school five days a week. Special education teachers and therapists work with the children, and the family is mandated to attend family therapy at the school. In addition, the school provides occupational and speech therapy, when needed.

Facesforkids.org- An organization that works with children who have Autism and other behavioral difficulties. *Facesforkids* provides Intensive Applied Behavioral Analysis (ABA) for children with Autism and addresses areas, such as language, behavior management, academics, self-help skills, and peer relationships in the schools, homes, and community settings. The starting age for this service is before the age of 3.5. The organization also provides consultation for grades k-12 training district personnel, providing ongoing support, developing academic programming, and decreasing negative behavior in the children.

Yourlittleprofessor.com/resources.html- The website provides resources and academic programs for children with Asperger's Syndrome/Disorder. The website provides information on various schools and camps that are designed to help children with Asperger's, and they provide information on what Asperger's is and how it is diagnosed.

Autismspeaks.org- An organization that funds research in finding the causes, prevention, treatments, and a cure for Autism. Autismspeaks increases awareness about Autism spectrum disorders, and advocates for the needs of individuals with Autism and their families.

Results from the Evaluation by Experts

1. Out of the ten teachers given the surveys, all replied that they have had experience in working with children who have AS or other learning or behavioral disabilities.
2. The majority of the teachers have been in the field of education between nine and twenty-two years. The director of the department has been in education for forty years.
3. Some of the teachers reported being very knowledgeable in the field of AS and others reported having some knowledge about AS.
4. Some teachers expressed that the strategies section was the most helpful, while others said that the section which discussed providing students with individual assignments, instilling a buddy system, and using non-verbal signals was the most helpful to them.
5. The majority of the teachers felt that the strategies mentioned in the handbook were possible to carry out in the classroom; however, some felt that the most challenging part was “understanding the issues that students with AS might have with their peers in the classroom.” The director believed that the teachers do not have an adequate time in the classroom to work one-on-one with a student with AS and would benefit more from having a shadow work with the child, but in close conjunction with the teacher.
6. Most of the teachers felt that the information in the handbook was helpful and clear, and some stated they would like to know “how to help a child who is having a tantrum and how to help children focus and pay attention in order to learn.” The director reported that it would be beneficial if the handbook described what Asperger's Disorder looked like at different ages and stages of development. For example, what would a teacher expect to see in a three-year old, as opposed to what Asperger's would look like in a nine-year old child.

7. All of the teachers responded that they would use the information in the handbook.