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THE IMPORTANCE OF CALMING STRATEGIES: TEACHING CHILDREN WITH AUTISM

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

BY

JENNIFER ANN CRNOBRNA

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THE IMPORTANCE OF CALMING STRATEGIES: TEACHING CHILDREN WITH

AUTISM

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OCTOBER 2018

APPROVED

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Abstract

The purpose of this study is to explore the different types of calming strategies that can be used to help children with autism spectrum disorders. There are many different types of calming strategies reviewed because individuals with autism are all unique and have many different kinds of needs. Different strategies are discussed to meet individual needs of an individual on the autism spectrum. The benefits of using different methods to calm students are defined throughout this paper. A detailed definition of terms is listed to better understand vocabulary within the paper. Three different areas, such as lack of communication skills, lack of social skills, and the presence of atypical behaviors are discussed. A brief history of autism spectrum disorder is explored. The benefits of calming strategies are discussed. This thesis discusses considerations for interventions and strategies for children with ASD and how programs must be individualized. It discusses the importance of meeting each person's individual needs with autism. Future implications are reviewed.

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CHAPTER I: INTRODUCTION

The author continued to ask herself, "What can we do to truly help students with autism spectrum disorders?" Reaching children with autism can be extremely difficult. The author wanted to know how to best help children with autism spectrum disorders. Introducing calming strategies into the classroom became the number one focus in her classroom. At the end of every school day, the author would find herself saying, "In order for everything to work for my students, they need to get to a state where they feel calm enough to learn." In order for children to learn they need to be in a state where they can focus. Children need to feel calm and safe in their environments. This is especially important for students with autism spectrum disorders. Children with autism have many sensory, communication, and social needs. These needs can make the coming to school and being in the classroom a large challenge. The purpose of this thesis is to conduct a thorough examination of the background of autism and to discuss the benefit of different types of calming strategies that can be used in the classroom with teachers and support staff and also at home with parents and families.

Autism is on the rise (Brill, 2008). When children enter the classroom, there are many expectations that they are expected to already know. For children with autism, many of these expectations have to be taught. How can children with autism be better served in a school setting? How can a productive educational program for children with autism be created? These are questions that the author thought about as she attempted to build an effective classroom that could help children with autism or disorders similar to autism. The purpose of this thesis is to look at different types of calming strategies that are used in the classroom to help calm students with autism. Calming strategies can be used in the classroom and at home. The goal is for consistency to happen across school and at home so students are successful. When staff and

parents know successful strategies to use, it can help students with autism and their families.

Families can be more prepared and children can be more successful in the classroom, at home, and in their daily lives.

The more that is known about autism the better families and teachers can help children with autism to be successful. What is autism? The term autism can be defined by looking at three different areas, such as lack of communication skills, lack of social skills, and the presence of atypical behaviors (Brill, 2008). To make an educational diagnosis of autism, these three criterions are looked at. The inability to sustain eye contact is an example of a lack of social skills and communication skills. Other examples are stimming and tantrum throwing. Autism can be diagnosed in children when these three areas can be observed and behaviorally defined.

Autism is a disability that affects how that person sees the world and how they interact and communicate with others. The disability results from problems in the nervous system, which is made up of the brain, spinal cord, and a network of nerves that allow someone to move, think, and sense the world (Brill, 2008). Brill (2008) explains that how a person with autism learns and develops depends upon how the nervous system interacts with the environment around them. Children with autism may have behaviors that are related to autism. Autism may cause children with learning disabilities to experience and react to the world differently which can result in behaviors. Many children with autism have problems processing information through their senses and sometimes they hear, feel, or see either too much or too little incoming information (Brill, 2008). As a result of this, children may become silent, withdraw, or throw tantrums to block out disturbing smells, sounds, touches, sights or movements (Brill, 2008). Therefore, children need to learn about different types of calming strategies to help reduce stress in these situations. Difficulties with social interactions may affect the development of children with

autism by increasing behavior problems which occur without mastery of social skills, increasing the possibility of maladaptive behaviors in adulthood, and decreasing the learning opportunities and support found in effective peer relationships (Simso, 1998). The purpose of this study is to explore the different types of calming strategies that can be used to help children with autism spectrum disorders.

DEFINITION OF TERMS

First and foremost, certain key terms must be described, as they are essential for readers to be familiar with and understand as the terms will be discussed several times throughout this paper. The following terms are necessary for readers to understand as it will give them a better understanding of autism spectrum disorders.

Autism Spectrum Disorders: Classified by the DSM-IV as a pervasive developmental disorder, a term meant to indicate severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interests, and activities (Cohen, 1998).

Developmental Disabilities: A term used to describe lifelong disabilities attributable to mental and/or physical impairments, manifested prior to age 22 (Langwith, 2009).

Developmental Disorder: Disorders that occur at some stage in a child's development, often delaying development. These may include psychological or physical disorders (Langwith, 2009).

Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-V): A book published by the American Psychiatric Association that gives general descriptions and

characteristic symptoms of mental illnesses. Physicians and other mental health professionals use the DSM-V to confirm diagnoses for mental illnesses (Langwith, 2009).

Learning Disabilities: A group of disorders that affect a broad range of academic and functional skills, including the ability to speak, listen, read, write, spell, reason, and organize information (Langwith, 2009).

Self-Regulation: People's ability to adjust their level of alertness and how they display their emotions through their behavior to attain goals in socially adaptive ways. It is the ability to do what needs to be done to be in the optimal state for the given situation. This includes regulating one's sensory needs, emotions, and impulses to meet the demands of the environment, reach one's goals, and behave in a socially appropriate way (Kuypers and Winner, 2011).

Sensory Room: As found in Wikipedia.Com, A sensory room is a special room designed to develop a person's sense, usually through special lighting, music, and objects. It can be used as a therapy for children with limited communication skills.

The Zones of Regulation: A conceptual framework used to teach students self-regulation and to improve students' ability to recognize and communicate how they are feeling in a safe, non-judgmental way. The Zones categorizes states of alertness and emotions into four colored zones (Kuypers and Winner, 2011).

The Blue Zone: is used to describe low states of alertness, such as when one feels sad, tired, sick, or bored. This is when one's body and/or brain is moving slowly or sluggishly (Kuypers and Winner, 2011).

The Green Zone: is used to describe a regulated state of alertness. A person may be described as calm, happy, focused, or content when in the Green Zone. This is the zone students generally need to be in for schoolwork and for being social. Being in the Green Zone shows control (Kuypers and Winner, 2011).

The Yellow Zone: is used to describe a heightened state of alertness; however, a person has some control when in the Yellow Zone. A person may be experiencing stress, frustration, anxiety, excitement, silliness, nervousness, confusion, and many more slightly elevated emotions and states when in the Yellow Zone (such as wiggly, squirmy, or sensory seeking). The Yellow Zone is starting to lose some control (Kuypers and Winner, 2011).

The Red Zone: is used to describe extremely heightened states of alertness or very intense feelings. A person may be experiencing anger, rage, explosive behavior, panic, terror, or elation when in the Red Zone. Being in the Red Zone can best be explained by not being in control of one's body (Kuypers and Winner, 2011).

CHAPTER II: LITERATURE REVIEW

Background

Autism is a lifelong disorder that interferes with the ability to understand what is seen, heard, and touched (Fredericks, 2008). Given these points, autism can cause severe problems in personal behavior and the ability to relate to others. An individual with autism can benefit from using calming strategies to communicate. A person with autism must learn how to communicate normally and how to relate to people, objects, and events (Fredericks, 2008). Although there are still many things unknown about autism, there is a lot more that we do know about the disorder. The most important thing to understand about autism is that people with autism have a difficult time communicating and their level of needs vary with each individual. There is a wide range of different needs on the autism spectrum. There is a full spectrum of symptoms, which can range from mild to severe (Fredericks, 2008). While a person with autism can have symptoms ranging from mild to severe, about 10% have an extraordinary ability in one area, such as in mathematics, memory, music, or art and are known as "autistic savants" (Fredericks, 2008).

Maurice, Green, and Luce (1996) explain that most people diagnosed with autism were expected to have serious and permanent deficits in areas such as communication, play, relating to others, and learning. Squire (2016) describes Autism Spectrum Disorder as the inability to communicate and interact with other people. Autism Spectrum Disorder is classified by DSM-IV as a pervasive development disorder, a term meant to indicate severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interests, and activities (Cohen, 1998). A quote in Cohen's book as quoted by Park in 1982, gives a fascinating description of meeting someone with autism

by stating, "There she moved, every day, among us but not of us, acquiescent when approached, untouched when we retreated, serene, detached...existing among us, she had her being elsewhere" (Cohen, 1998). Park gives readers a captivating description of the social isolation that can be seen in an individual with autism. As well as Cohen and Park, Gillam agrees that there are essential features of autism that are relevant and obvious. Gillam and Thomas (1981) describe the essential features of autism as follows: as typically manifested prior to 30 months of age and include disturbances of: (1) developmental rates and/or sequences; (2) responses to sensory stimuli; (3) speech, language, and cognitive capacities; and (4) capacities to relate to people, events, and objects. Groden and Baron (1991) also agreed that there were similar symptoms that emerged that appeared to be uniquely related to autism.

The first symptom that is uniquely related to autism is failure to develop social relationships. The second symptom related to autism is language delay with impaired comprehension, including echolalia and pronominal reversal. The third symptom related to autism is ritualistic or compulsive behaviors. Other characteristics sometimes seen in the autistic groups were repetitive movements, especially of the hands and fingers; a short attention span; self-injury; delayed bowel control; and the smelling of objects. (Groden & Baron, 1991)

In addition, Brill (2008) explains autism as a disability that affects how someone communicates and interacts with others. Although all areas of growth and development can be affected, the ability to communicate or be social are the most commonly altered skills (Brill, 2008).

Autism has been the subject of much interest and disagreement for decades (Brill, 2008). The term autism has gone through several changes over the years. Robert Snedden (2010) explains that autism was first named in 1911, although it had been around for decades, it is only in the last 60 years or so that it has been recognized and described as a medical condition.

Brill supports that the first documented report of the disorder now known as autism came in 1912 from Eugen Bleuler, a Swiss doctor Dr. Bleuler noticed how certain adults withdrew from the outside world, rejected social contacts, and kept to themselves. He started using the term autistic, which stems from the Greek word *auto* meaning *self*, to describe these adults. (Brill, 2008).

Gillam (1981) records that during the 1940's and 1950's that autism became referred to in the literature as a disease or specific illness. Snedden (2010) explains that it was not until the 1960's that society started to understand autism, however, there were still many questions and unknowns that came with this. According to Gillam, over the past few decades, clinicians and researchers have reached a consensus that autism is a behaviorally definable syndrome and that it should be included in our standard diagnostic manuals (Gillam, 1981). An initial definition was provided in 1976 when the term autism was formally introduced into Federal Developmental Disabilities Act (Gillam, 1981). It was emphasized that the term was a working definition and that it would be modified by future research as needed. Although scientists know a lot more today than they did decades ago, they still have many unanswered questions and continue to search of a cause for autism.

Facts that scientists do know is that autism is found more predominately in boys than it is in girls. Robert Snedden (2010) states that universally, boys are four times more likely than girls

to be autistic and he explains that one in 175 children have autism. Four times more boys than girls have the disorder, but girls are often affected more severely according to Fredericks (2008). With the incident of autism on the rise, more children are being diagnosed with autism and the number of children with autism continues to increase. The United States Education Department, for example, reported that the number of autistic students had risen by 544 percent between 1992 and 2000 (Snedden, 2010).

It is important to mention Doctor Leo Kanner as he was an important man in the history of autism. Autism first received its name in 1943 and Doctor Leo Kanner, did much to increase our understanding of the condition that he named autism (Snedden, 2010). According to Snedden (2010), it was in 1943, when Dr. Leo Kanner of John Hopkins University in Baltimore, Maryland, published the results of a study of eleven children carried out over five years.

According to Mesibov, Adams and Klinger (1997) Leo Kanner was fascinated and intrigued by the social withdrawal, communication peculiarities, insistence on sameness, and other idiosyncrasies of the 11 children he identified as different from the children whom he typically housed in his Child Inpatient Unit. By the age of two most children had withdrawn social interaction. Snedden (2010), explains what Dr. Kanner wrote and observed:

He seems to be self-satisfied. He has no apparent affection when petted. He does not observe the fact that anyone comes or goes, and never seems glad to see his father or mother or any playmate. He seems to almost draw into his shell and live within himself. (Snedden, 2010)

Kanner believed that children with autism were born without social instinct. He described

a "mechanization of human relationships," obsessiveness, and a lack of parental warmth (Mesibov, et al., 1997). Kanner focused in on the parents of children with autism and blamed them as the cause of autism, especially the mothers.

Mesibov, et al., (1997) explain that in that same year Kanner wrote a paper, "Autistic Disturbances of Affective Contact," and he labeled the syndrome as early infantile autism. To summarize, Kanner took insightful case descriptions of 11 children who, although similar to each other, were strikingly different from the children with whom they had often been associated, those diagnosed with childhood schizophrenia (Mesibov, et al., 1997). At the time, Kanner believed there was a link between schizophrenia and autism.

Kanner found, "Since 1938, there have come to our attention a number of children whose condition differs so markedly and uniquely from anything reported so far, that each case merits—and, I hope, will eventually receive—a detailed consideration of its fascinating peculiarities. There is from the start an extreme autistic aloneness that, whenever possible, disregards, ignores, shuts out anything that comes to the child from the outside. (Mesibov, et al., 1997)

Another doctor that played a role in the research of autism was Dr. Lorna Wing.

According to Snedden (2010), it was Doctor Lorna Wing who introduced the term ASD and the idea of the triad of impairments; three key factors in diagnosing autism. Snedden (2010) supports Groden & Baron (1991) in that there are three major components to autism.

It was Doctor Lorna Wing who coined the term "autistic spectrum disorders" and who introduced the triad of impairments. She studied a number of children in the Camberwell area of London in 1979 and observed that, all the children with social impairments had

repetitive stereotyped behavior and almost all had absence or abnormalities of language and symbolic activities. Thus the study showed a marked tendency for these problems to occur together. The triads of impairments are social problems, communication problems, and Lack of imagination. (Snedden, 2010)

Sensory processing disorder (SPD) is quite common among children with ASD, with incidence reports in the literature ranging from 42% to 88% (Baranek, 2002). Children with evidence of sensory processing dysfunction, such as those with ASD, often have difficulty regulating responses to sensations and specific stimuli and may use self-stimulation to compensate for limited sensory input or to avoid overstimulation (Smith, Press, Koenig, & Kinnealey, 2005).

It is crucial to help children with autism form better social interactions. Through the use of calming strategies children will be able to form better social interactions. In Kanner's paper from 1943, he points out the autistic child's inability to relate to people and situations in a normal manner from early on in life. Schreibman (1988) writes that it is unanimously agreed that the profound and pervasive deficits in social attachment and behavior displayed by these children are the hallmarks of autism and many have indicated that abnormal social and emotional behaviors are primary to the diagnosis. According to Schreibman, "There is a definite lack of attachment to others and a failure to bond with parents." Another example that continues throughout their lives, and a very early sign of autism according to Schreibman (1988) is the failure to establish social eye contact with others.

Throughout their lives, people with autism tend to actively avoid all eye contact and they do not show normal social response during social interactions. Some researchers have

defined this as "gaze aversion". In addition to this, the lack of peer contact and interactive play is another example of a social deficit that these children face. They usually avoid play situations with peers and, if in the same area, will engage in solitary activity. If they do express interest, it is often only to watch the activity without social initiation or reciprocation. Predictably, most autistic children do not show the social imitation so necessary to the acquisition of appropriate interaction with peers. (Schreibman, 1998)

Looking back to 1943, Kanner also considered the delay of speech a primary characteristic of autism. A specific pattern of speech and language is another characteristic of autism. An example given by Schreibman (1988) noted that often it is the child's failure to acquire language that first alerts the parents that something is wrong.

Approximately 50% of autistic individuals never develop functional speech and those who do speak characteristically display speech that is qualitatively different than the speech of normal children and children with other language disorders. In addition, it is often reported that such children begin to speak, learning to say "Mama," "Dada," and other labels but suddenly lose the acquired speech and fail to progress linguistically. This language loss tends to occur between 18 and 30 months of age. (Schreibman, 1988)

Likewise, as quoted by Hans Asperger, Attwood (2007) describes eloquently an unusual profile of language abilities that included problems with conversation skills, the 'melody' or flow of speech, and an unusual developmental history for language such as the early or late development of speech.

The Benefits of Calming Strategies

Calming strategies are essential and a necessity for all children. Any child can benefit from the use of calming strategies. Children with an autism spectrum disorder greatly benefit from the use of calming strategies for a variety of reasons. Many children with autism overreact or underreact to information coming in through their senses and this may result in repeating or avoiding actions to block out hurtful sounds, sights, or feelings. (Brill, 2008). There are several different methods that can be used to help children cope with these sensations. Children with autism tend to be very sensitive to their environment. Squire (2016), explains that some children with autism have frequent tantrums or meltdowns. Therapists, teachers, and parents learn how to cope and prevent these stressful situations for children with autism. The main reason for calming strategies is to prevent and keep these situations from happening and to help children to best cope in their daily routines.

There are many different reasons why children with autism may develop behaviors. Children may develop behaviors if sounds are too loud, if lights are too bright, if there are too many people in their space, and for reasons unknown. This is another reason why it is crucial to find calming strategies that work for each individual with an autism spectrum disorder. Dr. Stephen Shore (2012) states, "It is often said that if you know one child with autism spectrum disorders, you know one child with autism." What works for one child may not work for another. Sometimes it is important to try several different calming strategies to find out what works best for an individual. According to the author of this study, it is only by trial and error that we find out what works best because each child is unique and what works for one child may not work for another. Sensory rooms can be a tremendous benefit to all children with autism. Special environments called multi-sensory rooms provide safe, comfortable places for people with ASD to play, learn, explore, and relax (Squire, 2016).

The Zones of Regulation is an extraordinary method used as a calming strategy to help prevent stressful situations for children with autism. This method is used as a calming strategy that is a highly recommended curriculum designed to teach students self-regulation.

All people in general can benefit from the Zones of Regulation, not just the students. When one student starts using The Zones, often parents and teachers find it helps the other children and even themselves. Adults who teach The Zones report better insight into their own states and become more aware of the tools they can use to regulate. Everyone experiences difficulties in regulation from time to time, prompting many regular education teachers to adopt it for use with their whole class. (Kuypers and Winner, 2011)

A calming strategy within The Zones curriculum that should be taught in all classrooms, and especially in ASD classrooms, is the strategy of deep breathing. Wiseman (2006) explains that Harvard psychologist Alice Domar calls the technique "mini-relaxation" and describes it in detail in her book, "Self-Nurture: Learning to Care for Yourself as Effectively as You Care for Everyone Else." This strategy teaches students to relax and to simply take deep breaths to help them in any situation. The importance of integrating self-management (or self-regulation) into practice reflects the experts' confidence that this treatment will have favorable outcomes for individuals with autism (Kuypers and Winner, 2011). With The Zones of Regulation, students learn calming strategies such as learning to take a deep breath. Students learn different strategies to taking a deep breath and different types of breathing. Methods that are taught are Six Sides of Breathing and Lazy 8 Breathing. Kuypers and Winner (2011) explains that Six Sides of Breathing is a technique that uses a hexagon to structure breaths and Lazy 8 Breathing is a technique that uses a lazy 8 to structure breaths. Other tools used for calming in The Zones are

strategies such as Counting to Ten and Calming Sequence which is a meditative routine to follow that repeats steps consisting of muscle contraction and deep pressure input (Kuypers and Winner, 2011). Herbert & Weintraub (2012) express that sensory, sleep, seizure, speech, and language, and other brain-based issues increase stress in children. Additionally, Herbert and Weintraub (2012) continue to explain the need to understand how your students' brain makes them feel, and having concreate steps to help calm any stress students might feel to make their words more manageable, as children with autism can feel a high level of stress all of the time. Kuypers and Winner (2011) support calming techniques and explains that they incorporate both a physiological component that helps to calm the sensory and nervous system as well as a cognitive component to calm the mind.

A method within The Zones is the use of teaching and utilizing the separate zones by the different colors. The Zones promotes the use of sensory supports as well as thinking strategies and calming/mindfulness tools to help students regulate between states (Kuypers and Winner, 2011). The different zones are the blue zone, green zone, yellow zone, and red zone. Students are taught the importance of the unique zones and are taught that everyone will at some point be in each zone and that is okay. It is reinforced that none of the zones are bad and that it is okay to be in the different zones. The green zone is taught as ready to learn. Teaching the different colors helps children to identify and recognize their different levels of alertness. As a result, Kuypers and Winner explain the zones as traffic signs when they note,

The zones can be compared to a stoplight or traffic signs. When given a green light (in the Green Zone), one is "good to go." A yellow light or caution sign means slow down or take warning, which applies to the Yellow Zone. A red light or stop sign means stop; when a person is in the Red Zone, he or she needs to stop and regain control. The Blue

Zone can be compared to a blue rest area where you pull over when you're tired and need to recharge. It is important to note and reiterate to students that everyone experiences all of the zones at one time or another; the Red and Yellow Zones are not the "bad" or "naughty" zones. (Kuypers and Winner, 2011).

The use of movement is another remarkable calming strategy that can be used almost anywhere. Movement is used in many different forms and can be very calming for children. Programming sensory breaks into students' school day by jumping, swinging, or simply walking around can ready students to learn (Herbert and Weintraub, 2012). A sensory "diet" can incorporate elements of more calming activities into your daily routines such as trampolines, swings, scooters, bikes, skateboards, and roller skates (Herbert & Weintraub, 2012). Often these tools can help students to regulate their emotions—to help get them out of the autonomic "fight, fright, or flight" state that the body goes into when reacting to intense situations (Kuypers and Winner, 2011). Occupational therapists encourage movement as a calming strategy and teachers and families can use these simple methods too. Different types of movement that occupational therapy might include are movement through rolling, spinning, or swinging. These types of activities change how the body moves through space, which helps alter how a child sees and hears (Brill, 2008).

The use of deep pressure can be another calming strategy for some children with autism. Deep pressure can be used as a calming effect. An example of this would be using lotion as a calming strategy. For some children with autism, rubbing lotion and applying pressure to different parts of the body can be calming. Doing these activities frequently can help a child's ability to handle touch. A child could benefit from the use of a steamroller squeeze machine, squeezes with big pillows, or a heavy blanket that offers a big hug. There are several different

ways to give deep pressure to the body. Rolling a child's belly on an exercise ball, doing wheelbarrow walks, and crawling through small tunnels are all examples of ways to get deep pressure to an individual's body. Using these different methods can help calm children with autism and they can be used in the classroom, in therapy, and at home.

Finding the best ways to communicate with each child with autism on an individual basis can be an important method and can be used as a calming strategy. Communicating and interacting with students and adults can be very difficult for a child with autism. There are ways that people can make it easier for children with autism. Calming strategies are tremendously beneficial to children with autism for this reason. Remembering to keep calm and being patient when working with all children is helpful, especially with children with autism. Once children are calm they are ready to learn and may be able to better communicate their needs. When children are less frustrated and calm they are able to approach adults for help and tell adults what they need. It is common for children to have behaviors when they are not able to communicate their needs. People with autism may find it difficult to use words, facial expressions, gestures, or touch, and they can struggle with feelings and can have trouble expressing their own emotions (Squire, 2016). The use of tablets, iPads, and computers may be relaxing and reassuring for children with autism. According to Squire, (2016) tablet computers may help autistic children learn and communicate whether their symptoms are mild or severe. Teachers, parents, and speech & language therapists might use a picture communication system which can be calming for children. This type of communication system can be especially calming for children that have less verbal ability. One method of picture communication is PECS, or Picture Exchange Communication (Squire, 2016). PECS, alphasmarts, tablets, iPads, and computers are all types of communication devices that can better help children with autism to communicate. Alternative

forms of communication, which can include picture cards (such as picture exchange communication, sign language, letter boards, and computerized devices, are used as primary, long-term communication strategies or as bridges to oral language (Fredericks, 2008). Giving children with autism additional methods to communicate is another benefit of calming strategies.

Another tool that can be used as a calming strategy is the use of headphones. Noise cancelling headphones can be very helpful to screen out extra noise and they can be used as a tool to calm children or adults with ASD. Many people with ASD are very sensitive to sound (Squire, 2016). Places that a child might use noise cancelling headphones could be a grocery store, in the classroom, or in a crowded assembly. For example, children with ASD may have an easier time participating in assemblies at school when they wear noise cancelling headphones. Noise canceling headphones help to drown out the extra noise they may hear which is calming in crowded and loud spaces.

The list of calming strategies does not end here. Other alternative therapies, according to Chalfant (2011) are art therapy, dance therapy, drama therapy, play therapy, and supportive counseling. Any calming strategy used to help calm a child down can be beneficial and result in a positive situation. Flexible seating in a classroom could be a tool for an individual with autism. Flexible seating could be the use of exercise balls, fidget chairs, stools, or a balance ball chair. Music therapy in the classroom, in therapy, or at home can also be another tool used as a calming strategy. Studies have found that music therapy encourages autistic people to become more social (Squire, 2016). It is also noted that Squire (2016), states that children with autism tend to be very sensitive to their environments. Helping to create an environment that is calming to children with autism is a benefit for all.

Interventions and Strategies

Students with autism often require specific behavior interventions. When deciding on different interventions it is important to remember that no two children have the same strengths and the same needs. Deciding on interventions and instructional programs must be individualized. In 2002 it was estimated that autism is expected to increase at a rate of 10 to 17 percent each year (Fredericks, 2008). In 2003 and 2004 there were studies that showed that 60 out of every 10,000 American children that were being diagnosed with autism, which equals a ratio of 1 in every 166 children (Fredericks, 2008). Autism is on the rise and teachers and families need interventions and strategies to help children with ASD. Parents, teachers, and loved ones look for answers about autism. At the present time, there is no cure for autism. Meanwhile, research shows that ABA therapy can help individuals with autism. Applied Behavior Analysis (ABA) is the most commonly used intervention therapy amongst children with autism (Fredericks, 2008). ABA therapy works to increase independence amongst children with autism and focuses on improving different skills such as play skills, communication skills, and social skills. All things considered, ABA therapy has drawbacks just as any other intervention does and that is that it does not work for every individual with autism. To sum up ABA therapy, Fredericks (2008) describes ABA as an approach rooted in the fundamentals of behavior modification, which many psychologists employ in treating all sorts of physical, mental, and emotional disorders. The goal of ABA therapy is to change a particular behavior that someone with autism is displaying. Altogether, the goal is to add a socially appropriate behavior and extinguish an inappropriate one. Through educational methods such as The Zones of Regulation, children with autism can be taught calming strategies to help them in their everyday lives. Interventions such as ABA therapy have similar goals of teaching calming strategies in the

classroom. To summarize the main goal of each is helping children to learn new ways to manage their world around them.

A light touch may feel like a shove; basic eye contact may come across as debilitating Intrusive; a whisper can seem as loud as a sonic boom. Add to these experiences the autistic child's inability to let grown-ups know exactly how they're feeling and filtering this stimuli, and you have a child who may seem, to those who are uneducated about autism or unaware the child is autistic, out of control, over-reactive, or cold and distant. The responses of autistic children are all they know; but these kids can be taught new ways of managing and responding to the world. (Fredericks, 2008)

It is especially important for students with autism to learn strategies for calming down when they are upset. Students with autism can be easily over-stimulated within their environments, which can lead to disruptive behaviors. Students with autism can be sensitive to noise, high activity, and increased demands in the classroom. For this reason, Wagner (1998) explains that children with autism do not have the capability to identify when they are becoming upset and in addition, they frequently have few if any coping strategies to help them regain control once they have become upset. Another easy intervention to implement in the classroom is a self-regulated, calm-down time (Wagner, 1998).

Future Implications

In attempt to access treatment and support services for individuals with autism, there have been some successes and some failures along the way. Maurice, Green, and Luce (1996) explain that up until 1996 there were very few studies published and limited specific information

about how behavioral intervention was provided to the children studied, so many of the foregoing questions need to be addressed in future research. Additionally, Catalano (1998) makes it clear that research shows it is widely recognized that behavioral intervention need to be commenced as early as possible. Considerable success has been achieved with intensive early intervention for children with autism and it has been demonstrated in a number of recent studies. However, with careful monitoring, the emergence of autistic symptoms can be detected much earlier—at 18 months of age, or younger (Catalano, 1998). Not only were behavior therapies looked at but other therapies as well such as medical and dietary interventions as alternative treatments. Auditory training and structured listening were other attempts at interventions as supportive services for children with autism. Catalano (1998) explains that sensory integration and auditory training have produced good results in some children with autism. Catalano (1998) outlines research done by Dr. Sue Bettison, formerly of the Autism Research Institute in Sydney, suggests that "structured listening" involving listening through headphones to a variety of music is equally effective as auditory training. Furthermore, the goal for the future is to move towards answers. Recognition of autism has changed (Cohen, 1998). Currently, there is still no cure for autism.

The future of autism is complicated. Many have wondered where all this research leads, asking whether a complete and total cure for autism spectrum disorders can or should be found (Fredericks, 2008). Researchers continue to uncover the genetic causes of autism. Snedden (2010) explains that there are believed to be as many as thirty genes involved in autism and alteration to these genes may be what leads up to the condition of autism. The greater number of altered genes, the more likely the person is to show the symptoms of autism (Snedden, 2010). One future implication is that some people do not believe in looking for a cure for autism. Not

only do people believe to stop looking for a cure, but they believe in focusing on the quality of life for individuals with autism. A question posed when looking into the future is,"What does the future look like for autism?" Snedden (2010) ask the question, "Is a cure, or prevention, even remotely possibly?" Snedden (2010) writes, "Should we not, as some people believe, even be looking for a cure, but accept people with ASDs as they are?" A great deal of research today looks at the possibility of preventing autism and focuses on helping people with autism, by understanding their needs, and encouraging the rest of society to do so (Snedden, 2010). Additionally, examining calming strategies for each individual with autism would be one strategy to understanding their needs. Giving individuals with autism the tools they need to succeed is one way we can help them today. All things considered, it is crucial to understand each individual with ASD by meeting their individual needs. This includes understanding their communication needs, sensory needs, and behavioral needs so they can best live their lives.

One of the biggest complications regarding future research was best said by an amazing person with autism, Temple Grandin when she stated,

The genetics of autism is an exceedingly complex quagmire. Many small variations in the genetic code that control brain development are involved. A genetic variation that is found in one child will be absent in another autistic child. Researchers have done hundreds of studies on autistics' problems with social communication and facial recognition, but they have neglected sensory issues. Sensory oversensitivity is totally

debilitating for some people and mild in others. Sensory problems may make it impossible for some individuals on the autism spectrum to participate in normal family activities, much less get jobs. (Grandin & Panek, 2013).

Ultimately, the need for calming strategies for someone with autism is very high and could benefit their success.

CHAPTER III: POWER POINT

Slide Show Presentation for Special Education Teachers, Parents, and Support Staff

Calming Strategies for Students with Autism

A guide for special education teachers, parents, and support staff.

By: Jenny Crnobrna

Why Are Calming Strategies Important for Children With Autism?

Children benefit when they are taught calming strategies.

"All people in general can benefit from The Zones of Regulation, not just the students. When one student starts using The Zones, often parents and teachers find it helps the other children and even themselves. Adults who teach The Zones report better insight into their own states and become more aware of the tools they can use to regulate. Everyone experiences difficulties in regulation from time to time, prompting many regular education teachers to adopt it for use with their whole class" (Kuypers, 2011).

What is Self Regulation?

Self-regulation can go by many names, such as "self-control," "self-management," "anger control," and "impulse control." These terms all describe people's ability to adjust their level of alertness and how they display their emotions through their behavior to attain goals in socially adaptive ways (Kuypers, 2011).

Self Regulation

Self Regulation is the ability to do what needs to be done to be in the optimal state for the given situation. This includes regulating one's sensory needs, emotions, and impulses to meet the demands of the environment, reach one's goals, and behave in a socially appropriate way (Kuypers, 2011).

Building Skills

 "Students often act out because they do not know how to make better choices" (Kuypers, 2011).

Students Need to be Taught What They Could Do Differently and Time to Practice the Skills

Give Opportunities to Practice New Skills.



Practice the Skills in a Safe Enviorment.



Practice the Skills in a Supportive Environment.



Students Need Help Learning How to Recognize Their Emotions While They Still Have Some Control.

- Teach Children new skills of how to recognize their emotions as well as teaching them to control their impulses.
- Students need to be taught calming strategies such as self regulation
- Students need to be able to calm themselves independently.
- Learning calming strategies helps students so they do not interrupt the entire classroom.

Learning to Self Regulate Through the Zones of Regulation



Why are calming strategies important?

- · We can teach children to remain calm when they are upset.
- We can teach children tools to help them to cope with their emotions.
- We can teach children the tools they need to help them to communicate to alleviate a stressful situation.

Children with autism experience stress and frustration even more than children without autism.

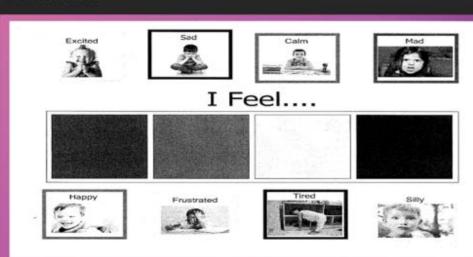
- Stress and frustration can be brought about in many situations for children with autism. There are many things that can trigger a stressful situation making it hard to cope for a child with autism.
- Sensory
- Sound
- Touch

Different Types of Calming Strategies for Children:

- · Teaching children The Zones of Regulation.
- Teaching children the different tools to use when they are in the different zones. For example, blue zone, green zone, yellow zone, and the red zone.
- Teaching children different emotions.
- Teaching children that it is okay to take a break.
- Teaching children about duration maps so children know where they are and how far they have left to go.

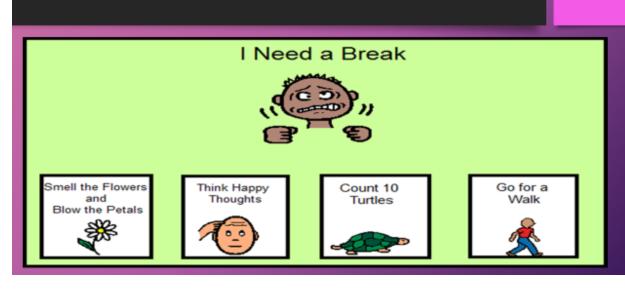
Tools: Teaching Different Tools to Use When in Different Zones THE ZONES OF REGULATION* GREEN ZONE GREEN ZONE GREEN ZONE Blue Zone Tools Stretch Creen Zone Tools Drink water Deep breaths Take a break

Tools: Teach Children About Different Emotions





Tools: Teach Children How to Take a Break

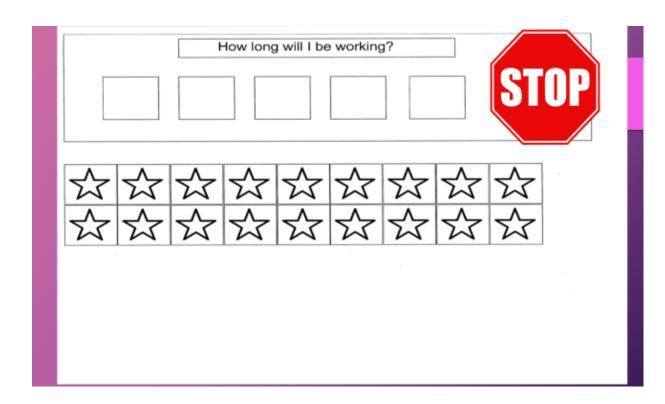


Tools: Teach Children How to Use a Duration Map

1. Duration maps give children a visual map of where they are going and how much work is left.



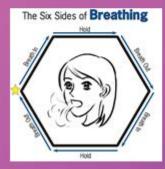
2. Duration maps alleviate stress.





Different Types of Breathing Used as Calming Strategies

The Six Sides of Breathing



Lazy 8 Breathing



Different Types of Calming Strategies

















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CHAPTER IV: DISCUSSION AND CONCLUSION

Summary

In the final analysis, teaching and using calming strategies with students with ASD improves their ability to communicate and to recognize their feelings in a safe and non-judgmental way. Being able to use calming strategies allows children with ASD to select different strategies or tools to help them move between the different zones of regulation.

Teaching the different strategies allows students to learn a variety of coping skills to help them function throughout their day, whether it be at home, in school, during therapy, or in a variety of settings in daily life. Teaching calming strategies helps children recognize their different emotions, feelings, and levels of alertness. The goal of teaching self-regulation to students is the hope that students will gain skills in the area of self-regulation. Impulse Control, self-control, and self-management are just some of the many various names for self-regulation. In addition to addressing self-regulation, the students will gain an increased vocabulary of emotional terms, skills in reading other people's facial expressions, perspective about how others see and react to their behavior, insight into events that trigger their behavior, calming and alerting strategies and problem solving skills (Kuypers, 2011).

Sometimes shortly after a young child is diagnosed with autism or pervasive developmental disorder the quest for help begins (Maurice, Green, & Luce, 1996). The purpose of this study is to offer help to students with ASD, the families, and teachers and staff that work with children with ASD. Students with autism likely have challenges with self-regulation skills. The main purpose of this thesis is to offer common approaches to help children explore the different types of calming strategies that can be used to help them throughout a variety of

settings in their daily life. This thesis can be used as a guide for teachers, parents, support staff, and children with ASD. The different benefits that calming strategies can offer are the number one goal and focus of this study.

According to Kuypers (2011) when taught sensory integration and regulation, it helps children learn to manage sensory input from the environment so they can process and respond in ways in which they are expected to function. Kuypers (2011) also explains that it is key to help children learn to understand the connection between their sensory systems, their emotions, and their ability to relate to the world in ways that make others feel comfortable relating to them.

Teaching emotional self-understanding and emotional self-regulation through different types of calming strategies helps children feel proud of themselves and builds a sense of community between children, educators, and families.

Professional Application

For the past three years, I have had the privilege to work with students with autism spectrum disorders and their families. Throughout my first three years as a special education teacher I have had the opportunity to work in a center-based classroom in a CID (Communications and Interactive Disorders) setting. It is common for our students to demonstrate significant deficits in the area of self-help, social skills, interpersonal communication, academic achievement, sensory-motor regulation, and self-regulation skills. Throughout my journey as a special education teacher I have become very passionate about the use of calming strategies and the benefits of the strategies in a classroom. I have been blessed with the opportunities to work with these amazing children and it has become my personal goal

to help them succeed in the classroom as well as their daily lives. Using calming strategies such as the Zones of Regulation has been a positive intervention for teachers, students, and families.

It was Kuypers (2011) who stated, students often act out because they do not know how to make better choices. This resonates with me because I watch wonderful school-aged children daily who act out, not because they want to be bad, but because they do not know how to make other choices. The positive impacts that special education teachers have the ability to make on children daily is riveting. This topic is so near and dear to my heart because making a difference in these children's lives, along with their families, is priceless.

Teachers can help children with ASD in a number of ways. Teachers can help to manage children's anxiety by teaching calming strategies in the classroom. There are so many different methods that can help students to focus, function, and to just be happy which leads to their success.

In conclusion, helping individuals with autism is unique and needs to be done on an individual basis. It was Temple Grandin (2013) who states, "I beg you. Do not allow a child or an adult to become defined by a DSM (Diagnostic and Statistical Manual of Mental Disorders) label." The importance of meeting each individual with autism where they are at is significant.

The end goal for this thesis is to present the power of calming strategies, especially for children with autism. The importance of understanding each child's unique characteristics and traits with autism is extremely valuable as it holds a key to help aid them in their daily lives.

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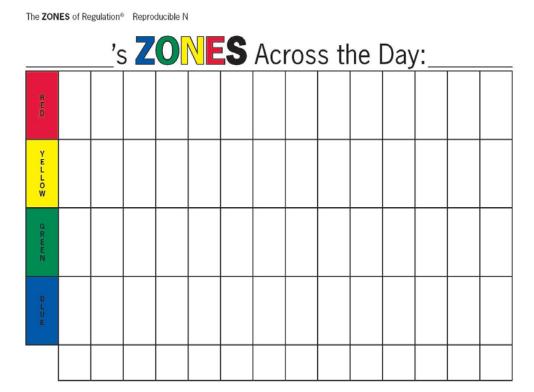
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Appendices

Figure 1: The Zones of Regulation and The Zones Across the Day



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Figure 2: The Zones of Regulation and The Zones Check-In

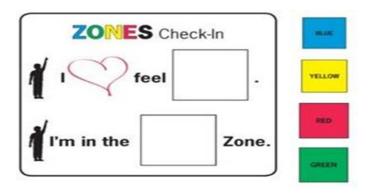


Figure 3: The Zones of Regulation and My Calming Sequence Visual

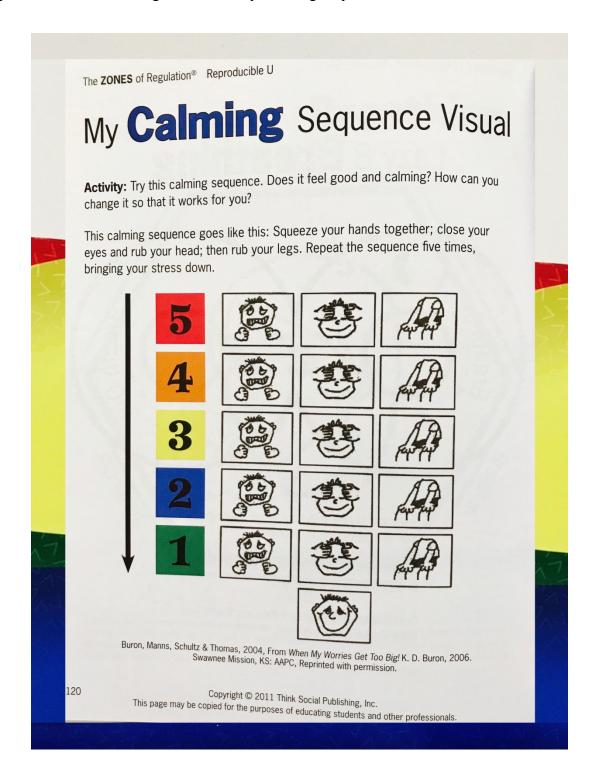


Figure 4: The Zones of Regulation and Tools for Each of My Zones

