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Autism: A Teacher's Guide

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Everything Educators Need to Know

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Introduction

In recent years, the amount of children between the ages of four and eight identified with neurological disorders – most notably Autism Spectrum Disorder (or **ASD**, as it will be referred to in this handbook) – has increased by approximately 54% from one in 91 in 2012 to one in 59 in 2018 (Shaw et al, 2021) in the United States alone. This increase has been, in large part, due to changing criteria in which to identify such disorders. Many changes in the diagnostic criteria and the way the criteria are applied in medical and educational practices (Voigt et al., 2011) have been made in recent years, and continue to this day, as more research surfaces. The actual cause of ASD is still relatively unclear. However, there has been evidence of defined genetic syndromes, mutations, and other genetic factors accounting for 10% to 20% of ASD cases; as well as prenatal environmental factors like utero exposure to certain medications, testosterone levels, alcohol exposure and infections may have been associated with increased risk of ASDs (Voigt, 2011).

There has been a growing interest in ASD in recent years and its true prevalence around the world, and an urgent need for Autism services in rather poor countries are also on the rise. Generally, children around the world have different expectations of how to behave depending on their culture and family background (Deweerdt, 2012). Research has continued to emerge about the importance of understanding family dynamics, structures in their daily lives, activities and family functionality (McWilliam, 2010; as cited in Hughes-Scholes, 2019). A key component in a successful education and quality of life for the child is an open line of communication between parents and all professionals involved in their child's care and education (Dunn et al., 2016).

Purpose of this Guide

Studies have shown that many educators are not prepared to teach children with ASD in their classrooms, as they may not be familiar with the characteristics of these children (Jiar Yeo & Teng, 2020) and do not have the knowledge needed to help them succeed.

In this guide, we discuss the different characteristics of ASD, how they affect a child's education, how to collaborate with families, and research and evidence based (proven to be effective through research and quality studies) intervention strategies that will assist general education teachers, paraprofessionals, special education teachers, and any other professional in the educational field that may benefit in understanding the complexity of ASD and the best current intervention practices that may assist these young students get on the right path to reach their full potential. It is important to note that not every intervention will work for every child, as every child is different, and every child has their own set of challenges. We will be focusing on children in the three to eight age range (early childhood to elementary), however, every strategy discussed in this handbook can be adapted to fit the needs of older students. Many of these interventions may have duel purpose in the sense that they can be used for more than one deficit; for example, a lot of behavioral issues that arise with children with ASD are due to a lack of communication or social skills, thereby addressing communication deficits, behaviors are likely to decrease.

At the end of this document, additional resources are available for any family or educator that desires more information.

Definition of Autism

Autism Spectrum Disorder can be defined as a neurological disorder that affects the brain. As a result, certain characteristics can make life very challenging for children diagnosed with it. Individuals with ASD often have difficulties with **social communication and interactions and restricted or repetitive behaviors or interests**. Additionally, they may also have **different ways of learning, moving, or paying attention** (CDC, 2022). These are considered the core symptoms of ASD, however, there is a range of co-existing conditions that individuals with ASD often experience. Examples include: **emotional and behavioral problems, sleep problems,** gastrointestinal problems, feeding and eating problems, **sensory sensitivities, learning and intellectual disabilities,** as well as other mental health diagnoses (as cited in Yu et al., 2020). Although many children without ASD present with these characteristics, the main difference is that these particular issues affect the functionality of everyday life.

The terms high functioning and low functioning autism (HFA and LFA respectively) have been used to describe the levels of severity in children with suspected ASD. One way this has been determined is through Intelligence Quotient testing. According to Jia Cai et al (2018), individuals with an IQ < 70 are typically defined as having LFA, and those with an IQ ≥ 70 are defined as having HFA. Some individuals that are diagnosed with Autism with other symptoms, but have normal or even superior intellectual abilities with no history of developmental language delays are classified as having Asperger Syndrome (AS) (Cai et al, 2018). AS is known as a developmental disorder characterized by impairments in social interaction and repetitive and ritualistic patterns of behavior (Woodbury-Smith, 2021). From a definition standpoint, there is no clinical delay in general cognitive development – as IQ is considered in the normal range (>69) – adaptive behaviors, and expressive language (2021). AS is an expansion of ASD, as they

both present with the same types of social deficits and repetitive behaviors. Furthermore, recent research suggests that nearly 80% of the ASD population are considered low functioning (Cai et al., 2018). There has been some controversy surrounding IQ testing and its validity in determining intelligence. However, it is still widely used to determine levels of high vs low functioning autism and everything in between.

Social Communication

Perhaps the greatest challenge a young child with ASD has is their poor social skills. These deficits include social/emotional reciprocity, non-verbal communicative behaviors used for social interaction, as well as developing, maintaining, and understanding relationships with others (Watkins et al., 2015). More specifically, social deficits can be characterized by poor eye contact, lack of joint attention, pedantic or odd speech patterns, difficulty both initiating and maintaining conversations, lack of social problem-solving ability, lack of empathy and difficulties interpreting body language (Jiar Yeo & Yin Teng, 2015). Because of these deficits, children with ASD may often prefer to stay to themselves in a social setting. Though it has been proven that integrating these students into inclusive classrooms improves their academic, social and emotional learning (Yeo & Teng, 2015). Building friendships is an important social experience for all children; this enables them to develop and practice fundamental pro-social skills, such as mutual caring, support, empathy, and caring (Bauminger & Shulman, 2003; as cited in Barnett, 2018). It all starts with positive social interactions with adults and peers.

Evidence-Based Interventions for Social Communication

It is important to note that no single intervention strategy has been officially identified as effective in improving social communication for every child with ASD (Watkins et al., 2015), so

designing intervention plans and IEPs (Individualized Education Plan) must be individualized based on the child's unique needs. As presented by studies in the evidence based approaches, the most beneficial intervention may involve a combination of several different validated strategies and approaches (Watkins et al., 2015). These first four strategies were discussed in the Early Childhood Education Journal by Juliet Hart Barnett in 2018.

➤ **Scripts –** involves a student repeatedly watching a video of another individual, or themselves (video self-modeling) correctly performing a targeted skill. After viewing it, the student has the opportunity to put the new skill into practice. Video modeling has been shown to positively impact a variety of skills; not only social communication, but also motor, self-monitoring, functional, and vocational skills. Scripts can also be used to prompt needs or engage in conversation Follow these steps for effective use of this intervention:

1. Observe the target student to determine which skill they need to work on (i.e. sharing toys, greeting peers, requesting toys, etc.)

2. Develop a script based on these observations of the phrases that typically developing peers use during play, as well as evaluation of the language and cognitive abilities of the target student

   ▪ Be sure to adapt the script in a language the target student will easily understand; if possible, use the child's native language if they are an ESL learner

3. Create a written script, printing statements on note cards with illustrations, photos or drawings for added support

- For example, a script for a child who would like to play with Legos might

    be cued to engage a peer by saying "Let's play with Legos"; or another

    child who wants to engage with another adult might be cued to say "watch

    me swing" before heading over to the swings during outside time

- For a younger child, assist them in reading the phrases and use the photos

    or illustrations to guide them in learning what each phrase in the script is

4. Go through the script with the child during choice/free time or other natural

    setting to teach the proper interaction; repetition is key! Keep prompting the use

    of the script/phrases they learned, while gradually fading it out in order to transfer

    control from relying on the script to natural environmental opportunities like the

    presence of a peer

5. As the student practices, parts of the script should be faded or removed, so the

    child is required to provide longer and longer segments of the language

    independently (McClannahan & Krantz, 2005; as cited in Barnett, 2018)

➢ **Video Modeling -** Implementing this strategy involves a teacher identifying the behavior

they want the video to feature, produce the video demonstrating the behavior – duration

should generally range from about 30 seconds to four minutes in length – and after the

student watches it, there must be an opportunity to apply the new skill they just learned in

a natural or social setting (Hanline and Riggie 2014; as cited in Barnett, 2018). Videos

have been seen to be a preferred activity for a lot of children with ASD, so they are

generally able to center the child's attention. This can minimize the overwhelming

amount of social information by capturing the target behavior in isolation (Hart &

Whalon, 2008; as cited in 2018). Evidence has shown that video modeling has positively

impacted a variety of skills; not only social communication, but also physical skills, self-monitoring, functional and vocational skills (Bellini et al., 2007; as cited in 2018). Follow these steps to implement a video model:

1. Observe the target student to identify the skill that he/she may improve most by a video model.

2. Record a video of the target skill being used in the proper manner

   ▪ Peers can be great to use for modeling certain skills, particularly social skills and even physical or functional skills; For self-monitoring, teach a target student how to perform a specific skill he/she is working on (may use scripting or other method), then record them performing said skill correctly so they may review it later and practice in natural settings

3. The table below shows next steps for uploading the video, making adjustments, adding narratives, and any other details that are desired

4. As the target student continues to practice the skill, review the video with them to assist them in their practice; gradually fade out the video as the student gets more comfortable performing the skill correctly.

Step 1: Recording a video Taking a video on a tablet or smart cell phone is straightforward. First, launch the camera application from the home screen by touching the camera icon, select video on the bottom of the screen, and then tap the record button to start. To stop recording, tap the red stop button.

Step 2: Identifying target behaviors To create a VM or VSM identify a student behavior you wish to change or increase. For example, some children may demonstrate difficulty with initiating social interactions. Identify a single behavior that is easily observed in the classroom that the student has previously demonstrated (or can be prompted to demonstrate). Once you have identified the preferred behavior, record the child (or peer model) demonstrating it for at least 3 min

Step 3: Uploading the video To upload videos, connect the tablet or phone to a computer. If using a Mac, import the video from an iPad/iPhone using the Photos application. Once imported, open the iMovie application and import the video into iMovie by selecting the computer drive in the upper left hand corner of iMovie. Then, select the correct drive and file that the video is in and click the import-selected button in the lower right corner of iMovie

Step 4: Adding narration To add a short narrative prior to the video, select the title option that is located in the content library in the lower left corner of iMovie. Then, insert three title videos with the same theme. To edit the title screens, click on the default title in the small iMovie screen on the right. On the first title screen, type the student's name and target behavior; for example, "Johnny knows how to greet his friends." On the second title screen type the definition of the target behavior, as in, For Johnny, greeting friends means that Johnny will go over to them, stand close to them, make eye contact, and say, "What's up?" On the third title screen, edit the title so that it transitions to the actual video by stating that the student is demonstrating the target behavior. For example, "Now, here is Johnny greeting his friends."

Step 5: Adding audio To add audio, click on the microphone image just below and to the left of the video screen in iMovie. By default, all Macs come with a built-in microphone and, once the microphone icon is clicked, the audio starts from the beginning. Click the red record button and begin narrating the introduction. When finished, drag the student video and drop it behind the title videos on the timeline. If your footage needs editing, click and highlight sections of the video, then right-click the mouse. This will open several options including cutting the video clip into smaller, manageable clips

Step 6: Exporting the video To export the video, click on File, Share, and then select iTunes. Once the video is added to iTunes, open iTunes, click on Movies, then Home Videos. Then, click on the iPad or iPhone image, then Movies, and then Sync Movies. The movie will download onto the iPad or iPhone and can be found by clicking on the videos icon in either device. Then click play

Step 7: Teach the student Once the VM or VSM has been created and added to the device, teach the student how to use the iPhone/iPad. Most children are familiar with iPads/iPhones and typically have a sense of how to use such devices. Ensure the student knows how to turn on the device and access the video. To access the video simply touch the Videos icon, select the Movies option, and click play on the video. Also, make sure to teach the student to watch the video in its entirety. Once the video has been viewed and the device has been put away, instruction should begin immediately

Step 8: Record student behavior During instruction, a second iPad or iPhone is used to record student behavior. The video of the student following viewing the video model will yield important data about student behavior. Teachers or paraprofessionals can set up the device to record student behavior after the student watches the video to determine the percentage of time the student demonstrates target behavior

➢ **Embedding Choices –** this allows students to select from two or more options given by the teacher, thereby allowing them to evaluate their own preferences. This also gives teachers an opportunity to modify the environment to increase student motivation, promote student independence, and improve students' social skills (Jolivette et al., 2002; as cited in Barnett, 2018). This strategy also allows children that are resistant to compliance to have some level of control in their day. By providing opportunities to make choices, teachers can reduce the chance of undesirable behavior. Learning to make small choices and communicate those choices effectively can lead to making the much bigger choices later as children grow and develop (Barnett, 2018). Embedding choices is especially effective and helpful at the beginning of the school year as educators get to know their new students; by performing preference assessments, educators can determine preferred and non-preferred activities that their students are most likely to be motivated by. The steps below are a great place to start embedding choices into the school day:

1. Start with a limited number of choices, such as two different activities to choose from. More than two or three can quickly overwhelm a child with ASD.
   - Pair the verbal choices with concrete objects or visuals of them; this is preferable as the children can see all options available to them; they are more likely to respond to the choice effectively (Vicker, 1999; as cited in 2018).

2. Avoid open ended choices like "choose a game," and instead use shorter phrases such as "do you want Legos or Lincoln logs?"
   - Many children with ASD are much more successful when they have a concrete, visual understanding of what their options are (2018).

➢ **Peer-Mediated Learning Strategies (PMLS)** – many social interventions can benefit
   from allowing typically developing peers to participate in the intervention process. In
   addition to the child with ASD, the typically developing peers will also have the
   opportunity to refine and increase their own social skills and interact with other children
   with disabilities. It is preferred that the peer model should already have a decent grasp on
   appropriate social skills, with a positive reputation among other peers as being a great
   peer to get along with, as well as have a positive (or neutral at least) interaction history
   with the target student, and shows compliance with teacher interactions (Odom & Strain,
   1986; as cited in Barnett, 2018). It is also helpful for the peer model student to have
   common interests and activities with the target student. This allows for better pairing and
   more positive interactions, which, in turn, could potentially develop into a long term
   friendship with such students. A few tips for implementing strategies that involve peers
   include the following:

   1. It is best to partner a peer with a child with ASD who share similar interests
      and/or preferred activities

   2. Several peers should be selected for each target student to increase skill
      generalization and prevent burnout by a single peer model (Rogers, 2000; as cited
      in 2018)

   3. When explaining to peers what a peer mediated activity involves, the teacher will
      want to explain the types of activities, the amount of time activities will last, and
      how often these interactions will occur (Barnett, 2018).

   4. It may be more effective to focus on describing the PMLS program as a chance
      for everyone to make new friends (Thiemann & Kamps, 2008; as cited in 2018).

Speech and Language Delays

In some children with ASD, a lack of social skill can stem from a speech and/or language delay. According to Maura R. McLaughlin, MD (2011), speech can be defined as the verbal production of language, whereas language is the conceptual processing of communication. Language also includes receptive language (understanding) and expressive language, or the ability to convey information, feelings, thoughts, and ideas. These delays are generally associated with increased difficulty in reading, writing, attention and socialization (2011). McLaughlin goes on to suggest that there have been several studies that have shown that children with speech and language problems at two and a half to five years of age have increased difficulty reading in elementary school years. Furthermore, for children who have speech and language impairments that persist past five years of age, they have an increased prevalence of attention and social difficulties (as cited in McLaughlin, 2011). Here are some evidence-based strategies for children with speech and/or language delays:

➢ **Speech Therapy –** the most commonly sought out intervention for language delays. A certified speech-language pathologist (SLP) will work with the child on speech and language skills using speech development techniques that encourage the use of their speech muscles. Speech therapists say their intervention services focus on enhancing the wellbeing of the child and their family through supporting communication development and alleviating stress that any member of the family might be experiencing due to communication breakdowns (Binns et al, 2021). Helpful tips include:

1. Speech therapy is only covered by certain insurance plans, so make sure the family has the right coverage for therapy; if this is not possible, other options may be available.

2. Speak with a speech therapist about ideas to help the children in your classroom; perhaps they can assist in providing techniques the educator can do in the classroom to increase communication

➢ **Augmentative and Alternative Communication (AAC)** – this is a tablet equipped with a speech program designed with picture-text to sound buttons that can be custom designed for the particular child that will be using it. Research shows that after working with the AAC program, some children become more verbal and increase their spoken communication, while others remain nonverbal, but demonstrate increases in augmented vocabularies (Kasari et al., 2014; Tager-Flusberg & Kasari, 2013; as cited in Bourque & Goldstein, 2019). Tips include:

1. A representative of the speech app used can assist educators in learning how the app works and the best practices for teaching a student to use it

2. Encourage the student to use the device whenever they are trying to communicate. Acknowledge their efforts by repeating the word or phrase that they touch and give them the item or activity they are requesting to pair that particular item or activity with the word or phrase.

3. For more information on the types of apps available, visit the site below: https://quicktalkerfreestyle.com/lp2/?utm_source=Google&utm_medium=CPC&utm_campaign=QTF+Autism+2021&gclid=Cj0KCQjwsdiTBhD5ARIsAIpW8CI6QII85bnSlpvkcMYis3b-dDF8r9irrfWTf2KvtXeAbgHnWyluEXcaAtDDEALw_wcB

➢ **Picture Exchange Communication System (PECS)** – similar to the AAC device, this is a low tech option that consists of pictures that are exchanged with a communication

partner. It was originally developed for nonverbal children with ASD to teach spontaneous, functional communication (Bondy & Frost, 1994; as cited in Thiemann-Bourque et al., 2016). Research supports the notion that PECs can improve functional communication such as initiating requests and responding to questions. These findings were consistent across participant ages and disability types as well (Thiemann-Bourque et al., 2016). The process of teaching the PECS system consists of six phases, according to Thiemann-Bourque et al (2016):

1. The physical exchange: the child exchanges a picture to request a desired item (much like the AAC device); physical prompts may be used to guide the exchange

2. Expanding spontaneity: provide a variety of communication partners and the distance the child must travel to request a preferred item

3. Picture discrimination: the child selects preferred and nonpreferred items from an array of symbols

4. Sentence building: the child selects present and non-present items by selecting multiple symbols together on a sentence strip (for example: "I want + object")

5. Responding to "what do you want?" the child responds to the adult's question by selecting the appropriate symbol

6. Response and spontaneous comments is focused on vocabulary expansion and responding to adults

   - For additional information on PECS visit the site below:

     https://pecsusa.com/pecs/#:~:text=Individuals%20learn%20to%20select%20from,and%20easily%20removed%20for%20communication

A Note on ESL Learners

It is important to note, however, that children with English as their second language may be roped into this category when in fact, they simply have limited English speaking ability. It can be difficult to distinguish English language learners with learning disabilities (LD) from those who do not have an LD because these two groups share a lot of the same characteristics (Ortiz and Maldonado-Col´on 1986; Ortiz and Yates 2001; as cited in Chu & Flores, 2011). English language learners are almost four times as likely to be identified as having language or speech impairments as students who are proficient in English (Artiles et al., 2005; as cited in Chu & Flores, 2011). It is advised to use the **child's home language** when conducting assessments to ensure the most effective academic results to determine if a multilingual child has a disability.

Maladaptive/Undesirable Behaviors

When children with ASD get overstimulated, stressed, frustrated, scared, overly excited, or any other extreme emotion, they often experience emotional dysregulation and maladaptive behaviors. Such behaviors include anxiety, compulsions, aggression, destruction and uncooperative behaviors (Yu et al., 2020). These intense emotions and behaviors are commonly triggered by their inability to communicate their needs effectively, sometimes a change in their routine, or a nonpreferred task is expected of them. To express themselves, they will often throw tantrums accompanied by screaming and aggressive behaviors towards others, or in extreme cases, engage in self injury (Jiar Yeo & Teng, 2015). There are intervention approaches that can be used to regulate these behaviors, including applied behavior analysis (ABA), holding, medication, sensory integration, speech and music therapy, special education and visual schedules. Unfortunately, there is little empirical evidence to prove the effectiveness of these

approaches, with mixed results in the evidence that is available (as cited in Yu et al., 2020).

Nevertheless, the evidence that is available shows some promising practices that have been

shown to have positive outcomes.

➢ **Applied Behavior Analysis (ABA) –** this is a very intensive behavioral therapy that has

become more sought out by parents of children with behavior problems. Studies of ABA-

based interventions have resulted in positive outcomes for the lives of not only the child –

particularly in areas of communication, challenging behaviors and independence – but

also on the family as a whole and their overall quality of life (McPhilemy &

Dillenburger, 2013). According to Fabio Junior Alves et al (2020), it is suggested that

there are seven dimensions in the scope and definition of ABA:

1. Applied – involves a significant behavior change for the subject, directed towards
   social behaviors

2. Behavioral – the focus is on the observable events of behavior that can be directly
   or indirectly measured

3. Analytical – this one guarantees an obtained intervention will produce behavior
   change; it proves the relationship between behavior and environment

4. Technological – describes the procedure clearly and objectively, making it
   descriptive for therapists, teachers and parents to ensure it replicates

5. Conceptually Systematic – refers to the use of well-defined concepts of ABA,
   relating procedures according to the principles of behavior

6. Effective – demonstrates that the intervention guaranteed a change in behavior in
   a socially appropriate way to ensure adequate intervention effectiveness

7. Generalization – requires the newly obtained behaviors to occur in different, natural environments, with lasting effects, and ensures that behaviors are adaptive for life

➢ **Prompting and Fading –** also known as errorless learning, prompting and fading is one of the techniques used in ABA therapy that can be adapted to a classroom setting. This technique attempts to prevent incorrect responses to a request by incorporating prompts from the beginning. As the student becomes more successful, the prompts are gradually and systematically removed (Mueller et al., 2007; as cited in Meindl et al., 2020). The goal is to reduce the number of errors made by the learner and maximize opportunities for positive reinforcement associated with prompting and correct responding (this may be a toy they prefer, a break from a nonpreferred task, a preferred activity, etc.). It promotes the use of effective communication and increases engagement in an activity or task, thus decreasing negative behaviors.

➢ Board Certified Behavior Analysts (BCBA) specialize in behavioral therapy and should be consulted in the development of these behavioral interventions to ensure adherence to the principles of ABA (Junior Alves et al., 2020).

1. Other stakeholders such as caregivers, clinicians, and educators should also be consulted in determining the target behaviors that must be a priority focus of an intervention; as well as how technology can be individualized for a child with ASD

➢ **Visual Schedules -** these are used to orientate students and provide predictability within the classroom and the students' unpredictable world. This informs students of an anticipated sequence of events using pictures, symbols and/or written language.

According to MacDonald et al (2018), making transitions more predictable is thought to reduce anxiety for children with ASD (Sterling-Turner & Jordan, 2007; as cited in 2018), and is also associated with reductions in maladaptive behavior (Knight, Sartini & Spriggs, 2014; as cited in 2018). MacDonald also mentions a study by Knight, Sartini & Spriggs in 2014 concluded that visual schedules have been proven effective in promoting on-task behavior and facilitating independent transitions. Examples of a visual schedule is on the next page of this document. REMINDER: these schedules can be used for the entire classroom and/or individualized for a student with ASD or other disability.
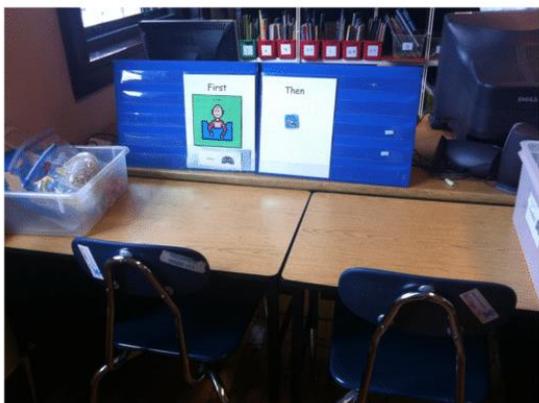
Effects on Sleep for Children with ASD

Educators may not realize it, but it is starting to become evident that sleep problems such as difficulties in falling asleep, superficial sleep, early awakening and low sleep efficiency (Yu et al., 2020) can have a negative impact on a child with ASD. Around 40-80% of children with ASD have experienced disrupted sleep, according to parents (Cohen et al., 2014). Cohen et al reports that in addition to exacerbating ASD symptoms, sleep difficulties have been shown to be associated with increased rates of overactivity, disruption, non-compliance, aggression, irritability, and affective problems, which are all problems that could significantly interfere with daytime functioning for children with ASD (as cited in 2014). In turn, lack of sleep could result in a very difficult day for the child, the teacher, and the parents.

Interventions for Sleep Deprivation

In order to help children who have had an insufficient nights' sleep, there is one thing educators can do if they have the ability. Teachers can provide students a quiet space in the corner of the classroom equipped with low lighting, blankets, pillows, noise-muffling headphones (example below; available at autismproducts.com), books, stuffed animals and other quiet activities to unwind and relax (or even take a quick nap) for a maximum time limit allowed by administration (typically around 15 minutes).

Sensory Seeking Behavior

  Children with ASD are frequently reported to present with unusual behavioral responses to sensory stimuli compared to typically developing children (Baranek, David, Poe, Stone, & Watson, 2006; as cited in Williams et al., 2018). Studies suggest that these unusual responses (sensory features) may be an important factor in affecting daily life activities and quality of life for children with ASD as well as their families and caregivers (as cited in Williams et al., 2018). Therapeutic and educational services are available that aim to target these issues for better functional outcomes (2018).

  According to Williams et al (2018), sensory features are multi-dimensional patterns of behavioral response to stimuli. Examples include hyper-responsiveness, – exaggerated, aversive or avoidant responses; hypo-responsiveness – muted, delayed or absent responses; and sensory interests, repetitions and seeking behaviors – intense fascination or repeated engagement with specific sensory qualities of stimuli or sensory-based actions with the body.

Interventions for Sensory Seeking Behaviors

The American Journal of Occupational Therapy offers suggestions for helping children with their sensory seeking behaviors; such as offering a ball chair or special seat cushion with different texture to sit on during group times or learning times, brushing arms and legs, weighted vests, or, if possible, setting up a sensory swing for them to use to support attention and self-regulation (Frolek Clark et al., 2019). Some other intervention options include the following from a psychologist by the name of Amy Sippl, from the Applied Behavior Analysis Program Guide (2021):

➢ **Environmental Accommodations –** this could be as simple as turning down music or dimming the lights to help reduce overstimulation.

➢ **Give Access –** provide regular access to sensory-seeking activities in a safe, more appropriate manner. For example, allow the child to engage in a sensory seeking behavior in a large open space after a particular nonpreferred task is completed ('first…then…' format)

➢ **Teach Child to Ask –** teach child to ask for sensory needs rather than using maladaptive behavior

➢ **Use Visual Schedules –** as mentioned above, visuals can help children understand when sensory input time is available to them

➢ For aversive situations that cannot be controlled (unexpected loud sounds, smells, etc.), practice in small, gradual steps working up to tolerating more of the sensory input

  o Use small doses of the aversive sensory input and reinforce when appropriate response is given or tolerated and work up to more intense sensory input

Collaborating with Families

One of the most important things we can do as educators to help our students succeed is COLLABORATING with FAMILIES. Parents and primary caregivers know their child best, and they witness their child and how they act at home, which can be a huge benefit to developing interventions, IEPs and overall care for the child. However, far too often, parents, in the initial diagnosis and special education eligibility processes and meetings are not given the proper collaborative feedback they need to understand their child's diagnosis. They are simply given a packet of information, and left to read and understand it all on their own (Dunn et al, 2016). Brittany Dunn et al (2016) wrote a newsletter highlighting the importance of collaboration and

provided a few suggestions that parents who participated in their study have offered as ways to improve collaboration:

➢ Care in explaining acronyms and technical terms; one parent described hearing SD and later learning it meant "sensory diet."

➢ A teacher asking parents about strategies that worked at home, since these methods might also work well at school, and vice versa.

➢ Being asked if their children's evaluation results accurately reflect their abilities.

➢ Teachers and clinicians who work to build a relationship, based on communication with the family, so that the child can be seen in context

Another study conducted in Australia found that in order to provide in-depth analyses of family concerns and priorities elicited through a standardized interview assessment, such as Routine Based Interviews (Hughes et al., 2019). These interviews allow educators to get to know the life styles of families, as well as cultural and ethnical backgrounds and the happenings of daily life. Cultural factors include family values and beliefs about their child's development, independence, and the importance of spending time with their children (2019). According to Carolyn Hughes et al, families' most common reported concern revolves around their child's general development, including speech and communication, physical development, behavior, and social-emotional development and the associated consequences. That is why taking the time to get to know families and show empathy to their concerns, as well as respecting cultural differences in approaches is essential to a child's overall success.

Conclusion

This guide is meant to arm educators with tools and evidence based practices that have been proven to assist children with Autism Spectrum Disorder. Additionally, it provided an in-depth look at the specific definition of ASD and how it presents itself in young children. The interventions presented can all be adapted to any age and developmental level. There are additional resources available in the next section of this document that provide more ideas and materials to further assist any professional or parent that may be interested. The hope is that educators feel more equipped to handle any obstacle that a child with ASD may be struggling with, and that these barriers are demolished.

Additional Resources

Autism Products: Providing Pieces to Solve the Puzzle

This website provides materials and other tools to give children with Autism sensory input in a variety of ways

https://www.autism-products.com/

Autism Speaks

Despite the controversy surrounding this organization, they have really helpful information for teacher and administrators about ASD, including symptoms, treatment options, and other resources

https://www.autismspeaks.org/teachers-and-administrators

Fraser

Fraser is a very well-known and respected Minnesota based organization that provides services for children with disabilities. They even have an ABA program and can provide behavioral, speech, physical and occupational therapies on site. They even have a preschool program that implements inclusive classroom practices

https://www.fraser.org/services/autism

Reading Rockets

This website has all things reading, writing and phonics. It provides a lot of information and ideas for teaching phonics, writing and other literacy skills.

https://www.readingrockets.org/article/top-autism-organizations-and-web-resources

Embrace Autism

This site provides information from the DSM-5 guide to disabilities about Autism. It includes all of the criteria required to diagnose ASD. Of course, always consult with a clinical or medical professional for confirmation.

https://embrace-autism.com/decoding-autism-in-the-dsm-5/#DSM-5_criteria_of_autism

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