

The ABC's Autism

The Basics of Autism Spectrum Disorder (ASD)

"The complete autism solutions company"



Special Learning

The ABC's of Autism

THE ABCs of AUTISM

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For all individuals with special needs who inspire us
to reach toward a brighter future for all.

– **Karen Chung**, Founder and CEO,
Special Learning, Inc.

Table of Contents

- Chapter 1 – Autism Overview1**
- Chapter 2 – Knowing Your Child’s Developmental Milestones4**
- Chapter 3 – Autism Statistics8**
 - Birth Rates8
 - Twins and Siblings9
 - Verbal Skills9
 - Diagnosis9
 - Incurred Costs10
- Chapter 4 – A New Classification for Autism Spectrum Disorder . . 11**
- Chapter 5 – What is Autism Spectrum Disorder?13**
 - Early Signs and Symptoms15
 - Diagnosis and Evaluation17
 - Understanding the Removal of Asperger’s Syndrome from DSM-V18
 - Understanding the Removal of CDD from DSM-V19
- Chapter 6 – Autism Spectrum Disorder Diagnostic Severity Level Scales20**
- Chapter 7 – Level 1 ‘Requiring Support’22**
 - Signs of Communication Deficits23
 - Signs of Social Deficits23
 - Signs of Restricted Interests and Repetitive Behaviors24
- Chapter 8 – Level 2 ‘Requiring Substantial Support’27**
 - Signs of Autism on the Level II Scale28
 - Signs of Communication Deficits28
 - Signs of Social Deficits29
 - Signs of Fixated Interests and Repetitive Behaviors.32

Table of Contents - Continued

- Chapter 9 – Level 3 ‘Requiring Very Substantial Support’ 34**
 - Signs of Communication Deficits 35
 - Signs of Social Deficits 35
 - Signs of Fixated Interests and Repetitive Behaviors. 36
- Chapter 10 – Early Intervention 38**
 - Resources. 38
 - Services. 38
 - Training Tools. 39
- Chapter References 42**



Chapter 1: Autism Overview

AUTISM SPECTRUM DISORDER (ASD) diagnosis in a child can be very difficult to accept and comprehend for family members. Feelings of desperation, depression and helplessness are not uncommon. The first instinct parents generally have is to find a way to help their child by any means possible. It may seem unattainable in the beginning, but with the right information, tools and timely interventions, children diagnosed with ASD can live a more complete and productive life. The purpose of this e-book is to help parents understand the various classifications that fall within the autism spectrum and learn what can be done to help their children diagnosed with ASD.

With ASD, a child's social and communication skills are compromised due to a neurological disorder that affects the normal functions of the brain. The effect on a child diagnosed with ASD may vary in intensity from mild to severe depending on which spectrum of the disorder the child falls into. What is essential for the parent to know is Autism is not a disease, but a disorder, and as such can be treated and managed with an appropriate intervention plan.

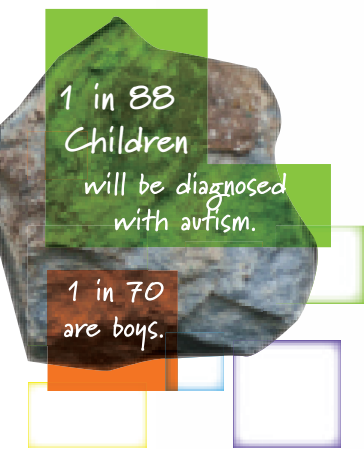
Autism is a spectrum disorder, meaning that no two children with autism will present the same symptoms or experience the same severity. Children with Autism may begin to show symptoms of the disorder as early as 18 months. Children diagnosed with ASD may show delays in many areas of functioning, or just a few. There is no single "personality characteristic" that serves as a marker for Autism. Children with ASD may show any range of personality traits;



the disorder primarily impacts development of skills related to communication and socialization with a range of impairment, but deficits may present themselves in daily living skills and ability to adapt to social norms.

In assisting a child with ASD, the goal is ultimately to help the child overcome his impairments in the following main categories:

- SOCIAL DEVELOPMENT
- SELF-HELP
- RECEPTION AND EXPRESSION OF LANGUAGE
- AGGRESSIVE BEHAVIOR
- TANTRUMS
- SELF-INFLICTED INJURIES
- INABILITY TO HANDLE CHANGE



Autism Speaks

As of the writing of this book, since there is no known cause of Autism, and each child's needs and conditions are different, there is no common treatment available; each child demonstrates unique needs and characteristics, and therefore, should be treated with a customized treatment plan. Unlike other disabilities, the study of ASD is still in its infancy and the full nature of the disorder is not completely understood; even the cause of Autism remains a mystery. There are several theories surrounding the cause of the disorder, such as genetic anomalies or abnormalities, and possible side effects caused by certain medications. However, none have been proven to be the root cause of Autism.

Although there are no known cures for Autism, non-medical approaches have been scientifically proven to effectively improve the quality of life for a significant number of children diagnosed with ASD. Applied Behavior Analysis, or ABA, is one of the only evidence-based treatment methods that is proven to help children with Au-

tism. The ABA approach employs a reward system to encourage and develop appropriate responses from children with Autism.

It all starts with a diagnosis of Autism of your child. Importantly, there are no medical tests, such as blood tests or neurological exams to identify Autism. Autism is identified through behaviors. A medical professional may then run a battery of diagnostic tests to assess communication, social, and behavioral skills. The most important assessments of behavior are the initial ones conducted early in the child's life by the parents.

The first signs of Autism symptoms may be identified as early as 6 months when a child fails to smile, make facial expressions, engage in eye contact or demonstrate any other noticeable signs. As a parent, you will be the first to recognize possible symptoms and become concerned. As a precaution, you should always share your concerns with a doctor, as early diagnosis and appropriate treatment are critical factors in providing your child with the best chance of success.

This e-book is designed to help you, the parents, identify symptoms of Autism as early as possible using the latest diagnostic criteria released by the American Psychological Association in May 2013.





Chapter 2: Knowing Your Child's Developmental Milestones

The earlier Autism is diagnosed and treated the better the treatment outcomes. It is important that, as a parent, you closely observe your child, especially during the early stages of his/her life. Although each child develops differently, knowing your child's milestones will help you to watch out for 'red flags' that may signal a developmental delay. Keeping track of the milestones will also give your doctor a good basis for diagnosis of your child's health.

These milestones, if delayed, do not automatically signify a disorder. But any loss or lack of skills is a cause for concern and needs to be brought to the attention of your child's doctor immediately. According to Autism Speaks, here are the typical developmental milestones for a child age 3 months to 5 years:

3 to 4 months

- LOOKS AT FACES AND OBJECTS WITH INTEREST.
- RECOGNIZES AND REACTS TO FACES AND VOICES.
- SMILES AT JUST ABOUT ANYONE.
- CURIOUS AND TURNS HEAD TOWARD SOUND.

7 Months

- CAN RECOGNIZE OTHER PEOPLE'S EMOTIONS.
- TRIES TO REACH OBJECTS IN HARD TO REACH PLACES.
- PUTS EVERYTHING IN THE MOUTH.
- TURNS HEAD WHEN CALLED BY NAME.
- BABBLES.

By 12 Months/1 Year

- IMITATES PEOPLE AND SOUNDS.
- ENJOYS GAMES SUCH AS "PEEK-A-BOO."
- EXPLORES OBJECTS ON SIGHT.
- UNDERSTANDS THE WORD "NO."
- POINTS AT OBJECTS.
- CAN SAY SINGLE WORDS.
- TURNS BODY TOWARD THE PERSON WHO CALLED HIS NAME.



By 24 Months/2 Years

- ENJOYS BEING AROUND OTHER CHILDREN.
- UNDERSTANDS SIMPLE SENTENCES.
- POINTS TO PEOPLE AND PICTURES.
- CAN SORT SHAPES AND COLORS.
- ENGAGES IN “MAKE-BELIEVE.”
- FOLLOWS SOME INSTRUCTIONS.
- CAN COMBINE TWO WORDS.

By 36 Months/3 Years

- DISPLAYS AFFECTION.
- CAN MAKE SIMPLE MECHANICAL TOYS WORK.
- CAN MATCH OBJECTS TO PICTURES, COLORS AND SHAPES.
- CAN FOLLOW A 2 TO 3 PART COMMAND.
- CAN USE SIMPLE SENTENCES TO COMMUNICATE.
- USES PRONOUNS – I, YOU, ME – AND PLURALS – CARS, DOGS.



By 48 Months/4 Years

- PLAYS AND COOPERATES WITH OTHER CHILDREN.
- CREATIVE AND INVENTIVE IN “MAKE-BELIEVE” PLAY.
- CAN NAME COLORS AND COUNT.
- SPEAKS IN FIVE TO SIX WORD SENTENCES.
- CAN TELL STORIES.
- SPEAKS CLEARLY ENOUGH FOR STRANGERS TO UNDERSTAND.
- FOLLOWS THREE-PART COMMANDS.
- UNDERSTANDS “SAME” AND “DIFFERENT.”

By 60 Months/5 Years

- LIKES IMITATING FRIENDS.
- LIKES TO SING, DANCE AND ACT.
- DISTINGUISHES FANTASY FROM REALITY.
- INCREASED INDEPENDENCE.
- CAN COUNT TO 10 OR MORE.
- SPEAKS IN SENTENCES OF MORE THAN FIVE WORDS. TELLS LONGER STORIES.





Chapter 3: Autism Statistics

Among all commonly known neurological disorders such as Down syndrome and Cystic Fibrosis, Autism is the only disorder shown to be on the rise. Autism Spectrum Disorder is being diagnosed more often in recent years. According to the Center for Disease Control and Prevention, as of 2008 approximately 1 in 88 children have been diagnosed with Autism Spectrum Disorder in the United States .

Birth Rates

The National Center on Birth Defects and Developmental Disabilities reports that roughly 1 percent of children born each year will eventually be diagnosed with ASD. That means that out of the 4 million births in the United States every year, almost 40,000 children will eventually be diagnosed with mild to severe ASD by age 8 according to the Centers for Disease Control and Prevention.



Twins and Siblings

It is currently suggested that twins in general have a 60 to 90 percent chance of being diagnosed with ASD. Identical twins have an approximately 36 to 95 percent chance of both children being diagnosed with ASD if one of the twins is diagnosed. With fraternal twins, there is an approximately less than 24 percent chance that both children will be diagnosed with ASD if one of the twins is diagnosed. In families where one child has been diagnosed with Autism, there is a 2 to 8 percent chance of having another child with ASD, according to the Centers for Disease Control and Prevention.

1/2

Million

Number of people in the U.S. that have autism – Tens of millions worldwide are affected.

Autism Speaks

Verbal Skills

According to the Centers for Disease Control and Prevention 25 to 30 percent of children diagnosed with Autism will have spoken some words by 12 to 18 months. However, those children will have diminished capacity, or lose the ability altogether, to communicate verbally. Nearly 40 percent of children diagnosed with ASD are non-verbal. The remaining percentage of children may be able to communicate verbally at a much later age.

10–17%

Autism is growing rampantly, 10 to 17 percent annually.

Diagnosis

Although diagnosing Autism is possible before the age of 2, often, children with Autism are not diagnosed until 4½ to 5½ years of age. Alarming, 51 to 91 percent of those children will have demonstrated symptoms of Autism at age 3 or earlier.



No clear explanation has been given for Autism's increase.



Furthermore, roughly 33 percent of children with Autism show signs by age 1; a full 80 percent show significant symptoms at 2. According to the Centers Center for Disease Control and Prevention, accurate diagnosis is possible by age 2, yet most children are not diagnosed until much later. Children who are diagnosed early and accurately can receive the appropriate treatment faster and longer, resulting in the best possible outcomes for them.



Children are more likely to be diagnosed this year with autism than cancer, diabetes and AIDS combined.

Incurred Costs

It is fairly well known that raising a child with Autism can be a financial strain. The average monthly expense of taking care of a child with Autism can range from \$4,000 to \$6,250 per month per child.

Over the course of a lifetime, the average extra care expenditure for a person with Autism can be as high as \$3.2 million dollars. Early intervention can help alleviate the cost incurred over a lifetime. The New England Center for Children states that the cost of care over a lifetime can be significantly reduced by as much as 66 percent with early intervention, as an estimated 90 percent of the expenses are from adult services. Early intervention can help a child with Autism develop skills in identified areas of weaknesses and decrease the level of support needed as he or she ages.



Chapter 4: A New Classification for Autism Spectrum Disorder

The five disorders commonly known as the autism spectrum disorders have been merged into one classification of Autism Spectrum Disorder.

In May 2013, the American Psychological Association (APA) introduced a major reclassification of Autism Spectrum Disorders (ASD) under the Diagnostic and Statistical Manual of Mental Disorders (DSM). Before we jump into learning about the ABCs of Autism, it is important to review how this new reclassification will affect the diagnosis and treatment of Autism. If you have a child diagnosed with Autism, he or she would have been classified under one of five diagnoses under the umbrella of Autism Spectrum Disorders – Autistic Disorder, Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS), Asperger's Syndrome, Child Disintegrative Disorder (CDD) and Rett's. Under the old system, the ABCs of Autism were an alphabet soup of overlapping symptoms, misclassifications, and often no clear classification, or 'not otherwise specified,' for those not meeting the rigorous diagnostic criteria for "classical" Autism.

Under the new DSM-V classification system, these separate disorders no longer exist. Instead, under the one classification of Autism Spectrum Disorder, an individual is diagnosed on a spectrum of the severity of the symptoms.

Level 1 – Requiring Support

Level 2 – Requiring Substantial Support

Level 3 – Requiring Very Substantial Support

Each severity level is defined under two core areas (DSM-V reduces the core areas for diagnosis from three to two):

- communication/social deficits
- fixed/repetitive behaviors

Communication deficits has replaced language deficit, and is linked with social deficits. How does this new classification affect the diagnosis and treatment of your child with Autism? By now, you may have read many conflicting media reports on whom will and will not be covered under the new Autism classification. In fact, early studies by the APA have shown that the new classification does not affect the number of those being diagnosed with Autism or the symptom profile of those diagnosed.

To recap, the previous diagnoses of Autism – PDD-NOS, Asperger's, CDD, Autism, Rett's – no longer exist. Instead, a child with Autism will be diagnosed with one of three severity grades based on a spectrum of the severity of symptoms.



Children are being diagnosed with Autism earlier in life and at an increased rate.



Chapter 5: What is Autism Spectrum Disorder?

A common misconception about Autism is that all children diagnosed with ASD have exactly the same symptoms. Autism is a spectrum disorder, which implies the degree (or severity) to which symptoms impact the courses of an individual's development vary greatly. Children diagnosed have in common symptoms that are a direct result of the neurological disorder. These similarities are the lack or absence of communication skills, stereotypical or repetitive behaviors and difficulty with, or a lack of, interpersonal or social skills. The severity of these symptoms, however, vary greatly among individuals with Autism.

Autism is a disorder that affects cognitive and interpersonal development. According to the Centers for Disease Control and Prevention, the prevalence of Autism in the general population in Europe, Asia and North America of 1%, is increasing. Accordingly, parents are becoming increasingly aware of the fact that children are being diagnosed with ASD at an increased rate and earlier in life; however, few parents know how to actually identify the signs and symptoms of Autism, or what to do if they suspect that their child has Autism.

Early signs of Autism can present themselves through a number of particular quirks or disabilities displayed in a child's daily behavior such as lack of eye contact when spoken to, and resistance to cuddling, which can serve as red flags. These early signs of Autism are indicators that parents should seek an immediate professional evaluation.

Signs of Autism may present themselves before a child enters the toddler stage. It can be difficult to accurately identify the presence of impairment with children under the age of 3, an age when social and behavioral development is still progressing. Children with Autism may also exhibit extremes in behavior, often times without any visible triggers.

Applying the newly published DSM-V diagnostic criteria for Autism Spectrum Disorder, this e-book will help you identify and understand the symptoms of Autism across the spectrum of severity levels. The new guidelines are designed to avoid misclassification or a diagnosis of 'not otherwise specified.' This guide was developed to help you identify the symptoms under the rubric of the new severity grades, including the more difficult to detect, less severe symptoms in the early stages of your child's life.



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Early Signs and Symptoms of Autism

As parents or care providers, you are the first ones to see any sign of Autism in your child. It can be very hard to determine if symptoms are present, especially for small children. According to the American Academy of Pediatrics, the signs that may suggest a need for further evaluation by a professional are:

- Doesn't return your smile by 6 months.
- Doesn't babble, point or use other gestures by 12 months.
- Doesn't use single words by 16 months.
- Doesn't use two-word phrases by 24 months.
- Loss of established abilities such as talking and walking.
- Will not make eye contact.
- Doesn't play with other children or family members.

Children with Autism may also be diagnosed simultaneously with Attention Deficit Hyperactivity Disorder (ADHD), Obsessive Compulsive Disorder (OCD) or Tourette's Syndrome. Anxiety and depression can also develop during young adulthood. The high degree of comorbidity with other disorders can further complicate symptom identification and diagnosis. By removing overlapping and unique symptoms introduced by the former five disorders under the ASD classification, DSM-5 makes the process of identifying ASD and comorbid disorders easier.





Autism is the fastest growing developmental disability in the U.S.

Behaviors that can serve as early warning signs of autism include:

- Doesn't react to sounds or when called by name.
- Delayed or impaired speech skills.
- Repetitive behavior.
- Avoids eye contact.
- Exhibits obsessive behavior.
- Does not play appropriately with toys or engage in "pretend" play by 18 months.
- Lack of, or irregular responses to, sensory input.
- Loss of previously acquired skills.



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Diagnosis and Evaluation

Immediate and early intervention is the best way to help your child. If one or more symptoms have been observed, consider seeking help from one of the following professionals:

- Developmental Pediatrician
- Pediatric Neurologist
- Child Psychologist
- Child Psychiatrist

Your child's pediatrician or primary care provider may not be qualified to evaluate your child for ASD; however, your child's pediatrician can help by referring you to a qualified professional. Therapists that can provide useful multidisciplinary evaluations include:

- Speech Therapist
- Physical Therapist
- Occupational Therapist
- Board Certified Behavior Analyst (BCBA)

Diagnosing your child with an ASD may include a combination of observation, non-medical tests, interviews and personal recommendations. It is essential that you make sure that the person or team of professionals evaluating your child are competent, fully trained and have experience working with and diagnosing children with ASD. Their evaluation and recommendation will be very important to your child's future.

The specialists will seek to place your child with Autism into one of the new severity levels under DSM-V. Take the time to familiarize yourself with the new classification levels, which we will discuss in more detail in the next three sections. The diagnostic process will be easier to understand if you are using the same terms as the professionals.

If you have a child already classified under the former ASD disorders, in understanding the change it is helpful to understand the rationale behind it.

Understanding the Removal of Asperger's Syndrome from DSM-V

For example, if your child is high functioning and has no or mild communication deficits, he may have previously been diagnosed with Asperger's syndrome. Asperger's is no longer part of the diagnostic classification. Under the new classification, he is more likely to fall under Severity Level I (see Chapter 7), requiring minimal support. Some researchers concluded that the broad criteria defining Asperger's was actually a disadvantage to those diagnosed with the disorder. Studies showed that the diagnostic criteria for Asperger's was interpreted differently across diagnosticians. This difference made it more difficult to create common treatment approaches across doctors, therapists and educators. In terms of government assistance, not all states providing support for autism supported Asperger's.

Understanding the Removal of CDD from DSM-V

On the other hand, if your child shows signs of regression in communication and social skills at the age of around 18 months and has limited communication skills and engages in repetitive behaviors, she may fall under Severity Level II. Formerly, she may have been diagnosed as having child disintegrative disorder, which is no longer part of the Autism definition.

Why has the DSM-V team decided to combine the CDD category with classic Autism and delete it as an independent condition in the spectrum? The reasons behind this decision are that other than the typical development for at least 2 years followed by a decline in skills, the criteria exactly match those of classic Autism. Since a child can exhibit the same exact pattern but begin to decline at 18

months, thus resulting in a diagnosis of classic Autism, the 2-year criterion seems arbitrary. CDD was originally allowed to stand as a distinct disorder in DSM-IV in order to permit the input of further studies and commentary. This was set up in order to show that CDD has a specific cause or bundle of symptoms distinct from classic Autism. The researchers concluded that no such evidence has emerged; therefore CDD's "trial period" as a separate disorder is no longer necessary.

Chapter 6: Autism Spectrum Disorder Diagnostic Severity Level Scales

Under the new DSM-V definition of Autism, individuals with Autism are now diagnosed based on a spectrum of three severity levels. The levels reflect the level of functionality of the individual in two categories:

- Communication deficit/social deficit
- Restricted interests and repetitive behaviors

Following is the DSM definitions based on the three levels of support required.

Level	Social Communication	Restricted interests & repetitive behaviors
Level 1 'Requiring support'	Without supports in place, deficits in social communication cause noticeable impairments. Has difficulty initiating social interactions and demonstrates clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions.	Rituals and repetitive behaviors (RRBs) cause significant interference with functioning in one or more contexts. Resists attempts by others to interrupt RRBs or to be redirected from fixated interest.
Level 2 'Requiring substantial support'	Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions and reduced or abnormal response to social overtures from others.	RRBs and/or preoccupations or fixated interests appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress or frustration is apparent when RRBs are interrupted; difficult to redirect from fixated interest.
Level 3 'Requiring very substantial support'	Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning; very limited initiation of social interactions and minimal response to social overtures from others.	Preoccupations, fixated rituals and/or repetitive behaviors markedly interfere with functioning in all spheres. Marked distress when rituals or routines are interrupted; very difficult to redirect from fixated interest or returns to it quickly.

In the next three sections, we will look in more detail at the symptoms exhibited in daily life by a child with Autism under each severity level to facilitate early intervention and correct classification in order to improve treatment outcomes.



Chapter 7: Level 1 'Requiring support'

Social Communication

Without supports in place, deficits in social communication cause noticeable impairments; has difficulty initiating social interactions and demonstrates clear examples of atypical or unsuccessful responses to social overtures of others; may appear to have decreased interest in social interactions.

Restricted interests & repetitive behaviors

Rituals and repetitive behaviors (RRBs) cause significant interference with functioning in one or more contexts; resists attempts by others to interrupt RRBs or to be redirected from fixated interest.

Symptoms

Symptoms of Autism Spectrum Disorder can present themselves as early as 18 months. One of the key signs that a parent may observe, which may serve as a red flag, is the child's way of interacting with other children and family members. Impaired ability in this area is one of the markers that should serve as a concern to parents.

The following guide to signs of communication deficits, social deficits, and restricted interests and repetitive behaviors in daily life

will help you to easier identify early signs of autism on the Level 1 Severity Scale of ASD.

Signs of Communication Deficits

- Obvious difficulty with spoken language yet doesn't compensate by using gestures. For example, the child speaks less than a dozen words by 18 months and does not point by 15 months.
- Child speaks but doesn't start or continue conversations.
- Uses single words or phrases repetitively or repeats, with immediacy, other spoken language.
- Doesn't play make-believe or cannot imitate a favorite cartoon character.

Support

At Level I on the Severity Scale of ASD, a child can benefit greatly from behavioral therapy in the areas of communication development. Communication impairments are relatively minor and there is significant potential to improve. The parents' support for the child may be limited to correcting the child when he makes a communication error. A trained ABA therapist can demonstrate how to use verbal and nonverbal techniques that appeal to the intrinsic motivation of the child to improve his communication skills. Many good ABA training materials are available in e-books, videos and webinars.

Signs of Social Deficits

Signs of social impairment – If at least two of these symptoms are observed in a child, there may be cause for further investigation:

- Doesn't interact with other children or family members. For example, the child prefers to be alone despite the presence of other children playing.





Autism comes with an annual \$35 billion price tag – the cost is expected to increase significantly in the coming decade.

- Does not demonstrate the use of gestures when communicating.
- Doesn't show, point to, or bring objects of interest such as toys.
- Doesn't respond in kind to emotional or social actions. For example, does not return hugs or kisses or respond when called by 12 months of age.

Support

Verbally correcting the social behavior of a child with Autism is likely to be ineffective. The child will soon forget the lesson and may not fully comprehend the instructions. A child may respond to an instruction to 'sit at the table' by crawling under the table. Imitation tied to intrinsic rewards is one of the most effective ways of changing social behavior in a child with Autism. Asking a child to sit at a table to receive a glass of orange juice while placing the juice in such a way that the child must sit to get it is one method. Having a sibling sit at the table in exchange for a cookie at snack time is a behavior your child will happily imitate. ABA therapy and training materials, such as e-books, videos and webinars can provide step-by-step ABA training and many effective examples.

Signs of Restricted Interests & Repetitive Behaviors

Engages in repetitive or stereotypical behavior, activity or interest:

- Unusually preoccupied with a specific part of an object.
- Repetitive movements and restricted patterns such as hand or finger flapping, irregular body movements and snapping their fingers.
- Unusually preoccupied with a singular activity or pattern of behavior.

If a child exhibits six or more of these symptoms, an immediate evaluation by a medical professional is advised. Although Autism doesn't have a common treatment, studies show that early intervention is the best course of action in terms of making the greatest positive impact on a child.

- Difficulties with regulating behavior and self-soothing.
- Prefers to play alone.
- Participates in class but can become easily over-stimulated.
- Repetitive hand clapping when excited.
- Social skills deficiency.
- Restricted, repetitive play potentially limited to a few toys.
- Can be overly talkative.

Support

The less severe symptoms of children diagnosed at Level I are the most difficult to detect, and the most easily misunderstood. The child is often mistaken for being clumsy, unfriendly or simply ill behaved. Moreover, diagnosis may take longer if the child does not demonstrate significant delays in the areas of language development, cognitive development, or in the development of age-appropriate self-help skills. By consulting a professional such as your doctor or an ABA therapist, you can ensure you are appropriately interpreting potential signs of Autism.

The especially observant parent may note the following behaviors:

- Obsessive behavior towards certain objects or activities.
- Struggles to recognize social cues given by communicative partners, which may indicate a loss of interest in the topic of conversation.
- Social skills deficits may be greater than other children his age.





1 in 70 boys will be diagnosed with autism in the United States.

- The child may not laugh along with other children at a funny joke (inability to recognize humor).
- Although communicative, the child may have difficulties in play that requires body language, or non-verbal communication.
- Poor motor skills may make riding a bike or playing difficult.

If any of these symptoms are present, a formal evaluation is recommended. Many children diagnosed with mild symptoms grow up to be independent and successful individuals. Problems with social interaction may still be experienced, but may be controlled. With early and proper intervention and family support, there is a high possibility that child with Severity Level 1 ASD will lead a fulfilling life.



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Chapter 8: Level 2 'Requiring substantial support'

Social Communication

Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions and reduced or abnormal response to social overtures from others.

Restricted interests & repetitive behaviors

RRBs and/or preoccupations or fixated interests appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts; distress or frustration is apparent when RRBs are interrupted; difficult to redirect from fixated interest.

Symptoms

Autism symptoms at Level II on the severity scale are more severe and therefore easier for parents and caregivers to observe. They more closely follow the criteria for autism disorder in DSM-IV. As the title indicates, your child may require 'substantial support' for social communication behaviors and activities that age equivalent typically-developing children are performing on their own.

Many parents notice early signs of Autism when their child requires more support than peers his age. In the first few years of development, these signs are often dismissed as a child developing more slowly. Boys will be boys, they may reason, and not show the same intellectual and physical progress as a sister did at the same age. The parents may become anxious and eagerly monitor progress but hold off on raising a red flag to a doctor.

Even at this early stage in your child's life, a diagnosis of Autism has been shown to have an impact on long-term treatment outcomes. It is important to carefully monitor your child's developmental progress and communicate any atypical behavior to your pediatrician.

Signs of Autism on the Level II Scale

If your child is demonstrating significant development delays and is in need of support in the following areas, she may be diagnosed with autism at Level II on the severity scale.

In social communication situations, the child will show deficits in both receptive and expressive skills.

Signs of Communication Deficits

- Does not speak or has problems speaking. Some common communication problems in children with Autism include:
- Does not respond when name is called.
- Repeats a phrase from daily routine, TV, movie, or song over and over again (e.g., repeats all day: 'Daddy gone to work in car').
- Frequently repeats words heard or spoken by others, a condition known as echolalia.
- Mixes up pronouns (e.g., calls Mommy 'he,' and himself 'you').

- Abnormal speech patterns (e.g., may speak in a monotone or singsong voice).
- Does not make direct eye contact when he speaks to others.
- Does not sustain a conversation of more than a few words.
- Confuses the meanings of commands (e.g., In response to 'play with your car,' gives toy car to his brother).

Supports

Parents and caregivers will use a variety of supports to help the child with communication deficits communicate. These may include acting out behaviors for the child to imitate when he does not understand the verbal command, and speaking on his behalf to caregivers, siblings and playmates to facilitate the communication process. Knowingly or not, you may use aspects of Applied Behavioral Analysis (ABA) to reinforce words as they are used. For example, you may place a cookie on the table as a reward when your child says 'cookie please' at snack time. Gesturing may play a major role in communication. Similar ABA techniques can be used to teach your child to make eye contact and understand commands. If you require additional verbal and nonverbal supports to communicate with your child, he may fall under Level II on the ASD severity scale.

Signs of Social Deficits

As a result of isolating communication and social behaviors, a child with Autism may play alone and fail to form friendships. As mentioned, a symptom often displayed by a child with Autism is the failure to make eye contact with an interlocutor. Other signs of social deficits to be on the lookout for include:

- Failure to make facial expressions appropriate to a situation.



- Seldom smiles and does not smile or laugh at funny situations.
- Does not interact with others or only responds when he wants something.
- Does not respond to or give affection.
- Does not respond to the emotional states of others, such as another child crying.
- Prone to behavioral problems and tantrums.

While a child with Autism may appear indifferent to his surroundings, he in fact requires a high level of routine and predictability in his life to feel secure. Familiarity with people, surroundings, and routine are very important to him. In the absence of routine, he may be more prone to tantrums in daily life. New environments and people may cause him to withdraw further from the environment and exacerbate communication and social deficits.

Supports

Parents and caregivers may use a variety of supports to improve the child's social skills. A parent or caregiver is often actively involved in the play time of a child with Autism in order to facilitate interaction among the children and stimulate creativity. Imitation is a very effective way of teaching appropriate behaviors, and can be more meaningful when other children are around and can participate. A parent may also find it necessary to tend to tantrums and take measures to avoid behavioral problems. The interruption of a child with Autism's fixation, with a toy or task for example, can trigger a negative behavioral event. Both non-expression and over-expression may be the result of underlying emotional problems. A child with Autism may be suppressing feelings and emotions that can be brought to the surface through play acting. If play time with other children is seldom or never a break time for mommy and daddy, then your child may have a more severe form of Autism.

Signs of Fixated Interests and Repetitive Behaviors

Children with Autism show an independent streak and sometimes above normal intelligence through their captivation with certain behaviors and interests. These behaviors can often be quirky, amusing and even fun, but they also can be hard to change in a child with Autism. Diagnosticians flag the existence of at least two of the following behaviors as signs of Autism: repeated or stereotyped behaviors that are extreme in either intensity or focus; inflexible adherence to nonfunctional routines; stereotyped and repetitive body movements; and fixated preoccupation with parts of objects. Examples are preferences for a certain color or toy, or a penchant for slamming doors. The child may insist on carrying a favorite plastic cup with her everywhere she goes. Withdrawing a preferential interest or behavior may result in a tantrum or the child withdrawing physically and emotionally from the parent in silent protest.

At play time, fixated interests are often very apparent. The child may take apart a plastic racetrack and only play with pieces of the track rather than the race cars. While a father may see a budding engineer in his child, the lack of variety and creativity of play is unhealthy for his development. Intelligence behind the fixated interests is often not considered when it could be used to expand the child's interests. Some children with Autism, for example, are brilliant with computers and programming. At a young age, this future computer scientist may rearrange toy numbers for hours without any apparent logical pattern to his play.

Repetitive behaviors are sometimes linked to fixated interests. Other forms of repetitive behaviors include repetitive, stereotyped body movements, such as rocking or hand flapping. The child may engage in a repetitive behavior with a utensil at the dinner table, or he may line up the vegetables like soldiers at dinner time. It is not uncommon for some children with Autism to spend more time playing with than eating food.



63%

Boys are 63% more likely than girls to develop autism.

Supports

Managing fixated interests and repetitive behaviors can require a lot of time of parents and caregivers. Parents often require support from outside therapists to deal with them. Interruption of these behaviors can—but does not always—lead to tantrums, withdrawal and self-injury. The cause of repetitive behavior is not fully understood but theories include sensory overload, chemical and neurological causes. Sensory integration is sometimes used to calm a child. Increasingly, children are being taught meditative techniques at a young age. ABA play therapy techniques can be used to turn a repetitive interest into a more meaningful activity.

The ongoing support required by a parent to manage repeated and fixated behavior is often the trigger that causes them to seek professional assistance and a diagnosis in search of a treatment.



Special Learning Inc. Photo/Chris Keels Photography

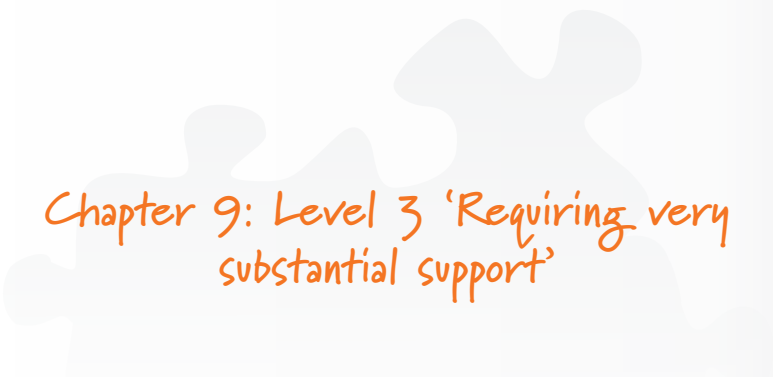
MONITORING AUTISM SYMPTOMS DURING PLAYTIME

Play time is a good opportunity to observe a wide spectrum of communication and social behavior of your child. Signs of Autism during play may include:

- Does not make eye contact.
- Doesn't respond when name is called.
- Not interested in playing with other children.
- Does not demonstrate communicative gestures like pointing.
- Doesn't participate in interactive play.
- Does not participate in creative or imaginative play
- Is fixated with a certain toy or activity
- Plays with toys out of context
- May engage in repetitive behaviors with a certain toy or activity

If parents or caregivers notice these signs or symptoms, they are advised to consult a medical professional for evaluation.





Chapter 9: Level 3 'Requiring very substantial support'

Social Communication

Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning; very limited initiation of social interactions and minimal response to social overtures from others.

Restricted Interests & Repetitive Behaviors

Preoccupations, fixated rituals and/or repetitive behaviors markedly interfere with functioning in all spheres. Marked distress when rituals or routines are interrupted; very difficult to redirect from fixated interest or returns to it quickly.

Symptoms

On Level III of the Autism Spectrum Disorder severity scale, both child and parents can benefit significantly from very early intervention. The more severe symptoms impel most parents to seek early medical attention. These may include lack of or impaired communication and social skills. The restricted interests and repetitive behaviors may be so intense that they interfere with daily functioning, and even the child's welfare. They may range from incessant hand flapping to the child banging his head against the wall.

However, in some cases the child may show normal development and then regress at around two years, a condition formally classified as Child Disintegrative Disorder (CDD). The child may then experience a gradual loss of language, social and motor skills before the age of 10 (National Institute of Child Health and Development). Understandably, the reversal in developmental progress may be confusing to a parent and result in a late diagnosis or misdiagnosis if potential symptoms of Autism are not carefully monitored. Medical conditions that can present several of the same symptoms as more severe Autism are epilepsy, head trauma, brain tumor, or schizophrenia.

Children diagnosed with Level III ASD on the severity scale exhibit many of the same symptoms as Level I and Level II Autism, but their symptoms are more severe in intensity and focus.

Signs of Communication Deficits

- Delay or loss of spoken language.
- Impaired non-verbal behaviors such as body language or facial expressions.
- Cannot start or maintain a conversation.
- Does not respond to name.
- Impaired or loss of motor skills.
- Delay or loss of language.
- Loss of ability to communicate previously known words and phrases.

Signs of Social Deficits

- Delay or loss of spoken language
- Inability to form relationships with friends and family.
- Does not form bonds or friendships.



- Rejects cuddling or holding.
- Does not demonstrate imagination or creativity in play.
- May be very sensitive to sensory stimulation such as light, smells, and textures.
- Tries to eat nonfood items such as chalk or cardboard.

Signs of Fixated Interests and Repetitive Behaviors

- Engages in repetitive routines and becomes agitated when they are interrupted.
- Repeats words or phrases but does not understand their meaning.
- Fixated with parts of objects but ignores the broader context and picture (e.g., colors one object in a coloring book in the same color).
- Banging head against the wall.
- May engage in other self-harm activities.
- Constantly moving and hyperactive.

Support

Parents with children with severe Autism will often seek professional assistance early through necessity. With help from therapists, some children's symptoms improve over time and they may even become independent as adults. In other cases, especially if the child has lower than normal intelligence, she will be more dependent on support from parents, therapists and community support programs into adulthood.

Many parents are pleasantly surprised to find that their child's deficits are complemented by special talents in other areas. The Autism world has introduced many mathematical, music, art and other gifted talents to the world, and these gifted individuals are often found among those on Level III of the ASD severity scale. While these savants are less common, finding special abilities in children with Autism is not. These special abilities and interests should be creatively used to help your child develop her social and communication skills. Applied Behavioral Analysis (ABA), for example, appeals to the intrinsic motivations of your child to encourage him to learn new words, phrases and behaviors. No matter what your child's level

< 5%

Less than 5% of our research funding goes to autism, even though it is the fastest-growing childhood condition.





Chapter 10: Early Intervention

of severity, a proven therapy such as ABA successfully uses verbal and nonverbal forms of communication to improve a child's communication, social and behavioral skills and help him/her achieve a more independent and fulfilling life.

A child with Autism may begin to show signs of delayed development in the first year. If by 12 months, your child is not smiling and making facial expressions, pointing or gesturing, or making baby talk, then you should share these observations with your doctor. Regardless of which expert is diagnosing your child the key factor is not delaying action in seeking services for your child and family. Early diagnosis and intervention will provide your child with the greatest chance to achieve his/her highest potential.

Resources:

Special Learning (www.special-learning.com) has a host of resources that you may choose in helping you take this important step in your child's life.

Our Early Autism Screening Checklist is a simple, FREE tool that you can use the moment you suspect that your child may have Autism. By completing the easy 35-item checklist, you will receive a basic interpretation and recommendations report. This tool can also be used to rule out an ASD diagnosis. Visit www.special-learning.com/checklist to start your own assessment.



Services:

To obtain additional information and detailed interpretation of the report, or if your child already has an Autism diagnosis, sign-up for the SL Virtual Consultation Assessment and Treatment (SL V-CAT) Program. With the dramatic rise in rates of Autism and other developmental disabilities, there is an overwhelming need for access to quality services in all areas around the world. Depending on the level of severity of your child's ASD, your child may require intensive behavioral intervention (IBI) services. In other cases, less intensive therapy measures may suffice. In all cases, our goal is to help your child achieve his or her highest level of ability.

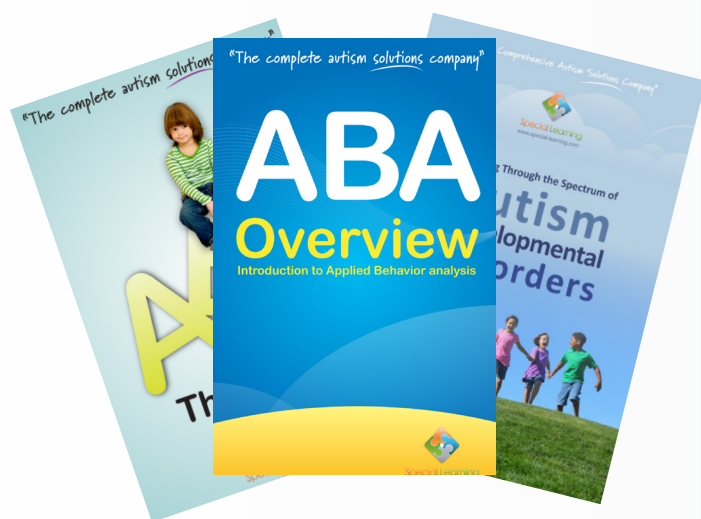
By providing our SL V-CAT services virtually, using easily accessible video conferencing tools, Internet-based and mobile app platforms, Special Learning is able to offer easy access to the most qualified experts in the field of behavior analysis to families who need it most, without any geographical boundaries.

The SL V-CAT program is a very simple yet comprehensive and powerful 5-step program that puts your child with special needs on his or her path to success using these three critical elements: (1) qualified experts; (2) evidence-based principles and procedures, and (3) highly effective tools and materials, all working in conjunction to ensure accurate and successful implementation. Our 5-step program includes consultation, assessment, treatment planning, and ongoing therapy services and case supervision. For more information on this program, visit [www. special-learning.com/slvcatprogram](http://www.special-learning.com/slvcatprogram).

Training Tools:

Special Learning's growing library of e-book titles helps parents navigate the journey to recovery with a child with Autism or other developmental disability. Written on various topics related to ASD, these informative books provide additional insight and guidance to parents as they seek to know more about Autism and ABA therapy. Additional titles include:

- ABA Overview
- Potential Challenges of Living with a Child with Autism
- ABA Therapies
- Autism and Adolescence
- Adolescent's Use of Technology to Cope with the Challenges of Autism



Further expand your knowledge of ABA principles and learn how to implement evidence-based procedures with your child with the Special Learning Instructor Training Webcast Series. The best way to learn about difficult and challenging subjects is to listen to professionals who have extensive experience and knowledge of the subject matter. Each 90-120 minute recording provides helpful, practical guidance to help you start teaching your child using the methods of ABA. Titles include:

- Pairing
- ABA Overview
- Teaching Methods
- Errorless Teaching and Prompting



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Special Learning would like to express our gratitude to our partner **Step By Step Academy** in Worthington, OH. Founded in 2002, **Step By Step Academy** has helped hundreds of children with autism to reach their full potential. With a student body of 135 children and adolescents ranging in age from 2 to 22, their dedicated staff of over 140 educators provide highly personalized training to help the children achieve their highest level of potential.

Contribution from staff members of **SBSA** including **Michele LaMarche**, BCBA, **Christine Austin**, BCBA, **Megan Dodd**, **Cindy Ring**, and **Gabe Valley** were invaluable in ensuring that the book presents accurate and scientifically valid information.

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"I was impressed with the ABCs of Autism eBook! I work specifically with children with autism in the city schools, and found it to be a tool full of information which I can pass along to parents who don't know much about the diagnosis."

- J. Hawley, Educator, St. Louis Schools

"This e-book is wonderful! I am sharing this with the aides and other teachers I work with to expand their knowledge base and understanding of Autism."

- D. Martino, CLM/Autism Support Teacher, Maplevue Elementary School



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THE ABCs of AUTISM

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