Effective Strategies for Managing Challenging Behaviors in Autism and Social Communication Disorder

Cara Daily, Ph.D., BCBA

1

Speaker Disclosure Information

Dr. Cara Daily is a licensed pediatric psychologist and Board Certified Behavior Analyst with Daily Behavioral Health and Jhope Foundation. She is an adjunt professor at Kent State University and the author of The Key to Autism. She has no other relevant financial or non-financial relationships to disclose.

2

APA Disclosure

Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your profession's standards.

Limitations of Research and Potential Risk

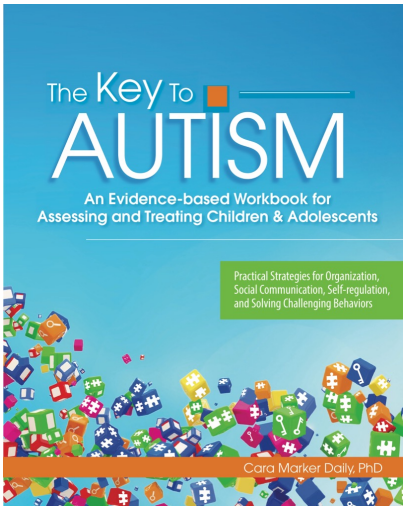
Most of the behavioral approaches, such as techniques of Applied Behavioral Analysis, discussed in the course are considered evidence-based as the literature consists of numerous controlled studies employing single-case experimental designs, consecutive controlled case-series studies, controlled group studies, and some randomized controlled trials. Other techniques presented are empirically supported or promising in the literature (e.g., Cognitive-behavioral therapy, Social Stories, Social Skills Programs, Social Autopsies, Exposure Response Prevention), although several studies have limitations due to small sample sizes and require more research.

Limitations of Research and Potential Risk

- The cost of certain behavioral interventions can be high
- Generalization of behaviors will not occur if not done across setting and people
- Interventions need to be individualized to the client
- Changes in behaviors may cause more initial stress
- Addressing behaviors alone can mask other problems

5

6



J-Hope Foundation
Helping and educating lives in Kyrgyzstan.

7

My Family

8

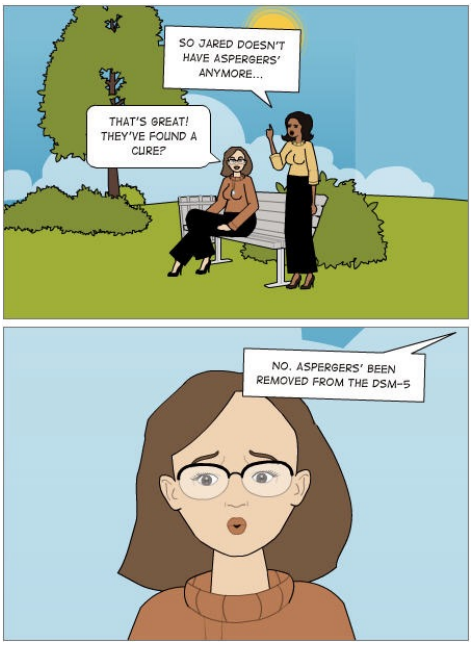
Outline

Understanding Autism Spectrum Disorder, Social Communication Disorder and Comorbid Disorders

- DSM-5, ICD-10, ICD-11 Updates
- Etiology
- Brain Function
- Hands on Activities

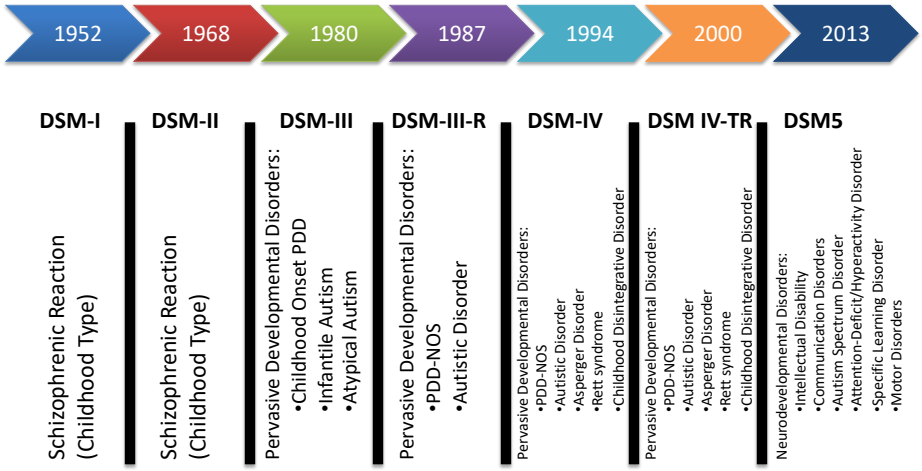
Evidence Based Strategies for Addressing Challenges in Autism Spectrum Disorder and Social Communication Disorder

- Social Communication
- Sensory difficulties
- Anxiety/Depression
- ADHD
- Obsessive-Compulsive Disorder
- Psychopharmacological
- Challenging Behaviors



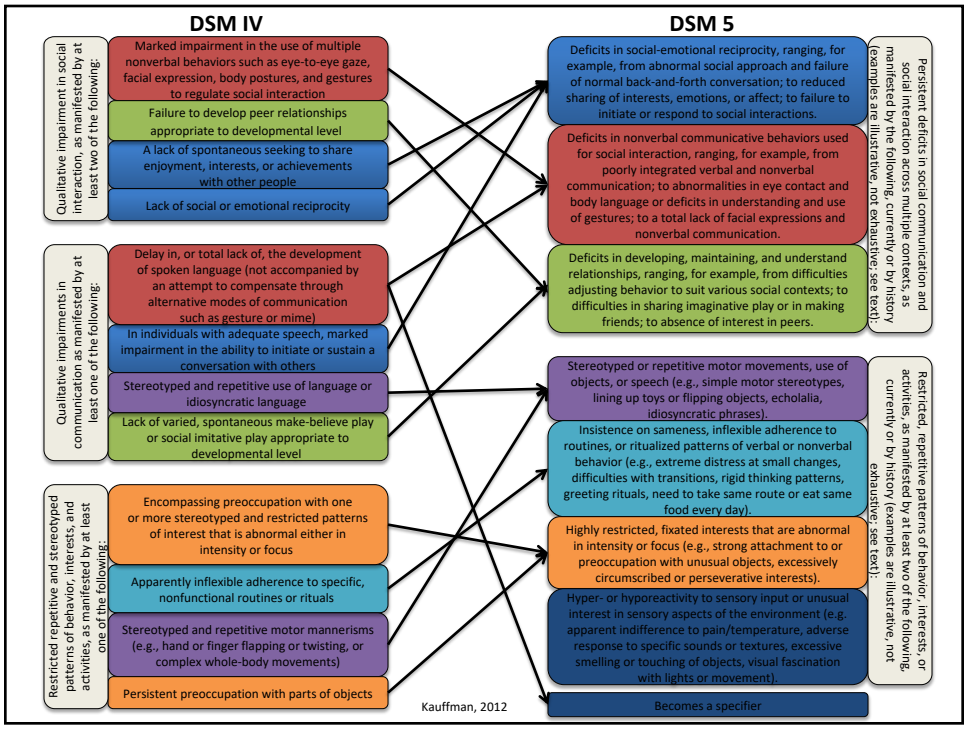
Brunner, D. (2010)

History of DSM and Autism



Daily, C. (2014)

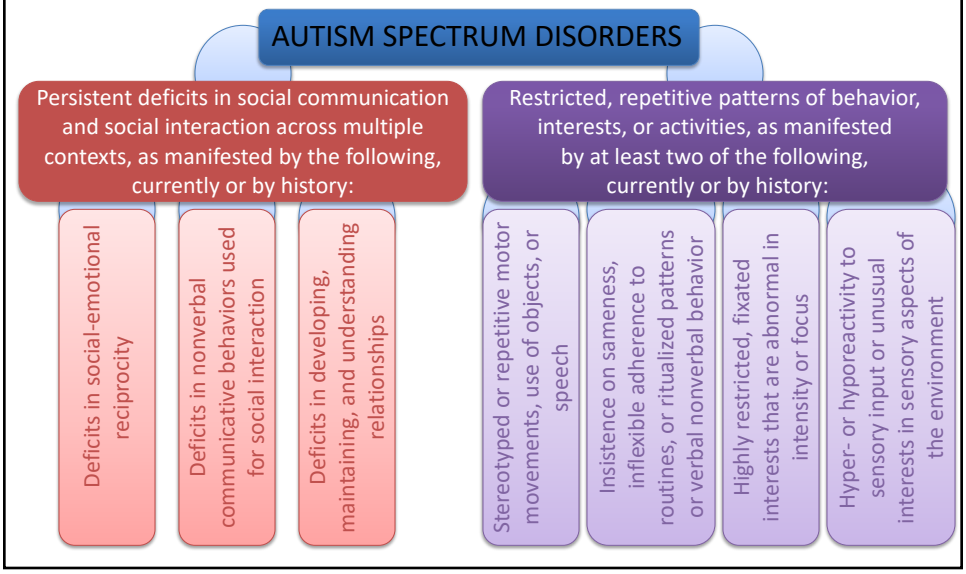
11



Kauffman, 2012

12

DSM 5 Diagnostic Criteria



13

DSM 5 Diagnostic Criteria: Autism Spectrum Disorder

- Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

14

DSM 5 Diagnostic Criteria: Autism Spectrum Disorder

Note: Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder. Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder, should be evaluated for social (pragmatic) communication disorder.

DSM 5 Diagnostic Criteria: Autism Spectrum Disorder

Specify if:

With or without accompanying intellectual impairment

With or without accompanying language impairment

Associated with a known medical or genetic condition or environmental factor

(Coding note: Use additional code to identify the associated medical or genetic condition.)

Associated with another neurodevelopmental, mental, or behavioral disorder

(Coding note: Use additional code[s] to identify the associated neurodevelopmental, mental, or behavioral disorder[s].)

With catatonia (refer to the criteria for catatonia associated with another mental disorder, pp. 119-120, for definition) (Coding note: Use additional code 293.89 [F06.1] catatonia associated with autism spectrum disorder to indicate the presence of the comorbid catatonia.)

DSM 5 Diagnostic Criteria: Autism Spectrum Disorder

Severity level	Social communication	Restricted, repetitive behaviors
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. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches	Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action.
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 responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and how has markedly odd nonverbal communication.	Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.
Level 1 "Requiring support"	Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful response to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to- and-fro conversation with others fails, and whose attempts to make	Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence.

17

DSM 5 Diagnostic Criteria: Social (Pragmatic) Language Disorder

A. Persistent difficulties in the social use of verbal and nonverbal communication as manifested by all of the following:
   1. Deficits in using communication for social purposes, such as greeting and sharing information, in a manner that is appropriate for the social context.
   2. Impairment of the ability to change communication to match context or the needs of the listener, such as speaking differently in a classroom than on the playground, talking differently to a child than to an adult, and avoiding use of overly formal language.
   3. Difficulties following rules for conversation and storytelling, such as taking turns in conversation, rephrasing when misunderstood, and knowing how to use verbal and nonverbal signals to regulate interaction.
   4. Difficulties understanding what is not explicitly stated (e.g., making inferences) and nonliteral or ambiguous meanings of language (e.g., idioms, humor, metaphors, multiple meanings that depend on the context for interpretation).

18

DSM 5 Diagnostic Criteria: Social (Pragmatic) Language Disorder

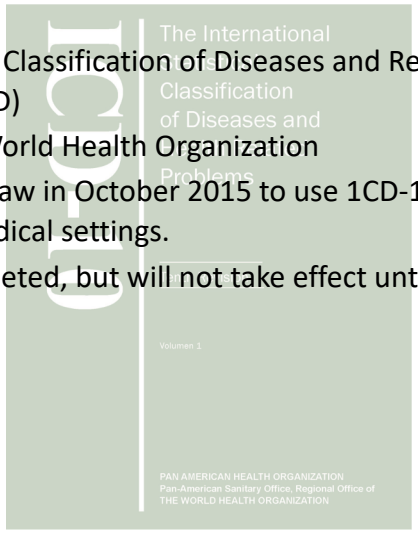
B. The deficits result in functional limitations in effective communication, social participation, social relationships, academic achievement, or occupational performance, individually or in combination.

C. The onset of the symptoms is in the early developmental period (but deficits may not become fully manifest until social communication demands exceed limited capacities).

D. The symptoms are not attributable to another medical or neurological condition or to low abilities in the domains of word structure and grammar, and are not better explained by autism spectrum disorder, intellectual disability (intellectual developmental disorder), global developmental delay, or another mental disorder.

ICD-10 and ICD-11

- International Classification of Diseases and Related Heath Problems (ICD)
- Created by World Health Organization
- Required by law in October 2015 to use 1CD-10 for diagnosis coding in medical settings.
- ICD-11 completed, but will not take effect until January 2022 or later.



ICD-10

Diagnostic Criteria for Pervasive Developmental Disorders, Atypical autism, and Asperger syndrome:

- F84 Pervasive Developmental Disorders
- F84.0 Childhood autism
- F84.1 Atypical autism
- F84.2 Rett syndrome
- F84.3 Other childhood disintegrative disorder
- F84.4 Overactive disorder associated with mental retardation and stereotyped movements
- F84.5 Asperger syndrome
- F84.8 Other pervasive developmental disorders
- F84.9 Pervasive developmental disorder, unspecified

Other Developmental Disorders of Speech and Language (F80.89)

- Equivalent to DSM-5 Social (Pragmatic) Language Disorder

ICD-10

F84.0 Childhood autism

- A type of pervasive developmental disorder that is defined by: (a) the presence of abnormal or impaired development that is manifest before the age of three years, and (b) the characteristic type of abnormal functioning in all the three areas of psychopathology: reciprocal social interaction, communication, and restricted, stereotyped, repetitive behaviour. In addition to these specific diagnostic features, a range of other nonspecific problems are common, such as phobias, sleeping and eating disturbances, temper tantrums, and (self-directed) aggression.

ICD-11
6A02 Autism Spectrum Disorder

"Autism spectrum disorder is characterized by persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and by a range of restricted, repetitive, and inflexible patterns of behaviour and interests. The onset of the disorder occurs during the developmental period, typically in early childhood, but symptoms may not become fully manifest until later, when social demands exceed limited capacities. Deficits are sufficiently severe to cause impairment in personal, family, social, educational, occupational or other important areas of functioning and are usually a pervasive feature of the individual's functioning observable in all settings, although they may vary according to social, educational, or other context. Individuals along the spectrum exhibit a full range of intellectual functioning and language abilities."

ICD-11

6A02.0 Autism spectrum disorder without disorder of intellectual development and with mild or no impairment of functional language.

- All definitional requirements for autism spectrum disorder are met, intellectual functioning and adaptive behaviour are found to be at least within the average range (approximately greater than the 2.3rd percentile), and there is only mild or no impairment in the individual's capacity to use functional language (spoken or signed) for instrumental purposes, such as to express personal needs and desires.

ICD-11

6A02.1 Autism spectrum disorder with disorder of intellectual development and with mild or no impairment of functional language.

- All definitional requirements for both autism spectrum disorder and disorder of intellectual development are met and there is only mild or no impairment in the individual's capacity to use functional language (spoken or signed) for instrumental purposes, such as to express personal needs and desires.

25

ICD-11

6A02.2 Autism spectrum disorder without disorder of intellectual development and with impaired functional language.

- All definitional requirements for autism spectrum disorder are met, intellectual functioning and adaptive behaviour are found to be at least within the average range (approximately greater than the 2.3rd percentile), and there is marked impairment in functional language (spoken or signed) relative to the individual's age, with the individual not able to use more than single words or simple phrases for instrumental purposes, such as to express personal needs and desires.

26

ICD-11

6A02.3 Autism spectrum disorder with disorder of intellectual development and with impaired functional language.

- All definitional requirements for both autism spectrum disorder and disorder of intellectual development are met and there is marked impairment in functional language (spoken or signed) relative to the individual's age, with the individual not able to use more than single words or simple phrases for instrumental purposes, such as to express personal needs and desires.

27

ICD-11

Removed right now - Autism spectrum disorder without disorder of intellectual development and with absence of functional language.

- All definitional requirements for autism spectrum disorder are met, intellectual functioning and adaptive behaviour are found to be at least within the average range (approximately greater than the 2.3rd percentile), and there is complete, or almost complete, absence of ability relative to the individual's age to use functional language (spoken or signed) for instrumental purposes, such as to express personal needs and desires.

28

ICD-11

6A02.5 Autism spectrum disorder with disorder of intellectual development and with absence of functional language.

- All definitional requirements for both autism spectrum disorder and disorder of intellectual development are met and there is complete, or almost complete, absence of ability relative to the individual's age to use functional language (spoken or signed) for instrumental purposes, such as to express personal needs and desires."

ICD-11

6A02.Y – Other specified autism spectrum disorder

- Other specified autism spectrum disorder
- Autism spectrum disorder without disorder of intellectual development and with absence of functional language
- Autism spectrum disorder without disorder of intellectual development and with absence of functional language with loss of previously acquired skills
- Autism spectrum disorder without disorder of intellectual development and with absence of functional language without loss of previously acquired skills
- Atypical autism
- atypical autistic syndrome
- Atypical childhood psychosis
- atypical infantile psychosis
- Mental retardation with autistic features

6A02.Z – Autism spectrum disorder, unspecified

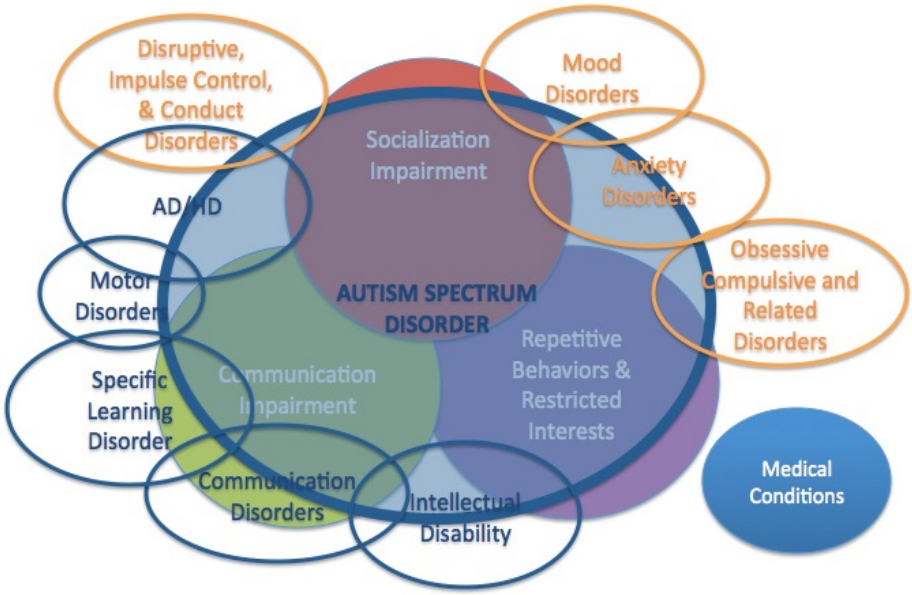
ICD-11

6A01.22 Developmental language disorder with impairment of mainly pragmatic language

- Developmental language disorder with impairment of mainly pragmatic language is characterised by persistent and marked difficulties with the understanding and use of language in social contexts, for example making inferences, understanding verbal humour, and resolving ambiguous meaning. These difficulties arise during the developmental period, typically during early childhood, and cause significant limitations in the individual's ability to communicate. Pragmatic language abilities are markedly below the expected level given the individual's age and level of intellectual functioning, but the other components of receptive and expressive language are relatively intact. This qualifier should not be used if the pragmatic language impairment is better explained by Autism Spectrum Disorder or by impairments in other components of receptive or expressive language.

31

Conceptual Framework



32

Autism Spectrum Disorders (ASD): Prevalence & Etiology

- 1 in 6 children diagnosed with a neurodevelopmental disorder
- In 2024, 1 in 36 children diagnosed with autism in US
- In 2020, 1 in 37 children in BC
- In 2019, 1 in 50 in Canada
- 4 to 5 times more common in boys
- Biologically based neurodevelopmental disorder
- No known etiology?
- Highly heritable

(CDC, 2024, Ministry of Child and Family Services in British Columbia, 2020, Public Health Agency of Canada, 2019).

Autism Spectrum Disorders (ASD): Etiology

- Genetics
  - 70% concordance in monozygotic twins, 90% if a broader phenotype is used (Bailey and colleagues, 1995)
  - Rate of autism among siblings of a child with ASD is 20% (Ozonoff and colleagues, 2024)
  - X, 2, 3, *7 (7q31-35) – speech deficits*, 15, 17, and 22 – most promising in the research
  - Maternally derived 15q duplications common (15q11-q13 region – Prader-Willi, Angelman Syndrome)
  - X-linked gene MECP2 mutations (encodes methyl-CpG binding protein-2) – Rett's Disorder
  - 20% associated with medical condition or known syndrome (e.g., Fragile X, Neurocutaneous disorders, 22q deletion syndrome, PKU, Fetal Alcohol Syndrome, CHARGE, Cornelia de Lange Syndrome, Smith-Lemli-Opitz syndrome, Smith Magenis Syndrome, Sotos Syndrome, Tuberous Sclerosis, Duchenne Muscular Dystrophy,) (Frombonne & Charkrabarti, 2001; Johnson, Myers, & the Council on Children with Disabilities, 2007;CAR Autism Road Map, 2020; Genovese & Butler, 2023)

Autism Spectrum Disorders (ASD): Etiology

- Correlation with Maternal and Paternal Age (Croen and colleagues, 2007; See Kolevzon and colleagues, 2007, for a review)
- Teratogens related to autism risk in first trimester (see Arndt, Strodgell and Rodier, 2004)
  - Maternal rubella infection
  - Ethanol
  - Thalidomide
  - Valproic acid
  - Misoprostol

Autism Spectrum Disorders (ASD): Etiology

- Maternal Factors, such metabolic syndrome (diabetes, hypertension, and obesity), bleeding, infection, rubella, measles, mumps, chicken pox, influenza, herpes, pneumonia, syphilis, varicella zoster, cytomegalovirus, bacteria infection, and pregnancy complications which require hospitalization (Karimi & Colleagues, 2017)
- Perinatal factors, such as low birth weight, abnormally short gestation length, and birth asphyxia
- Post-natal factors associated with ASD include autoimmune disease, viral infection, hypoxia, mercury toxicity
- Epidemiological studies have found no association between vaccines (as environmental risk factors) and increased risk of autism
  - (for more information, see review by Park and Colleagues, 2016; Karimi and Colleagues, 2017).

Brain Function

Prenatal teratogens

Genetics

Disturbed neuronal migration during gestation

Differences in the brain's electrical activity

Temporal & Prefrontal Cortex - Neurons Disrupted

Abnormal formation of synapses & dentritic spines

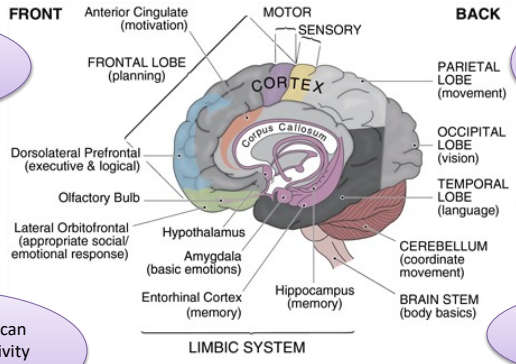
Excess of Neurons can cause overconnectivity or underconnectivity

Neurotransmitters
•Serotonin
•Glutamate

Mirror Neuron System

Corpus Callosum
Amygdala
Cerebellum
Hippocampus

Delayed brain response of auditory signals



Daily, C. (2014)

37

Brain Function: What it Means

- Intact or Enhanced Abilities:
  - Basic attention
  - Elementary motor
  - Sensory perception
  - Simple memory
  - Formal language (phonological and grammatical elements)
  - Rule-Learning
  - Visuospatial processing

(Williams & Minshew, 2010)

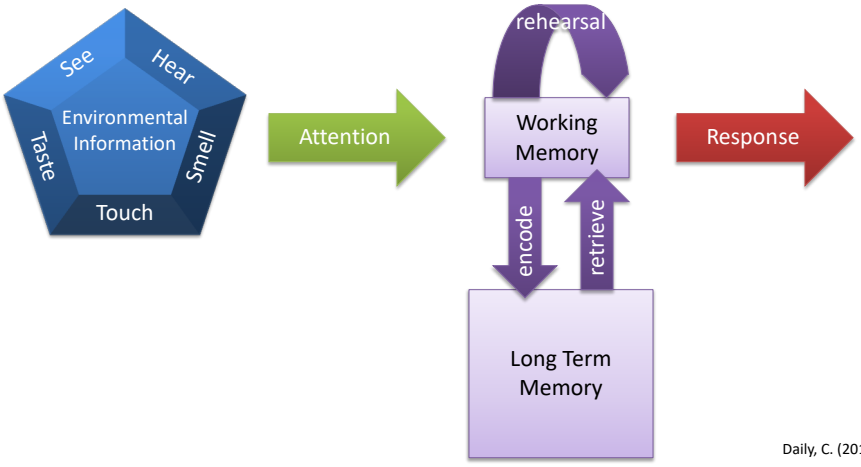
38

Brain Function: What it Means

- Deficits:
  - Executive functioning
  - Integrative processing
  - Complex sensory, motor, memory, and language skills
  - Concept and Prototype Formation (facial recognition, emotional expression, organization of information into different categories, detecting patterns)
  - Differential processing of human speech and the integration of complex auditory information
  - Processes auditory information in the right-hemisphere (visually) instead of left-hemisphere

(Williams & Minshew, 2010)

Information Processing



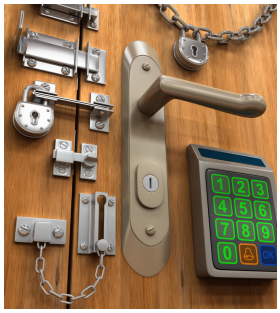
Daily, C. (2014)

Key Analogy: Start of the Day

Presented with Task

Has a Set of Keys

Needs to unlock (access) each piece of information they have with a key before starting the task



Daily, C. (2014)

41

Key Analogy: Processing Information Throughout the Day

Interrupted to start a new task

Need to get an entirely different set of keys to process new information.

Starts unlocking another door which requires access to each piece of information they have about that task.

42

Key Analogy: End of the Day

43

Early Intervention and Evidenced-Based Therapies

Committee on Educational Interventions for Children with Autism, National Research Council (2001) recommends:

- Early Intervention
- Intensive
- Individualized
- Regularly evaluated
- Educated at school, home, and in community settings
- Minimum of 25 hours every week year-round
- One-on-one or small group
- Parent involvement

44

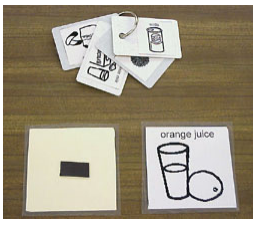
Early Intervention: Applied Behavioral Analysis

Applied Behavior Analysis (ABA)

- An effective approach to teach new skills and behaviors, reduce maladaptive and disruptive behaviors, maintain and generalize positive behaviors, and enhance attention and motivation (Goldstein, 2002; Horner, Carr, Strain, Todd, & Reed, 2002; Lovass, 1987; Odom et al., 2003, Sallows & Graupner, 2005).
- Early intervention most beneficial for children with ASD (Lovaas, 1987; Rogers & Lewis, 1989).
- Early Intensive Behavioral Intervention (EIBI) applies the principles of ABA to young children. EIBI includes 25 to 40 hours per week of behavioral intervention for two or more years.
- Children participating in EIBI have been shown to demonstrate significant improvements in intellectual, educational, and adaptive behavior functioning (Cohen, Amerine-Dickens, & Smith, 2006; Lovaas, 1987).

Social-Communication Strategies: Speech/Language and PECS

- Speech & Language Therapy within ABA program
- Picture Exchange Communication System (PECS)
  - Students exchange a picture of a desired item for the actual item
  - Teaches functional communication
  - Many times used with ABA
  - Many studies have shown effectiveness of PECS with individuals with autism and other disabilities (see Hourcade, Pilotte, West, & Parette, 2004, for a review)



Social-Communication Strategies

- Gain Attention
  - Reduce Distraction
  - Proximity
  - Make it Positive

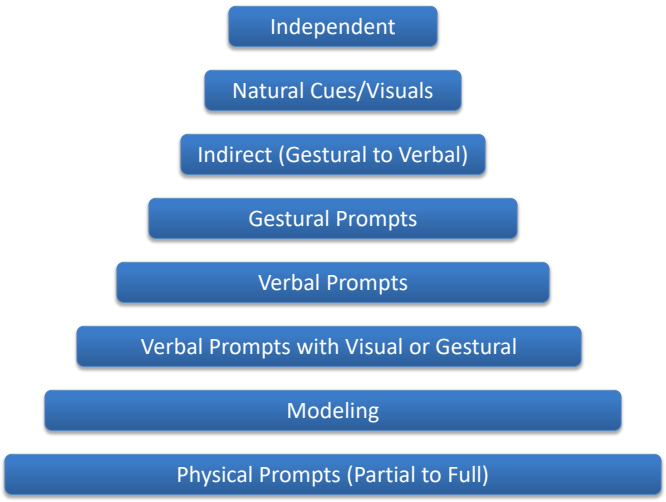
47

Social-Communication Strategies

- Evaluate your own communication
  - Nonverbal Communication
    - Body Language
    - Hand Gestures
    - Facial Expressions
  - Verbal Communication
    - Voice Tone
    - Volume
    - Intonation
    - Few Words
- Allow Time for Processing

48

Social-Communication Strategies: Least Restrictive Prompts



49

Social-Communication Strategies: Social Skills Programs

- Social Skills Training Programs in the Schools
  - Bellini and colleagues (2007) reviewed 55 studies
    - Limited effectiveness for children with autism
    - Difficulty generalizing the social skills they learn from one situation to another
    - Maintenance effects of social skills instruction were moderately strong
    - Interventions were most effective for middle school and high school-age students
    - Elementary school children showed the lowest intervention and generalization effects
    - Lowest maintenance effects were observed in preschool-age children
    - Social skills interventions delivered in the general classroom showed significantly stronger intervention, maintenance, and generalization effects than social skills interventions delivered in pull-out programs.
    - Limitations of the Research and needed design improvements:
      - Increase dosage
      - Target individual skill deficits
      - Implement program as designed

50

Social-Communication Strategies: Social Skills Programs

- Social Skills Training Programs
  - Reichow and Volkmar (2010) – Reviewed 66 studies
    - Interventions based on ABA
    - Naturalistic techniques with young children
    - Parent training with young children
    - Peer training
    - Use of visual supports
    - Video modeling
    - Generalization and Maintenance need improvement
- The PEERS program (Program for the Education and Enrichment of Relational Skills) is an evidence-based social skills intervention for teens and young adults, particularly those with autism spectrum disorder or other social challenges, designed to help them make and keep friend (Mandelburg and colleagues, 2014; Yoo and colleagues, 2014; Scholhl and colleagues, 2013)

Social-Communication Strategies: Social Stories

- Social Stories and Comic Strip Conversations – Carol Gray
  - Includes: "short stories constructed to inform, advise, and reflect upon social situations"; comic strip conversations, which are similar to social stories, with the difference that they rely on the participation of the child who co-constructs them; and written cues (Hutchins & Prelock, 2006; Scattone, Wilczynski, Edwards, & Rabian, 2002; Thiemann & Goldstein, 2001).
  - These pragmatic approaches are widely used with the ASD population and are often integrated into a behavioral program.
  - Although case studies have shown social stories and comic strip conversations to be promising interventions with the ASD population (Hutchins & Prelock, 2006), further research is needed to explore the efficacy of these alternative methods of ASD treatment.

Social-Communication Strategies: Social Story Example

There are many ways to say hello to someone.

When I see someone I know, usually I will look at them, try to smile and say "hi" or "hello." They may say "hello" back. They may stop to talk with me.

Sometimes I will try to shake their hand. Sometimes, when I am visiting a relative or a close friend, I will try to give them a small hug or a little pat on the back or the shoulder.

Sometimes, if I am just passing someone I know, I can smile, wave, or just nod my head. Most people like it when I smile at them. Smiling can make people feel good.

53

Social-Communication Strategies: Social Story Example

Taking turns is important when playing with my brother and my friends.

People may like me more when I take turns.

You have to let someone else have a turn when talking or playing.

I like to play birds and ninja turtles. Sometimes other kids like to play with other toys. I need to remember to take turns and play with what they want to play with first. For example, I don't always like to play superman, but if my friend wanted to play I should do it. Afterward, we can take turns and maybe play with what I want to play with.

When I take turns with my friends, they may like me more. If I learn to take turns with other kids, I will make more friends.

Taking turns is good.

54

Social-Communication Strategies: Social Autopsy

1. Ask person to explain what happened.
2. Ask person to identify the mistake(s) that was made.
3. Assist person in determining the actual social error that was made and teach more appropriate responses.
4. Practice the skills
   - Role Play
   - Video
   - Create Social Story/Comic Strip
5. Provide social homework.

No controlled studies have been conducted using this intervention.

Social Autopsy - Rick Lavoie

Social-Communication Strategies: The Hidden Curriculum

- The hidden curriculum is the set of rules governing day-to-day interactions that everyone is assumed to know but that are rarely directly taught.
  - Book offers practical suggestions and advice for how to teach and learn those subtle messages that most people seem to pick up almost automatically but that have to be directly taught to individuals with social-cognitive challenges.

Myles, B., Trautman, M., & Schelvan, R. (2004). *The hidden curriculum*. Shawnee Mission, KS: Autism Asperger Publishing Company.

Social-Communication Strategies: The Power Card

- The Power Card uses the child's special interests to change an unwanted or inappropriate behavior.
- Motivational text or short story related to a special interest is combined with an illustration and made into a bookmark- or business card-sized Power Card.

No controlled studies have been conducted using this intervention.

Gagnon, E. (2001). *Power cards: Using special interests to motivate children and youth with Asperger Syndrome and autism*. Shawnee, Mission, KS: Autism Asperger Publishing Company.

Social-Communication Strategies: Challenging Topics

- Puberty
- Sex Education
- Masturbation
- Pornography
- Indecent Exposure
- Stalking Behavior

- Best Book: Sexuality and Relationship Education for Children and Adolescents with Autism Spectrum Disorders (Hartman, 2014)

Puberty and Sex Education

- Body Awareness and Exploration of Self
  - Gender Education
  - Body Parts and Fluid Education
    - Exploration of Sexual Play
- Schools introduce sex education around 5th grade
- Resources:
  - The Growing Up Book for Boys (Hartman, D., 2015)
  - The Growing Up Guide for Girls (Hartman, D., 2015)

Puberty and Sex Education

- Dating
  - Hierarchy of Steps to Physical Conduct from the waist up
    - Professional and/or Caregiver creates social story for each step
    - Individual should always ask for permission at each step
      - For example, "Is it ok to hold you hand?"

    1. Holding hands on the outside of each other's thighs
    2. Hugging (putting your arms around the other's body) from the chest and shoulders. Do not have your body below your waist touch the other person while hugging.

Puberty and Sex Education

- Dating (continued)
  - Hierarchy of Steps to Physical Conduct from the waist up
    3. Kissing (touching your lips upon the other's lips) for one second
    4. Kissing for two to three seconds without using your tongue
    5. Kissing placing your tongue in the other's mouth and touching their tongue with your tongue (sometimes called French kissing). This type of kissing can last several seconds to several minutes.
    6. Touching the other's body while kissing. You can touch their face, the back of their head, and/or their back (above their waist).

Puberty and Sex Education

- Social story example for Kissing

At the end of a date, sometimes people kiss each other. I need to find out if it is ok to kiss the person I took on the date. First, I need look for the nonverbal signals from the other person that it may be ok to kiss her.

If I drove her on the date, I should walk her up to her front door. If she does not immediately walk through her door, but is looking at me for longer than 3 seconds and I wish to kiss her, I should ask her, "Is it ok to kiss you?" If she says no, I should say, "Ok, thank you for the date. Please let me know if you would like to go on another."

Puberty and Sex Education

- Social story example for Kissing (continued)

If she says yes when I ask, “Is it ok to kiss you?”, I should take one step toward her and tilt my head to the right and place my lips upon her lips for one second and then back away. I need to remember to not try to stick my tongue in her mouth or down her throat on the first kiss as she may not like this. If she is still facing me and has not walked through the door, then this may be a signal for me to kiss her again. I should take another step toward her, tilt my head, and place my lips upon her lips for two seconds.

Puberty and Sex Education

- Sex
  - Resources:
    - Sex, Sexuality, and the Autism Spectrum (Lawson, 2004)
    - Making Sense of Sex (Attwood, 2008)
    - Love, Sex, and Long-Term Relationships (Hendricks, 2008)
    - The Aspie Girl’s Guide to Being Safe with Men (Brown, 2013)
    - The Autism Spectrum Guide to Sexuality and Relationships (Goodall & Lawson, 2016)

Strategies for Challenging Behaviors

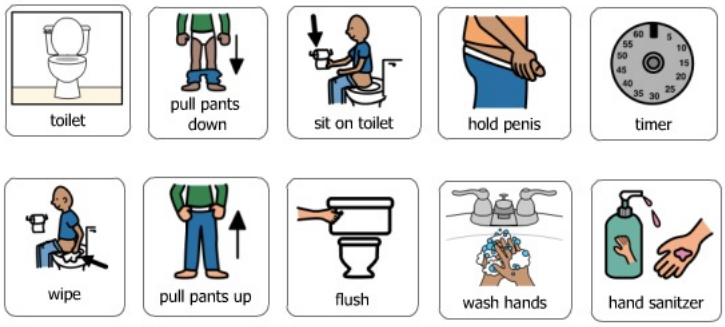
- Masturbation
  - Lower Functioning Individual – Collect data to determine how often behavior is occurring and FBA. Present bathroom or bedroom card before behavior occurs
    - At antecedent and on a structured schedule that will be gradually faded out
  - Higher Functioning Individual – Conversations about how often he or she is masturbating, normalize masturbation is normal.
    - If interfering with activities (e.g., more than 3 times a day, is painful, or individual says it's a problem), then help individual determine more appropriate number a day and use visual calendar to track gradual reduction in number of times masturbating per day.

Strategies for Challenging Behaviors

- Masturbation Resources – Social story books
  - Things Ellie Likes (Reynolds, 2015)
  - Things Tom Likes (Reynolds, 2015)

Strategies for Challenging Behaviors

- Masturbation Visual Schedule



67

Strategies for Challenging Behaviors

- Pornography
  - Normalize individual's interest in exploring sexual pictures on the internet
  - Find out what they are looking out
  - Educate about child pornography and how the child in the websites/pictures are a victim
  - Help them find resources that are more appropriate if they are looking at any sites that may be illegal.
- Resource
  - The Autism Spectrum, Sexuality, and the Law (Attwood, Henault, & Dubin, 2014)

68

Strategies for Challenging Behaviors

- Stalking Behaviors
  - Stalking involves repeated or persistent unwanted attempts to communicate with or associate with another
  - Engage in stalking behavior when seeking contact with others for friendship or intimacy Have less access to their peers and friends as sources of learning to acquire relationship skills and knowledge.
  - Most do not obtain any learning of romantic skills from parents, siblings, observation, the media, sex education, or peers
    - (Stokes and colleagues, 2007)

69

Strategies for Challenging Behaviors

- Stalking Behaviors
  - They attempt to initiate relationships more often than is typical with strangers and celebrities.
  - "ASD adolescents and adults were more likely to touch the person of interest inappropriately, believe that the target must reciprocate their feelings, show obsessional interest, make inappropriate comments, monitor the person's activities, follow them, pursue them in a threatening manner, make threats against the person, and threaten self-harm."
    - (Stokes and colleagues, 2007)

70

Strategies for Challenging Behaviors

- Stalking Behaviors
  - Prevention by education through visuals and social stories and increasing appropriate social skills
  - If behavior is occurring, educate individual about the stalking and the law
  - Gradually decrease stalking (if person they are stalking is willing) by giving individual "appropriate time" with that person (reduce this time in small increments on a daily basis while combining reinforcement)
    - If person they are stalking is not willing to be involved, use visuals of others on the internet that may look like that person and then gradually reduce exposure to these pictures

Strategies for Challenging Behaviors

- Indecent Exposure
  - Occurred in 3% of one sample (Fernandes and colleagues, 2016).
  - Lag between interest in exploring and talking about sexual developmental compared to neurotypical individuals
  - They start to engage in "sexual play" at an older age
  - Prevent by teaching earlier
  - Educate about the laws of exploring privates with younger individuals and posting sexual pictures on the internet and in public

Strategies for Challenging Behaviors

- Special Interests and Sex
  - Their sexual desires and fantasies are similar to those found in the general population
  - Some case examples of using objects to masturbate and using special interests in masturbation/sexual act – one study reported 24% of some type of "paraphilia", mostly described as a "fetish" (Hernandes et al., 2014).
  - Watch out for "you tube poop".

73

Understanding Sensory Difficulties

74

"Step Into the Shoes" of a Child with Autism

Groups of Five

1. Identified person with autism
2. Sits behind #1 and moves edge of paper up and down back of neck of #1
3. Sits next to #1 and hums/sings a song into #1's ear.
4. Sits on other side of #1 and talks to #1 about what he/she ate for lunch and what it tasted and smelled like.
5. Sits in front of #1 and claps hands repeatedly in front of #1's eyes

- Adapted from S. Shore.

Anxiety

- What does it look like in ASD?
  - Increased restlessness
  - Increases in *rumination*
  - May request that you confirm the same information over and over
  - May increase routines and rituals as a way to bring order into their life
  - May become more rigid in their thinking
  - May spend more time with special interest, using this as a way to escape situations that invoke anxiety
  - May regress to earlier behaviors

Depression

- Higher rate among ASD than typical population
- What might it look like?
  - Loss of Special Interests
  - Increased Cognitive Rigidity
  - Decreases in Restorative Non-social Time
  - Downward Social Spiral

Anxiety/Depression: Cognitive Behavioral Therapy

- McNally and colleagues (2013) - The Coping Cat Program for Children with Anxiety and Autism Spectrum Disorder: A Pilot Randomized Controlled Trial
- "May be a feasible and effective program for reducing clinically significant levels of anxiety in children with high-functioning ASD."
- Limitations - Need larger sample sizes and for it to be replicated.

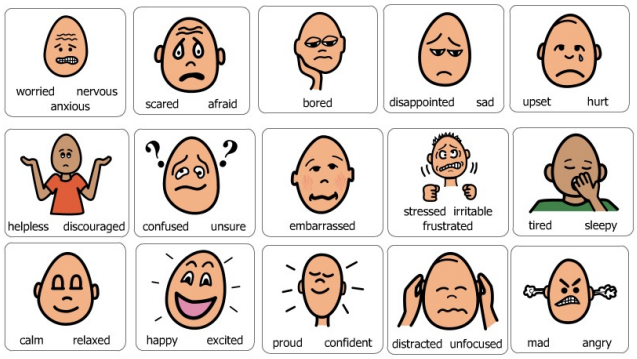
Coping Cat

- Philip Kendall, Ph.D., ABPP and associates- Temple University
  - The Coping Cat Workbook, Second Edition
    - Ages 8-13, 16 sessions
  - Cognitive-Behavioral Therapy For Anxious Children: Therapist Manual, Third Edition
  - The Coping Cat Parent Companion
  - The CAT Project
    - Ages 14-17
  - Therapist Manual for Group Treatment
- Use Manual as guiding template, not rigid cookbook.
- All Coping Cat, Therapist Manual, Parent Companion, and CAT Project material in this presentation reprinted with permission by Philip Kendall.

Anxiety/Depression: Cognitive Behavioral Therapy

- Sleep, Diet, and Exercise
- Self-Regulation Strategies - Thought Regulation
  - Understanding Emotions
  - Identifying the Situation
  - Changing Distorted Thought Patterns

I am feeling



because _____.

81

Worksheet

Thought Chart: Rational Response

Directions: Complete the information below to change the cognitive distortion into a rational response. An example has been provided to help you.

Situation	Emotion	Automatic Thought	Cognitive Distortion	Rational Response	Outcome
Describe situation that occurred.	**Label the feeling and rank how strong it is on a scale from 1 to 10.**	**Write down the thought you had.**	**Identify the cognitive distortion or twisted thinking pattern.**	**Identify a way to untwist your thinking and then write rational thought.**	**Label your feeling and rank how strong it is on a scale from 1 to 10.**
Mom tells me to get off video game	Frustrated - 8	She never lets me finish a game.	Over-generalization	Examined the evidence – she did let me finish the game last Monday. I'll ask her when I can finish the game.	Frustrated – 3

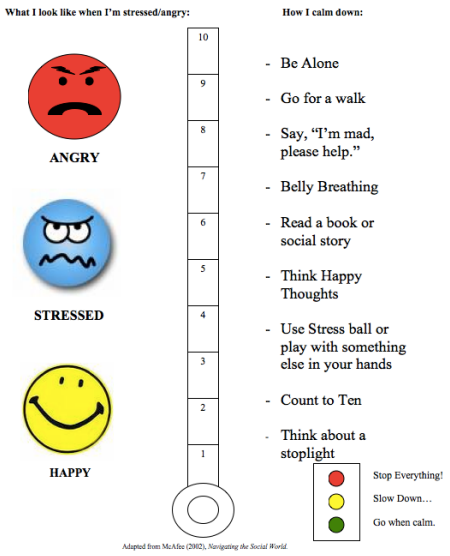
82

Anxiety/Depression: Cognitive Behavioral Therapy

- Self-Regulation Strategies - Physical Regulation
  - Diaphragmatic Breathing
  - Positive Imagery
  - Progressive Muscle Relaxation

Anxiety/Depression: Self-Regulation Strategies

- Teach and practice
  - Thermometer
  - Relaxation Skills
  - Conflict Resolution



Modifying CBT

- Goals for a clinician during TX:
  - Focus on positive characteristics of client's attributes
  - Address the presenting concerns and core symptoms
    - Develop an exposure hierarchy
    - Identifying social problems
  - Benefits of groups training
    - Opportunities to practice new skills
    - Peer modeling and skills practice
  - Develop emotional awareness and insight

(White and colleagues, 2018)

Modifying CBT cont.

- Factors to be aware of for clinicians treating adolescent ASD populations:
  - Increased reliance on parents in treatment
  - Need for psychoeducation about comorbid symptoms
    - Anxiety and Depression
  - Treatment pace tends to be slower or more drawn out
    - Benefits of this, is more opportunities for practice and time to address rigid beliefs, behaviors, and thinking patterns

(White and colleagues, 2018)

Modifying CBT cont.

- Involve the child's special interests in treatment
  - Benefits of this, the child can visual concept easier and this can be a good tool for connection and to incentivize
- Reduce your use of metaphors (and sarcasm)
- Promote high structured sessions, give transitional prompts and clear directions
- Use visuals!!!
- Set aside time in session for practice
  - Ex. planning at-home practices, can use modeling or role play

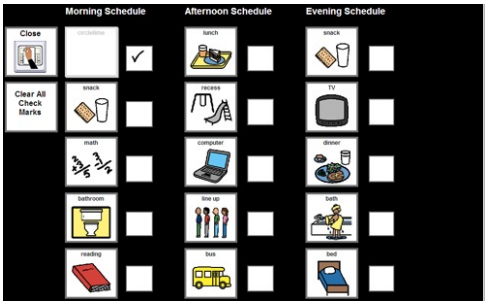
(White and colleagues, 2018)

ADHD

- ADHD – Inattentive Type
- ADHD – Hyperactive-Impulsive Type
- ADHD - Combined Type
- Most individuals with ASD will have executive functioning deficit
- Differences between ADHD and ASD

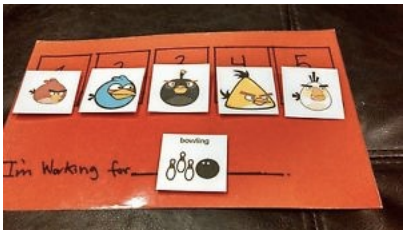
Environmental Strategies

- Organization Systems
  - Visual Schedules
  - Checklists
  - Calendars



Environmental Strategies

- Reinforcement Menu (Change Often)



Environmental Strategies

- Adjusted Seating/Preferential Seating
- Alternate Preferred tasks with less preferred tasks
- Minimize Transitions
- Priming of Schedule/Staff Changes
- Home Base
- Make sure task is appropriate
- Break down Steps
- Flexibility
- Prepare activities, people, environment ahead of time

91

Environmental Strategies

- Venn Diagrams/Webbing
- Time Lines
- Choice Cards
- Break Cards
- Schedule Break Time (don't inadvertently reinforce it)

92

OCD - Diagnosis

- You must have obsessions and compulsions
- The obsessions and compulsions must significantly impact your daily life
- You may or may not realize that your obsessions and compulsions are excessive or unreasonable
- Obsessions:
  - Intrusive, repetitive and persistent thoughts, urges, or images that cause distress
  - The thoughts do not just excessively focus on real problems in your life
  - You unsuccessfully try to suppress or ignore the disturbing thoughts, urges, or images
  - You may or may not know that your mind simply generates these thoughts and that they do not pose a true threat
- Compulsions:
  - Excessive and repetitive ritualistic behavior that you feel you must perform, or something bad will happen. Examples include hand washing, counting, silent mental rituals, checking door locks, etc.
  - The ritualistic compulsions take up a least one hour or more per day
  - You perform these physical rituals or mental acts to reduce the severe anxiety caused by the obsessive thoughts.

93

OCD

High functioning ASD – CBT and Exposure and Response Prevention (ERP)

- Lehmkuhl and colleagues (2008) – Case study with ERP
- Russell and colleagues (2013) - CBT with larger sample size using randomized controlled trial

Limitations – although demonstrating effectiveness in literature, more research needed to confirm.

94

Psychopharmacology

- Warning: children with ASD process medications differently
- A Medication Guide for ASD
  - https://www.autismspeaks.org/tool-kit/atnair-p-medication-decision-aid
  - Tracking behavior and medication effects

Table of standard medication choices & potential side effects

Medicine Type	Target Behaviors	Possible Side Effects	
Stimulant Medicines • Methylphenidate (Ritalin, Metadate, Concerta, Methylin, Focalin, Daytrana) • mixed amphetamine salts (Adderall) • dextroamphetamine (Dexedrine) • lisdexamfetamine (Vyvanse)	Hyperactivity Short attention span Impulsive behaviors	Common: Problems falling asleep Less appetite Irritability/emotional outbursts	Less common: Anxiety /Depression, Social withdrawal Repeating behaviors/ thoughts Headaches Diarrhea Changes in heart rate Tics
Alpha Agonist Medicines • guanfacine(Tenex, Intuniv) • clonidine (Catapres, Catapres TTS, Kapvay)	Hyperactivity Short attention span Impulsive behaviors Sleep problems Tics	Common: Sleepiness Irritability	Less Common: Aggression Less appetite Low blood pressure Constipation
Anti-Anxiety Medicines • fluoxetine (Prozac) • fluvoxamine (Luvox) • sertraline (Zoloft) • paroxetine (Paxil) • citalopram (Celexa) • escitalopram (Lexapro)	Depression Anxiety Repeating thoughts Repeating behaviors	Common: GI problems (nausea, vomiting, constipation, low appetite) Headaches Problems falling asleep /Sleepiness Agitation Weight gain	Less common: Seizure Thoughts of harming self Suicide Serotonin syndrome
Second Generation/ Atypical Antipsychotics • risperdone (Risperdal) • olanzapine (Zyprexa) • quetiapine (Seroquel) • aripiprazole (Abilify) • ziprasidone (Geodon)	Irritability Aggression Self-injury Tantrums Sleep problems High activity level Repeating behaviors Tics	Common: Sleepiness Drooling Increased appetite/ weight gain	Less common: High blood sugar, diabetes High cholesterol Tardive dyskinesia (abnormal movements) Quetiapine – eye side effects Ziprasidone- heart side effects
Medicines for Seizures and Mood Problems • carbamazepine (Tegretol, Carbatrol) • valproic acid (Depakote, Depakene) • lamotrigine (Lamictal) • oxcarbazepine (Trileptal) • topiramate (Topamax)	Aggression Self-injury	Common: Sleepiness Nausea Vomiting	Less common: Dizziness /Memory problems Rashes Hepatitis, Liver failure, Pancreatitis Bone marrow suppression , Tremo

Psychopharmacology

Limitations of Research and Potential Risk

- Antipsychotics are the only medication proven to be effective in reducing repetitive and stereotypical behaviors in autism based on Fair Quality Studies. Other medications, such as antidepressants or those for ADHD, have not been replicated and/or are low quality studies (e.g., small sample sizes, lacking control groups, not randomized). Antidepressants are not considered effective in treating symptoms of autism in children. Risk factors include numerous side effects.

97

Psychopharmacology

- Antipsychotics
  - McDougle and colleagues (1998)
  - 24 participants completed the trial. The experimental design was a 12-week, randomized, doubleblind, placebo-controlled phase followed by a 12-week, open-label risperidone treatment phase for individuals from the placebo group
  - Observed decreased aggression, repetitive behavior, irritability, anxiety, and depression
  - Considered a “Fair Quality Study”

98

Psychopharmacology

- Risperidone (Risperdal) – FDA Approved
  - McCracken and colleagues (2002) – Research Units in Pediatric Psychopharmacology network study
  - n = 101, eight-week, double-blind placebo-controlled study
  - Ages 5-17 y, dx with autism
  - 1.8 (+ or – 0.7) mg day
  - 57% decrease on the Irritability subscale of the Aberrant behavior Checklist
  - 69% rated much improved versus 11% for placebo on the Clinical Global Impression – Improvement scale
  - Improvement on the Stereotypy and Hyperactivity subscales
  - No improvement on the Social Withdrawal or Inappropriate Speech subscales.
  - Side effect: Weight Gain

Psychopharmacology

McCracken and colleagues (2002) – Research Units in Pediatric Psychopharmacology network study

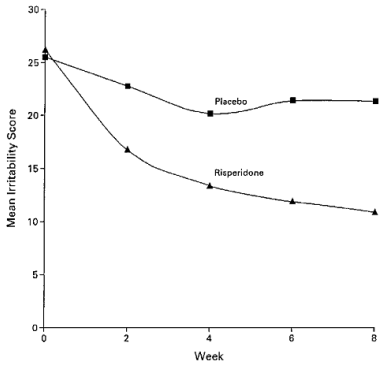


Figure 1. Mean Scores for Irritability in the Risperidone and Placebo Groups during the Eight-Week Trial. Data are for all 101 children (49 assigned to the risperidone group and 52 assigned to the placebo group). Higher scores indicate greater irritability.

Psychopharmacology

McCracken and colleagues (2002) – Research Units in Pediatric Psychopharmacology network study

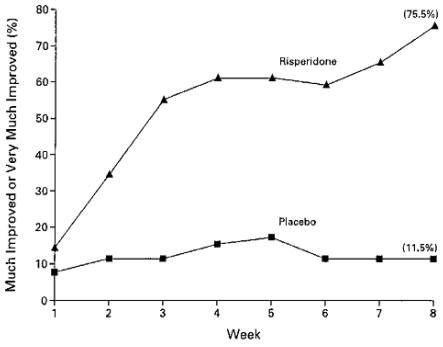


Figure 2. Percentage of Children with a Rating of Much Improved or Very Much Improved on the Clinical Global Impressions — Improvement Scale during the Eight-Week Trial.
Data are for all 49 children assigned to the risperidone group and for all 52 assigned to the placebo group.

Psychopharmacology

- Antipsychotics
  - Risperidone (Risperdal) –
    - McDougle and colleagues (2005)
    - n = 174
    - Reduced overall score on the Ritvo-Freeman Real Life Rating Scale and following subscales: Sensory Motor Behaviors, Affectual Relations, and Sensory Responses. No effects on Social Relatedness or Language.
    - Reduced scores on the Children's Yale-Brown Obsessive Compulsive Scale and Vineland maladaptive Behavior Domain.
    - Treatment response maintained for 6 months.

Psychopharmacology

McDougle and colleagues (2005)

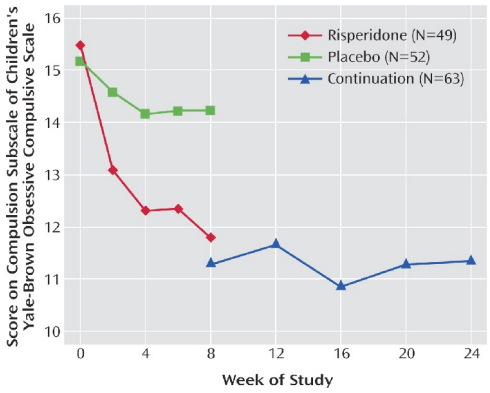


Figure 1. Scores for Compulsions on the Children's Yale-Brown Obsessive Compulsive Scale of Children and Adolescents in a Placebo-Controlled Risperidone Trial and Open-Label Continuation Study

103

Psychopharmacology

- Antipsychotics
  - Olanzapine (Zyprexa)
    - Open-label studies suggested similar efficacy (Malone et al., 2001, Potenza et al., 1999)

See Lewis & Lazoritz (2005) for a review.

104

Psychopharmacology

- Limitations of Research and Potential Risk
  - Other medication studies have not been replicated and/or are low quality studies (e.g., small sample sizes, lacking control groups, not randomized). The medications discussed in the next several slides are not considered effective in treating symptoms of autism in children. Risk factors include numerous side effects.

Psychopharmacology

- Antidepressants
  - Tricyclics
    - Clomipramine (Anafranil)
      - Decreased compulsive behavior, stereotypies, aggression and self-injury (Gordon et al, 1993)
  - SSRI's
    - Fluvoxamine (Luvox)
      - Decreased repetitive behavior, aggression, and inappropriate repetitive language in adults with autism (McDougle et al., 1996)
      - McDougle and colleagues repeated study in 2000 with children – limited improvement, adverse effects
      - Martin, Koenig, Anderson, & Scahill (2003) – pilot study of age-related differences. Minimized side effects by use of low initial dose with gradual increases – inconsistent responses.

Selective serotonin reuptake inhibitors (SSRIs) Review

- There is no evidence of effect of SSRIs in children and possible emerging evidence of harm.
  - One study reported significantly more adverse events in children on citalopram compared to placebo and one serious adverse event, a prolonged seizure (King, 2009). Both studies of fenfluramine reported adverse effects in children, including withdrawal and sadness that prompted dosage changes (Barthelemy, 1989) and weight loss (Barthelemy, 1989, Leventhal, 1993).
  - No significant differences were reported for side effects in children in the treatment or placebo group for fluoxetine (Hollander, 2005) and little information was available for side effects in children in the fluvoxamine study (Sugie, 2005).

(Williams and colleagues, 2013)

107

Selective serotonin reuptake inhibitors (SSRIs) Review

- There is limited evidence of the effectiveness of SSRIs in adults from small studies in which risk of bias is unclear.
  - Some reported improvements in:
    - Clinical global impression (fluvoxamine and fluoxetine)
    - Obsessive-compulsive behaviors (fluvoxamine)
    - Anxiety (fluoxetine)
    - Aggression (fluvoxamine).

(Williams and colleagues, 2013, Reiersen & Handen, 2011)

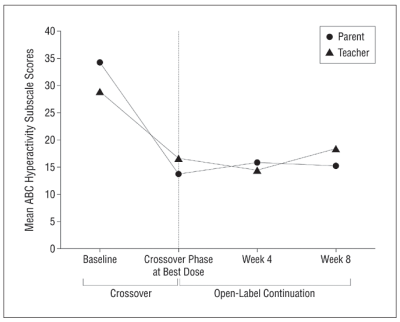
108

Psychopharmacology

- Stimulants
  - Methylphenidate
  - Posey and colleagues (2005)
  - 72 children, ages 5-15 years with ASD with hyperactivity
  - Effect sizes ranging from 0.20 to 0.54 depending on dose and rater.
  - Thirty-five (49%) of 72 enrolled subjects were classified as methylphenidate responders.
  - Adverse effects led to the discontinuation of study medication in 13 (18%) of 72 subjects.

Psychopharmacology

Posey and colleagues (2005)



- **Figure 2.** Mean Aberrant Behavior Checklist (ABC) hyperactivity subscale scores as rated by teachers and parents at baseline, at the best dose of methylphenidate during the crossover phase, and during the methylphenidate hydrochloride open-label continuation phase. Linear slopes were used to examine the change in the primary outcome measure over time during the 8-week open-label continuation phase. Parent-rated (F = 1.09; *P* = .30) and teacher-rated (F = 3.01; *P* = .10) ABC hyperactivity subscale score slopes were not significantly different from 0, suggesting a maintenance of response.

Psychopharmacology

- Stimulants
  - Ritalin, Concerta, Metadate (Handen et al., 2000; Quintana et al., 1995, Ghanizadeh et al., 2019)
    - Improvement in symptoms of hyperactivity
    - Side effects: social withdrawal and irritability
- Clonidine (Catapres) (Rankhauser et al., 1992; Jaselskis et al., 1992, Ming et al., 2008)
    - Reduced irritability, hyperactivity, and impulsivity in double-blind trials
    - Side effects: tolerance, hypotension, rebound hypertension, over-sedation
- Guanfacine (Tenex) (Posey et al., 2004, Jahagirdar & Mahood, 2023)
    - Limited evidence. Improvements in insomnia, tics, hyperactivity and inattention (less sedation and rebound effect)

Psychopharmacology

- Divalproex (Depakote)
    - Improved affective stability, impulsivity, and aggression (Hollander and colleagues, 2001, 2009)

- Buspirone (Buspar)
    - Reduction of aggressive symptoms and anxiety in small sample of adults with ID (Ratey et al., 1991)
    - Improved hyperactivity (Realmuto et al., 1989)
    - Limited data indicates low-dose may be effective in treating RRB as well as anxiety, irritability, and hyperactivity (Gupta et al., 2023)

Psychopharmacology: Ethical Considerations

- Do individuals with ASD process medication differently than neurotypical individuals???

113

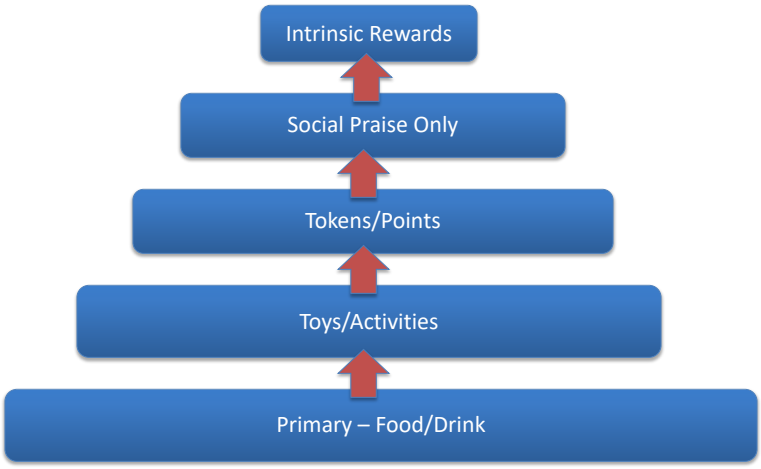
Challenging Behaviors: Behavioral Techniques

INCREASING DESIRABLE BEHAVIORS

- Reinforcement: Something serves as reinforcement if
  1) it immediately follows a behavior and
  2) it increases the frequency of that behavior in the future.
- Positive and Negative Reinforcement
- Noncontingent Reinforcement
- Reinforcement Hierarchy

114

Challenging Behaviors: Behavioral Techniques



115

Challenging Behaviors: Behavioral Techniques

Token Economy System

- A token should be something that the child can see, touch, and/or count.
- Child must be able to store and/or see how many tokens earned.
- Child must be able to exchange the tokens for actual rewards (back-up reinforcers) as frequently as necessary to maintain the child's motivation.
- Child should not be able to obtain a token from sources other than the parent, teacher, aide, etc.
- Child must know the token can be exchanged for various desirable rewards and be able to know in advance how many tokens are needed to "purchase" particular rewards. We can tell how much they value the tokens by how they take care of them, how they respond when they are administered, and even if they try to take them from other children.
- In some cases, tokens may be tally marks, etc., but other than this, the token should not be so large or small that the child is prevented form handling it.

116

Challenging Behaviors: Behavioral Techniques

Administering Tokens

- Administration of tokens SHOULD always be paired with verbal praise. Physical contact is good to give if reinforcing to the child.
- Tell the child WHY she/he earned a token (e.g., "I like the way you are sitting in your seat", "Good setting the table")
- With higher-level children, it is helpful if they know how many tokens they are earning for an activity before starting.
- Tokens must be given immediately after the behavior occurs, no matter how often the behavior occurs.
- Tokens should be given frequently for target behaviors.
- Give tokens CONSISTENLY, IMMEDIATELY, AND CONTINUOUSLY at first and as the behavior gets stronger, gradually increase the amount and difficulty of the behavior required for the same back-up reinforcer.

Challenging Behaviors: Behavioral Techniques

Name: Tommy **Week:**

Behavior	Mon	Tues	Wed	Thurs	Fri
Say Hello to my teacher	☺				
Have good eye contact	☺				
Ask a friend to play	☺				
Take turns talking and playing	-				
Total Stickers/Points	3				

3-4 Stickers/Smiling Faces
Daily Reward:
Barbeque Chips
Stay up 15 minutes later
15 minutes extra on computer

17-20 Stickers/Smiling Faces
Weekly Reward:
Go out for ice cream
Go to movie

Challenging Behaviors: Behavioral Techniques

Ways to Teach Desirable Behaviors

Prompting

- Prompts are cues given by others in order to obtain the desired response. Prompts direct the learner's attention to the task at hand and its requirements. The purpose of a prompt is to give staff an opportunity to reinforce the desired behavior when it occurs.

Types of prompts:

- Verbal prompts are simply instructions that people give to a child. Verbal prompts may be given either spoken or singed.
- Gestural prompts consist of pointing or gesturing and indicates what the child should do.
- Physical prompts (or physical guidance) involves using physical contact to guide the child.
- Environmental prompts are things such as signs, posters (e.g., list of classroom rules).

Challenging Behaviors: Behavioral Techniques

Ways to Teach Desirable Behaviors

Fading

- Fading is the gradual elimination of prompts so that the learner is responding to the minimal cues that exist in the natural environment.
- Fading is used when a new behavior has been established and the child no longer needs as much direction. As soon as the behavior occurs without hesitation at your prompt, it's time to start fading the prompt. The purpose of fading is to increase the child's independent performance of the behavior so that the child does not rely on prompts to perform the behavior.

Challenging Behaviors: Behavioral Techniques

Ways to Teach Desirable Behaviors

Shaping

- Shaping is a procedure used to establish single, simple behavior. To shape a response, we start with a behavior a child can already perform and reinforce each "step in the right direction."

Steps in Shaping

- Observe the child to determine exactly what abilities the child displays in connection with the target behavior. We break down the behavior into little parts to see what the child CAN do.
- Arrange the setting for the maximum likelihood that the behavior will occur. If the behavior involves other people, or if particular environmental cues are necessary, arrange to have them present during shaping.
- Define the first approximation/step in the right direction that you will reinforce.
- Reinforce steps in the right direction toward the target response. Use the most powerful reinforcers you can. Reward these in-between steps with lots of praise, a hug, or whatever is reinforcing for your child.
- Use verbal, gestural, or physical prompts (only what's necessary) at all stages of the process.

Challenging Behaviors: Behavioral Techniques

Ways to Teach Desirable Behaviors

Chaining

- Chaining is used to teach a more complex series of behaviors. Chaining teaches sequence of related behaviors, each of which provides the cue for the next, and the last of which produces a completed task.
- The goal of chaining is to tie together already existing behaviors (which may have been shaped previously) so the child can do the sequence independently – without any verbal prompting for "what comes next". Behaviors we chain include eating breakfast, setting the table, getting dressed/undressed, etc.

Challenging Behaviors: Behavioral Techniques

DECREASING BEHAVIORS

- **Punishment: By definition, something serves as punishment if: 1) it immediately follows a behavior and 2) it decreases the frequency of that behavior in the future.**
- We can decrease unwanted behaviors through a variety of methods. The following list ranges from least to most intrusive.
  - Extinction/Ignoring
  - Differential reinforcement of others (DRO)
  - Response cost
  - Time Out
  - Physical restraint - Not used in our practice
- You should use the least intrusive punisher so that the child has the opportunity to have the most independent control over his or her actions.

From Olson & Marker (2000). Inservice Training Manual – Pine Grove School.

123

Challenging Behaviors: Behavioral Techniques

Although punishment can suppress behavior when used correctly, it has its disadvantages. It is not the best way to change behavior because:

- The child will try to avoid future punishment by doing less in general (the fewer "things" you do, the less likely you are to get punished). Repeated punishment leads to social withdrawal, depression, or lack of motivation. To avoid this make sure the child knows what behavior leads to being punished, so only that specific behavior will decrease.
- It may produce emotional behavior: the child may become nervous or upset prior to being punished.
- The child may become aggressive toward the parent, staff, or children.
- Negative modeling may occur: you risk teaching the child how to react when others are not doing what they want.
- The child may attempt to escape or avoid the punishment by avoiding the punisher, even when the child is not being punished.

Challenge: Try giving at least 6 reinforcers for every 1 punishment

124

Behavioral Techniques: Functional Behavioral Assessment

Finding Solutions for Problem Behaviors: ABC Analysis

- **ABC Analysis is a process for gathering information about the environmental stimuli that are controlling the behavior.**
- Antecedents (A)

  Antecedents are things or situations which happen before the target behavior. Examples of antecedents are asking a question, time of day, loud noise, a particular toy, etc. Certain behavior may regularly follow each of these antecedents.
- Behavior (B)

  This is the target behavior we are studying. It is very important to be specific in our descriptions so that others could easily recognize it.
- Consequences (C)

  Consequences are things or situations which immediately follow a particular behavior. They serve two purposes: to increase the behavior or to decrease the behavior that just happened.

125

Behavioral Techniques: Functional Behavioral Assessment

Antecedent Analysis

There are several types of antecedents (also environmental stimuli):

- Cues the child gives
- Prompts others give
- Situations
- People
- Time of Day
- Activity
- Physical Setting

From Olson & Marker (2000). Inservice Training Manual – Pine Grove School.

126

Behavioral Techniques: Functional Behavioral Assessment

Analysis of Function

- Two main functions of behavior:
  - To OBTAIN something desirable or communication
  - To AVOID/ESCAPE something undesirable
- By identifying the variables that maintain a behavior, we can also identify more adaptive ways of obtaining the same function.

Always teach a more appropriate behavior in a manner that makes meaning for the child.

From Olson & Marker (2000). Inservice Training Manual – Pine Grove School.

127

Behavioral Techniques: Functional Behavioral Assessment

Classification of "Obtaining"

- Obtain attention/Communication attempt
  - If you believe that a child's behavior serves to obtain attention, then the child will perform this behavior more often if he/she gets attention. We would want to teach the child a more adaptive behavior for obtaining attention from others.
- Obtain activities
  - A child's behavior may be to obtain an activity.
- Obtain internal stimulation
  - A child may engage in a behavior in order to stimulate him/herself internally. In some cases, self-injurious behavior occurs for self-stimulation. The child may also be bored or may enjoy the sensory stimulation. As a result, you may try to teach the child another way of stimulating him/herself more appropriately.

From Olson & Marker (2000). Inservice Training Manual – Pine Grove School.

128

Behavioral Techniques: Functional Behavioral Assessment

Classification of "Escaping/Avoiding"

- Escape/Avoid attention
  - Sometimes maladaptive behavior may occur when a child wants to be left alone. As an adaptive behavior, you may want to teach the child a more appropriate way of asking for a break.
- Escape/Avoid tasks
  - Escape of tasks and demands is very common. A child may perform a maladaptive behavior to get out of doing a task. Make sure to monitor the difficulty of tasks.
- Escape/Avoid internal stimulation
  - Some children have difficulty with internal stimulation. The may be overly sensitive or may not like a particular type of stimulation.

From Olson & Marker (2000). Inservice Training Manual – Pine Grove School.

129

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
1) While playing with some of the kids at recess, Angela calls Bob a mean name. Bob pushes Angela and knocks her to the ground. The other kids run away.

A = Antecedent	B = Behavior	C = Consequences
Function: To obtain and/or avoid Appropriate Behavior to Teach:		

130

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
1) While playing with some of the kids at recess, Angela calls Bob a mean name. Bob pushes Angela and knocks her to the ground. The other kids run away.

A = Antecedent	B = Behavior	C = Consequences
ANGELA CALLS BOB MEAN NAME	**BOB PUSHES ANGELA**	**KIDS RUN AWAY**
Function: To obtain and/or avoid		
Appropriate Behavior to Teach:		

131

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
1) While playing with some of the kids at recess, Angela calls Bob a mean name. Bob pushes Angela and knocks her to the ground. The other kids run away.

A = Antecedent	B = Behavior	C = Consequences
ANGELA CALLS BOB MEAN NAME	**BOB PUSHES ANGELA**	**KIDS RUN AWAY**
Function: To obtain and/or avoid **COMMUNICATES ANGER, AVOID KIDS**		
Appropriate Behavior to Teach: - **BEFORE GETTING TO RECESS, TEACH HOW TO COMMUNICATE FEELINGS AND ASK FOR HELP. REINFORCE POSITIVE INTERACTIONS WHILE AT RECESS.**		

132

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
2) Joe is drawing cartoon figures when his teacher tells him to get out his Math book. Joe continues to draw and doesn't respond to his teacher. Five minutes later, his teacher asks Joe to get his Math book out again.

A = Antecedent	B = Behavior	C = Consequences
Function: To obtain and/or avoid Appropriate Behavior to Teach:		

133

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
2) Joe is drawing cartoon figures when his teacher tells him to get out his math book. Joe continues to draw and doesn't respond to his teacher. Five minutes later, his teacher asks Joe to get his math book out again.

A = Antecedent	B = Behavior	C = Consequences
TEACHER TELLS HIM TO GET OUT MATH BOOK	**JOE CONTINUES TO DRAW**	**JOE CONTINUES TO DRAW, FIVE MINUTES LATER, TEACHER ASKS AGAIN**
Function: To obtain and/or avoid Appropriate Behavior to Teach:		

134

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
2) Joe is drawing cartoon figures when his teacher tells him to get out his math book. Joe continues to draw and doesn't respond to his teacher. Five minutes later, his teacher asks Joe to get his math book out again.

A = Antecedent	B = Behavior	C = Consequences
TEACHER TELLS HIM TO GET OUT MATH BOOK	**JOE CONTINUES TO DRAW**	**JOE CONTINUES TO DRAW, FIVE MINUTES LATER, TEACHER ASKS AGAIN**

Function: To obtain and/or avoid **OBTAIN DRAWING, AVOID GETTING OUT MATH BOOK**

Appropriate Behavior to Teach: **WHEN JOE CAN DRAW, VISUAL SCHEDULE FOR SUBJECTS, PRIME FOR HOW MUCH TIME HE HAS TO DRAW BEFORE GETTING OUT MATH BOOK, REINFORCE**

135

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
3) While the class is engaged in small group activities that require talking, your child, Ally, rocks back and forth.

A = Antecedent	B = Behavior	C = Consequences

Function: To obtain and/or avoid

Appropriate Behavior to Teach:

136

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
3) While the class is engaged in small group activities that require talking, your child, Ally, rocks back and forth.

A = Antecedent	B = Behavior	C = Consequences
GROUP ACTIVITY	**ALLY ROCKS**	**GROUP ACTIVITY CONTINUES**
Function: To obtain and/or avoid		
Appropriate Behavior to Teach:		

137

Behavioral Techniques: Functional Behavioral Assessment

CASE EXAMPLE:
3) While the class is engaged in small group activities that require talking, your child, Ally, rocks back and forth.

A = Antecedent	B = Behavior	C = Consequences
GROUP ACTIVITY	**ALLY ROCKS**	**GROUP ACTIVITY CONTINUES**
Function: To obtain and/or avoid	**OBTAIN INTERNAL STIMULATION/CALMING MECHANISM**	
Appropriate Behavior to Teach:	**BEFORE STARTING GROUP ACTIVITY, TEACH HOW TO ASK FOR A BREAK OR HOW TO RELAX, REINFORCE**	

138

Behavioral Techniques: Problem Solve Challenging Behaviors

A = Antecedent	B = Behavior	C = Consequences
Function: To obtain and/or avoid Appropriate Behavior to Teach:		

139

Thank you!
caradaily@dailybh.com

140