Navigating the Spectrum: Enhancing Understanding and Outcomes with the ASRS

Sam Goldstein, Ph.D.
Assistant Clinical Professor
University of Utah School of Medicin

www.samgoldstein.com
info@samgoldstein.com
@drsamgoldstein
@doctorsamgoldstein
@CommonSenseScience

ISPA Coimbra • 2025

1

Relevant Disclosure

- Co-author of the Autism Spectrum Rating Scales (MHS, 2009).
- Co-author of Assessment of Autism Spectrum Disorders text (Guilford, 2009).
- Co-author/presenter Assessment of Autism Spectrum Disorders CEU (APA, 2009).
- Co-author of Raising a Resilient Child With Autism Spectrum Disorders (2011, McGraw Hill).
- Co-author of Treatment of Autism Spectrum Disorders (2012, Springer).
- Co-author of the Autism Spectrum Evaluation Scales (in development, MHS).
- Compensated speaker.
- AI note-taking is fine.

2

Goals

- Briefly discuss the historical theories of Autism Spectrum Disorders (ASD).
- Define ASD and DSM 5 criteria.
- Briefly discuss symptoms of ASD by age into and including adulthood.
- Briefly discuss a core theory of ASD.
- Discuss data from the ASRS, the largest epidemiological/standardization sample collected of normal children and those with ASD.
- Discuss the ASRS and other methods for assessment, diagnosis and treatment of autism.

3

We are social beings.

4

4

What Benefits Do We Derive From Socialization?

- Support
- Survival
- Affiliation
- Pleasure
- Procreation
- Knowledge
- Friendship

5

The social development of autistic children is qualitatively different from other children.

6

In normal children perceptual, affective and neuroregulatory mechanisms predispose young infants to engage in social interaction from very early on in their lives.

7

Socialization Begins Early
Reina and Her Mother

8

8

9

9

Adrian, my seatmate on a recent flight.

10

Adrian

11

Adrian

12

13

13

14

14

Kanner's Description (1943)

- first physician in the world to be identified as a child psychiatrist
- founder of the first child psychiatry department at Johns Hopkins University Hospital
- Wrote *Child Psychiatry* (1935), the first English language textbook to focus on the psychiatric problems of children.

Leo Kanner who introduced the label *early infantile autism* in 1943 in his paper : Kanner, L. (1943). Autistic disturbances of affective contact. Nervous Child, 2, 217-250.

15

15

Kanner's Description (1943)

- His seminal 1943 paper, "Autistic Disturbances of Affective Contact", together with the work of Hans Asperger, forms the basis of the modern study of autism.
- Leo Kanner was the Editor for *Journal of Autism and Developmental Disorders*, then called *Journal of Autism and Childhood Schizophrenia*

Leo Kanner who introduced the label *early infantile autism* in 1943 in his paper : Kanner, L. (1943). Autistic disturbances of affective contact. Nervous Child, 2, 217-250.

16

16

Kanner's Description (1943)

- Inability to relate to others
- Disinterest in parents and people
- Language difficulties
- Fascination with inanimate objects
- Resistance to change in routine
- Purposeless repetitive movements
  - A wide range of cognitive skills
  - Where they possess an innate inability for emotional contact

Leo Kanner who introduced the label *early infantile autism* in 1943 in his paper : Kanner, L. (1943). Autistic disturbances of affective contact. Nervous Child, 2, 217-250.

17

17

Autism's First Child

AS NEW CASES OF AUTISM HAVE EXPLODED IN RECENT YEARS—SOME FORM OF THE CONDITION AFFECTS ABOUT ONE IN 110 CHILDREN TODAY—EFFORTS HAVE MULTIPLIED TO UNDERSTAND AND ACCOMMODATE THE CONDITION IN CHILDHOOD. BUT CHILDREN WITH AUTISM WILL BECOME ADULTS WITH AUTISM, SOME 500,000 OF THEM IN THIS DECADE ALONE. WHAT THEN? MEET DONALD GRAY TRIPLETT, 77, OF FOREST, MISSISSIPPI. HE WAS THE FIRST PERSON EVER DIAGNOSED WITH AUTISM. AND HIS LONG, HAPPY, SURPRISING LIFE MAY HOLD SOME ANSWERS.

By John Donvan and Caren Zucker

Atlantic Monthly, October 2010

18

18

A Brief Research Update of ASD and Transition to Adulthood

19

19

Background

- Autism Spectrum Disorder (ASD) is a neurodevelopmental condition marked by deficits in social interaction, communication, and repetitive behaviors.
- The etiology of ASD is complex, involving both genetic and environmental factors.
- Recent studies emphasize the need for individualized and technology-driven interventions to improve quality of life and functional outcomes (Qin et al., 2024).
- Despite progress in understanding ASD, challenges remain in diagnosis and treatment, mainly due to the disorder's heterogeneity and co-occurring conditions, which complicate the diagnostic process (Hus & Segal, 2021).

20

Diagnosis

- ASD diagnosis typically involves using standardized tools such as the Autism Diagnostic Observation Schedule (ADOS-2) and Autism Spectrum rating Scales (ASRS).However, these tools do not specifically diagnose
- This leads to potential misdiagnosis, especially in those with co-occurring cognitive or sensory impairments (Bishop & Lord, 2023).
- Early detection is critical, as timely intervention can significantly influence developmental outcomes.
- Advances in diagnostic technologies, including machine learning and biomarkers, enhance the precision of ASD diagnoses (Yu et al., 2024; Rasul et al., 2024).

21

Treatment

- The treatment of ASD is highly individualized, with a range of behavioral, educational, and pharmacological interventions available.
- Applied Behavior Analysis (ABA) remains one of the most well-established therapies, particularly for improving children's intellectual functioning and adaptive behaviors (Eckes et al., 2023).
- Other interventions, such as Cognitive Behavioral Therapy (CBT), have proven effective in managing emotional and social challenges (You et al., 2023).
- Emerging therapies, including transcranial pulse stimulation and virtual reality-based interventions, offer promising alternatives for addressing the core symptoms of ASD and improving social skills (Cheung et al., 2023; Dechsling et al., 2021).

22

Outcome

- Long-term outcomes for individuals with ASD vary widely, influenced by early intervention, co-occurring conditions, and the level of intellectual functioning.
- Early comprehensive treatment models have improved cognitive, language, and adaptive functioning, especially when intensive interventions involve parental participation (Shi et al., 2021).
- However, many individuals with ASD continue to face challenges in adulthood, particularly in areas such as employment and independent living (Scheeren et al., 2022).
- The outcomes' trajectory highly depends on the severity of symptoms and access to sustained, individualized support (Elias & Lord, 2021).

23

Assessment of ASD

- High levels of co-morbidity require a comprehensive assessment including: intellect, neuropsychological abilities, achievement, emotional status, personality and protective factors.
- A careful history is essential.
- Well developed, reliable and valid measures must be used to the extent they are available.
- DSM 5 or ICD 10 criteria must be met.

24

Making the Diagnosis of ASD

- Meets DSM 5 Criteria.
- Coping behaviors assessed.
- Co-morbid behaviors and disorders assessed.
- Corroborating data obtained about child and adulthood.
- Intellectual, achievement and neuropsychological data collected if warranted.

25

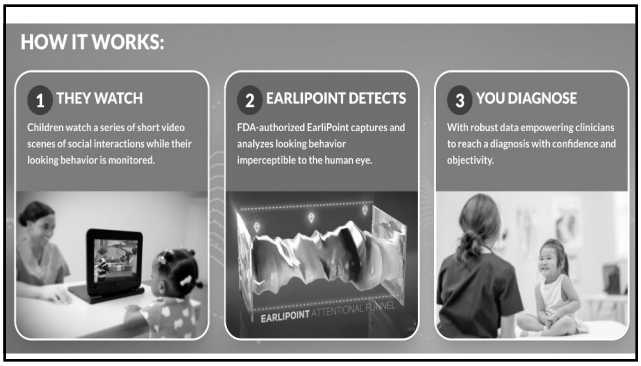
Use of Technology to Detect Risk of ASD

Ami Klin, Ph.D.
Director, Marcus Autism Center
Professor and Chief, Division of Autism and Related Disorders, Department of Pediatrics, Emory University School of Medicine
Warren Jones, Ph.D.
Research Director, Marcus Autism Center
Assistant Professor, Division of Autism and Related Disorders, Department of Pediatrics, Emory University School of Medicine

EMORY UNIVERSITY SCHOOL OF MEDICINE

Children's Healthcare of Atlanta

26



27

28

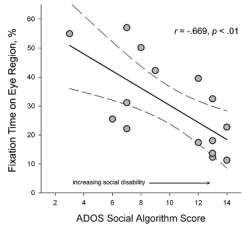
Toddler Eye Tracking Studies

Klin et al., Nature (2009);
Jones, Carr, & Klin, Arch Gen Psych (2008)

29

Predictors of Outcome

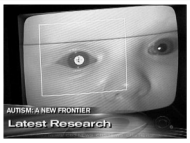
Jones, Carr, & Klin (2008; Arch Gen Psychiatry)



Less fixation time on eyes predicts more severe social disability.

30

Infant Eye Tracking Studies



Patterns of Eye Gaze at monthly intervals

Birth through 36 months – data collected over 11 visits (2, 3, 4, 5, 6, 9, 12, 15, 18, 24, 36m)

Creating Growth Charts of Social Visual Engagement

31

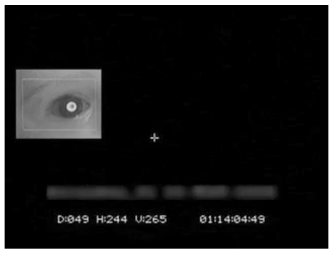
5 Month-Old – Low Risk Infant

Courtesy of Ami Klin & Warren Jones

32

5 Month-Old – High Risk Infant

Courtesy of Ami Klin & Warren Jones



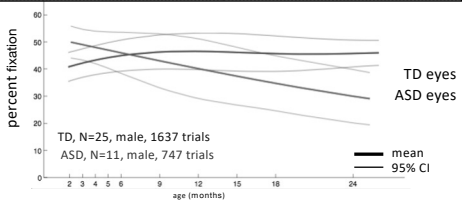
33

LETTER

doi:10.1038/nature12715

Attention to eyes is present but in decline in 2–6-month-old infants later diagnosed with autism

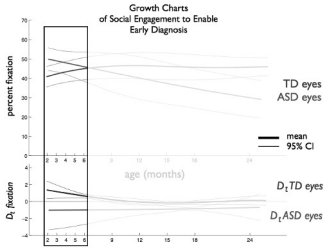
Warren Jones[1,2,3] & Ami Klin[1,2,3]



34

Eye Fixation – First 6 Months of Life

Jones & Klin, 2013, Nature



35

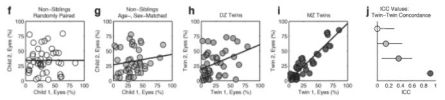
Genetic Predisposition to Visual Engagement?

Jones et al., 2018, Nature

Nature. 2017 July 20; 547(7663): 340–344. doi:10.1038/nature22999.

Infant viewing of social scenes is under genetic control and atypical in autism

John N. Constantino[1,2,3], Stefanie Kennon-McGill[1], Claire Weichselbaum[1], Natasha Marrus[1,3], Alyzeh Haider[1], Anne L. Glowinski[1], Scott Gillespie[4], Cheryl Klaiman[5,6], Ami Klin[5,6,7], and Warren Jones[5,6,7]



36

Studies of Speech Production & Perception

Gordon Ramsay, Director of Spoken Communication Lab, Marcus Autism Center

- **Prenatal ultrasound**
- **Vocal recordings**
- **Face & voice perception**
- **Motor development**
- **3D head growth**

Gordon Ramsay, Ph.D.

Director, Spoken Communication Laboratory
Marcus Autism Center

Department of Pediatrics
Emory University School of Medicine

gordon.ramsay@emory.edu

37

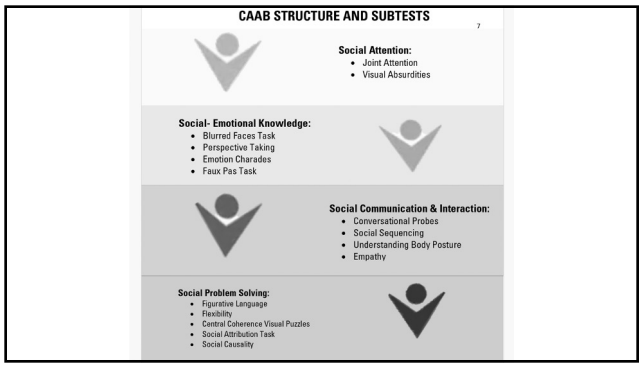
CAAB

38

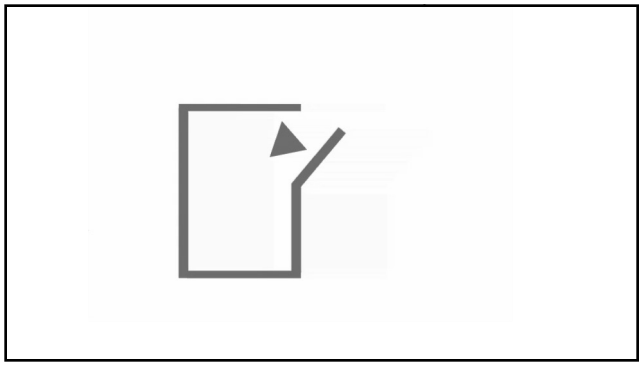
Characteristic Cognitive Impairments to Evaluate in ASD

- The ability to attribute mental states to oneself and others.
- The ability to display emotional reaction appropriate to another person's mental state (joint attention of emotion).
- The ability to plan and attend to relevant details in the environment.
- The ability to understand the communicative content of gaze.
- The ability to work cooperatively with others (joint attention of behavior).
- The ability to understand, comprehend, analyze, synthesize, evaluate and differentiate in particular social information in the environment.

39



40



41

Core DSM and ICD Core ASD Symptoms in All Ages

- Impaired social relations.
- Impaired communication skills.
- Impaired behavior.

42

Symptoms Present Before 24 Months

Children with ASD Struggle to:

- Orient to name
- Attend to human voice
- Look at face and eyes of others
- Imitate
- Show objects
- Point
- Demonstrate interest in other children

43

Symptoms Present Before 36 Months

Children with ASD:

- Use of other's body to communicate or as a tool
- Stereotyped hand/finger/body mannerisms
- Ritualistic behavior
- Failure to demonstrate pretend play
- Failure to demonstrate joint attention

44

Autism is now referred to as a spectrum disorder in which individuals can present problems ranging from total impairment to near reasonable functioning.

45

In a Spectrum Disorder genetic and phenotypic factors predispose certain individuals to express certain Central Nervous System vulnerabilities leading to poorly adapted variations in development and behavior.

46

In a Spectrum Disorder all symptoms are considered relevant to the extent they present in each disorder. Thus a symptom is not exclusive to a disorder.

47

The form that a Spectrum Disorder assumes is determined by its composite symptoms. These symptoms often have complex relationships.

48

DSM 5 Autism Spectrum Disorder

- Combined social and communication categories.
- Tightened required criteria reducing the number of symptom combinations leading to a diagnosis.
- Omitted Retts and Childhood Disintegrative Disorders.
- Clarifies co-morbidity issues.
- Eliminated PDD NOS and Aspergers in favor of Autism Spectrum Disorder.
- Created Social Pragmatic Communication Disorder.
- Still no specified profile for adults, just guidelines.

49

49

DSM 5 Autism Spectrum Disorder

- Five criteria.
- Seven sets of symptoms in the first two criteria – Social/Communication and Restrictive/Repetitive behaviors, interests or activities.
- All three symptoms are required to meet the first criteria (although a typo omits this).
- Two out of four are needed for the second criteria.
- Some symptoms have been combined.
- Sensory sensitivity has been added.

50

50

DSM 5 ASD Criteria A

Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive; see text):

1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

51

51

DSM 5 ASD Criteria B

Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive; see text):

1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).
3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
4. Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

52

52

DSM 5 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.

  Associated with another neurodevelopmental, mental, or behavioral disorder.

  With catatonia.

53

53

DSM 5 ASD Criteria C, D, E.

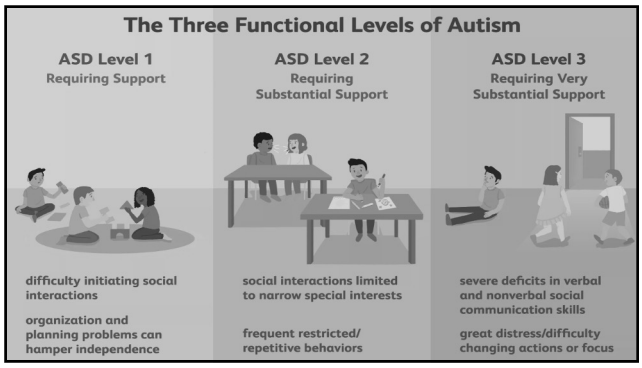
C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life)

D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E. 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 co-morbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

54

54



55

Applying DSM 5 With Adults (page 54)

- "Many adults with ASD without intellectual or language disabilities learn to suppress repetitive behavior in public."
- "Special interests may be a source of pleasure and motivation and provide avenues for education and vocation later in life."
- "Diagnostic criteria may be met when restricted, repetitive patterns of behavior, interests or activities were clearly present during childhood. . . even if symptoms are no longer present."
- "Among adults with ASD with fluent language, the difficulty in coordinating non-verbal communication with speech may give the impression of add, wooden or exaggerated body language."

56

Applying DSM 5 With Adults (page 56-57)

- Symptoms are "clear in the developmental period."
- "In later life interventions or compensations, as well as current supports, may mask these difficulties in at least some contexts."
- "However **symptoms remain sufficient** to cause current impairment in social, occupational or other important areas of functioning."
- "ASD is diagnosed four times more often in males than females."
- "Girls without accompanying intellectual impairment or language delays may go unrecognized."

57

DSM IV TR Autism and Asperger Syndrome

Data from the Autism Spectrum Rating Scales Epidemiologic Sample (2009)

58

58

Lorna Wing: Godmother of Autism

59

59

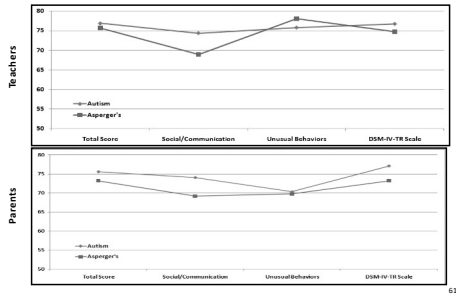
Autism vs. Asperger

- ASRS means for ages 2-5 years were typically somewhat higher for children with Autism than those with Asperger's syndrome.
  - Exception being Unusual Behaviors where the two groups were similar
- ASRS means for ages 6-18 years were consistently higher for children with Autism than those with Asperger's syndrome.

60

60

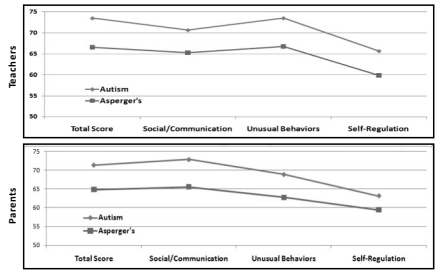
Autism vs Asperger (2-5 years)



61

61

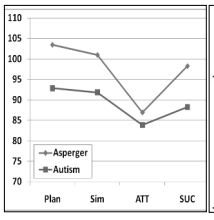
Autism vs Asperger (6-18 Years)



62

62

Autism vs Asperger (6-18 years)



Descriptive Statistics and Comparisons Between Individuals with Autism (n = 20) and Asperger Syndrome (n = 23).

		Mn	*SD*	*F*	Sig	*d* -ratio
PLAN	Asperger	103.5	31.6	1.71	.20	0.40
	Autism	92.9	19.2			
SIM	Asperger	101.0	15.3	3.33	.08	0.54
	Autism	91.9	17.5			
ATT	Asperger	86.9	17.7	0.30	.59	0.17
	Autism	83.9	18.8			
SUC	Asperger	98.3	15.7	2.46	.12	0.47
	Autism	88.3	25.6			

63

63

DSM 5 Social (Pragmatic) Communication Disorder Criteria A

Persistent difficulties in the social use of verbal and nonverbal communication as manifested by all of the following:

- Deficits in using communication for social purposes, such as greeting and sharing information, in a manner that is appropriate for the social context.
- 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 a playground, talking differently to a child than to an adult, and avoiding use of overly formal language.
- 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.
- Difficulties understanding what is not explicitly stated (e.g., making inferences) and non-literal or ambiguous meanings of language (e.g., idioms, humor, metaphors, multiple meanings that depend on the context for interpretation).

64

64

DSM 5 Social (Pragmatic) Communication Disorder Criteria B, C, and D

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).

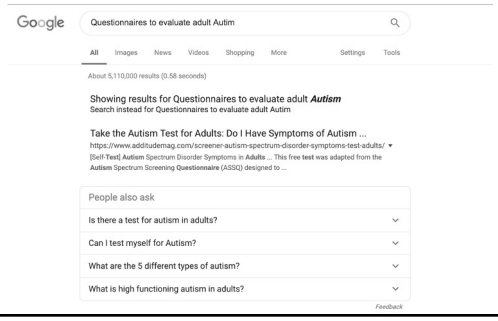
D. The symptoms are not attributable to another medical or neurological condition or to low abilities in the domains of word structure and grammar, and are not better explained by autism spectrum disorder, intellectual disability (intellectual developmental disorder), global developmental delay, or another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

NO DISCUSSION OF THIS DIAGNOSIS IN ADULTS!

65

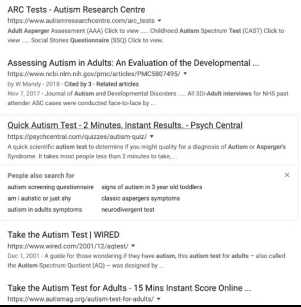
65

Google It! Conducting an Evaluation for ASD



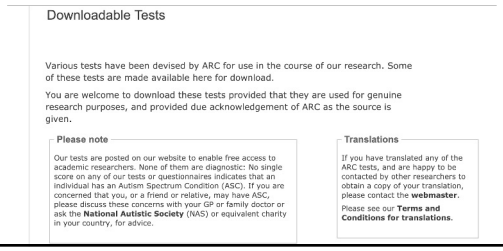
66

Google It! Conducting an Evaluation for ASD



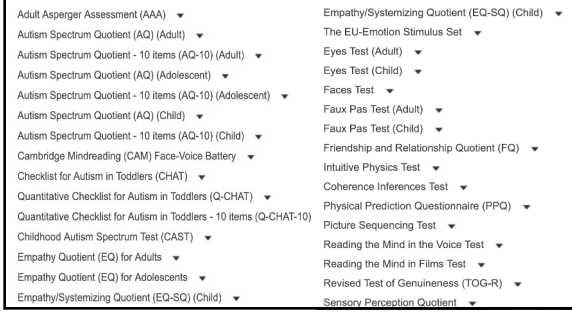
67

https://www.autismresearchcentre.com/arc_tests



68

https://www.autismresearchcentre.com/arc_tests



69

Cambridge Behavioural Scale

1. I can easily tell if someone else wants to enter a conversation.	strongly agree	slightly agree	slightly disagree	strongly disagree
2. I prefer animals to humans.	strongly agree	slightly agree	slightly disagree	strongly disagree
3. I try to keep up with the current trends and fashions.	strongly agree	slightly agree	slightly disagree	strongly disagree
4. I find it difficult to explain to others things that I understand easily, when they don't understand it first time.	strongly agree	slightly agree	slightly disagree	strongly disagree
5. I dream most nights.	strongly agree	slightly agree	slightly disagree	strongly disagree
6. I really enjoy caring for other people.	strongly agree	slightly agree	slightly disagree	strongly disagree
7. I try to solve my own problems rather than discussing them with others.	strongly agree	slightly agree	slightly disagree	strongly disagree
8. I find it hard to know what to do in a social situation.	strongly agree	slightly agree	slightly disagree	strongly disagree
9. I am at my best first thing in the morning.	strongly agree	slightly agree	slightly disagree	strongly disagree

70

Autism Spectrum Disorder as Reflected in the Autism Spectrum Rating Scales (Goldstein and Naglieri, 2009) Exploratory and Confirmatory Factor Analyses

71

Validity of the Factors

- Factor analysis is a valuable tool to understand how items group.
- But we also need to know if the items have validity, that is do they measure what they purport to measure?
- Discriminating individuals with ASD from the regular population is important.
- Discriminating individuals with ASD from those who are not in the regular population (e.g. they suffer from other conditions) but not ASD is equally important.

72

72

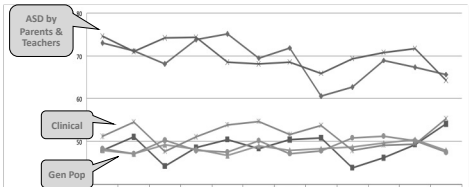
ASRS Profiles

- A scale like the ASRS should differentiate adults with ASD from the normal population.
- Comparison to regular individuals should demonstrate that those with ASD have high scores.
- Comparisons to other clinical groups should also show differences from those with ASD.
- Comparisons of the ASD to regular and other clinical samples provides an essential examination of validity.

73

73

ASRS Validity for ages 2-5

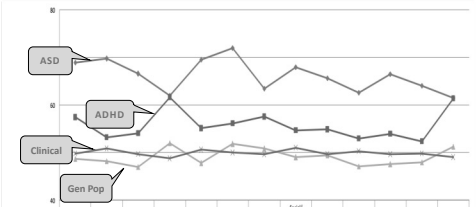


	Total Score	Social/Communication	Unusual Behaviors	DSM-IV-TR Scale	Peer Socialization	Adult Socialization	Social/Emotional Reciprocity	Atypical Language	Stereotypy	Behavioral Rigidity	Sensory Sensitivity	Attention/Self-Regulation
Parent ASD	73.0	71.2	68.1	73.8	75.1	69.5	71.9	60.6	62.7	69.0	67.3	65.7
Parent Other Clinical	48.0	51.1	44.3	48.6	50.5	48.4	50.4	50.9	43.9	46.2	49.3	54.1
Parent General Population	48.0	47.1	49.3	48.2	46.7	49.0	47.9	48.4	48.8	49.7	50.4	47.9
Teacher ASD	74.6	71.0	74.2	74.3	68.5	68.1	68.6	65.9	69.4	70.8	71.7	64.3
Teacher Other Clinical	51.2	54.6	47.7	51.1	53.9	54.7	51.7	53.8	47.9	49.2	49.4	55.4
Teacher General Population	48.4	47.1	50.3	47.9	47.5	50.2	47.2	47.8	50.9	51.3	50.2	47.5

74

74

ASRS Validity: Ages 6-18 Parents

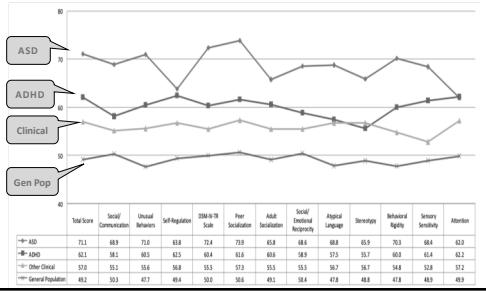


	Total Score	Social/Communication	Unusual Behaviors	Self-Regulation	DSM-IV-TR Scale	Peer Socialization	Adult Socialization	Social/Emotional Reciprocity	Atypical Language	Stereotypy	Behavioral Rigidity	Sensory Sensitivity	Attention
ASD	68.9	69.7	66.6	62.0	69.6	72.0	63.5	67.9	65.6	62.6	66.5	64.0	61.5
ADHD	57.4	53.2	54.1	61.7	55.1	56.1	57.5	54.6	54.8	53.0	53.9	52.3	61.4
Other Clinical	48.7	48.2	47.0	52.0	47.7	51.8	50.8	49.0	49.4	47.0	47.5	47.9	51.2
General Population	49.7	50.8	49.7	48.7	50.6	50.0	49.6	51.0	49.6	50.3	49.6	49.8	49.0

75

75

ASRS Validity: Ages 6-18 Teachers



	Total Score	Social/ Communication	Unusual Behaviors	Self-Regulation	DSM-IV-TR Scale	Peer Socialization	Adult Socialization	Social/ Emotional Reciprocity	Atypical Language	Stereotypy	Behavioral Rigidity	Sensory Sensitivity	Attention
ASD	71.1	68.9	71.0	63.8	72.4	73.9	65.8	68.6	68.8	65.9	70.3	68.4	62.0
ADHD	62.1	58.1	60.5	62.5	60.4	61.6	60.6	58.9	57.5	55.7	60.0	61.4	62.2
Other Clinical	57.0	55.1	55.6	56.8	55.5	57.3	55.5	55.5	56.7	56.7	54.8	52.8	57.2
General Population	49.2	50.3	47.7	49.4	50.0	50.6	49.1	50.4	47.8	48.8	47.8	48.9	49.9

76

76

The ASRS now has a DSM 5 scale as well as scoring options for non-verbal children.

77

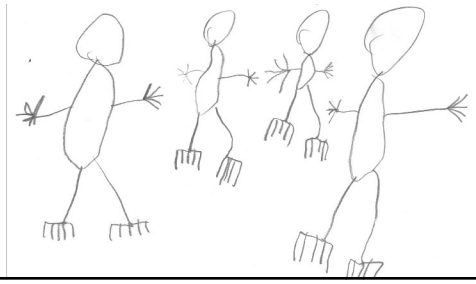
77

Meet Kevin

78

78

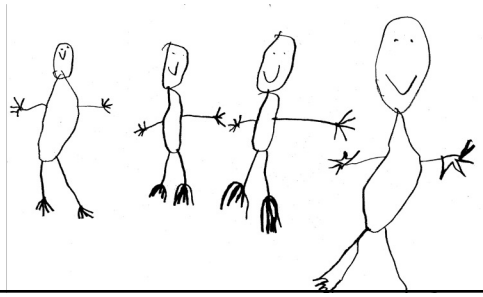
Kevin Draws His Family



79

79

Kevin Adds Faces



80

80

Pretend Play in Autism

- Limited, often absent
- When present usually characterized by: repetitive themes, rigidity, isolated acts, one-sided play, limited imagination.

81

Evaluating Compensatory Behaviors: Social Camouflage in ASD

- Social camouflaging is defined as the use of strategies by autistic people to minimize the challenges of autism during social situations (Lai et al. 2011).
- Social camouflage has recently been a focus of researchers, but has been recognized by clinicians as coping strategies. It is now recommended that clinicians evaluate masking or coping behaviors when assessing autism in the newly released 11th edition of the International Classification of Diseases (Zeldovich 2017).
- This phenomena may be a widespread in ASD, especially in intellectually strong individuals.

82

Social Camouflage in ASD

- Social camouflaging reflects an explicit effort to 'mask' or 'compensate' for autistic characteristics; and to use conscious techniques to minimize an autistic behavioral presentation (Hull et al. 2017; Lai et al. 2017; Livingston and Happé 2017).
- Examples of camouflaging behaviors described in the current literature include as example: forcing oneself to make eye contact during a social interaction; pretending that one is doing so by looking at the space between someone's eyes or at the tip of their nose; or using working memory strategies to develop a list of appropriate topics for conversation.

83

Social Camouflage in ASD: Unanswered Questions

- Do autistic females camouflage more than males, and does this partly account for gender disparities in the rate and timing of diagnosis (Begeer et al. 2013; Loomes et al. 2017)?
- What is the relationship between camouflaging and mental health outcomes?
- How should camouflaging be accurately measured? Is a discrepancy method sufficient to assess the the gap between how a person with ASD mediates their internal autistic status and their overt behavior (external autistic presentation)?

84

Measuring Social Camouflage

Livingston and Happé (2017) suggest that camouflaging is a component of social compensation.

The "processes contributing to improved behavioral presentation of a neurodevelopmental disorder such as ASD, despite persisting core deficit(s) at cognitive and/or neurobiological levels".

As such they should be measured at the behavioral, cognitive, and even neurobiological levels.

85

Performance on tests of cognition relevant to autism, or scores on self-reported measures of autism traits can only serve as a proxy measure of internal autistic status.

86

Measuring Social Camouflage

- An alternative to the discrepancy approaches is one based on observational recognition of camouflaging; measuring the specific behaviors and experiences which represent camouflaging.
- Observational/reflective methods circumvent the limitation of being unable to measure an individual's internal autistic state. Camouflaging can be measured consistently and compared between individuals, and behaviors can be identified regardless of how successful they may be.
- This approach to camouflaging has the advantage of allowing for variation in camouflaging behaviors and their success. Techniques learned and used in some situations may not be successful in others.
- An individual's overall camouflaging skill may partly depend on their flexibility/generalizable capacity to adapt to different situations.

87

Measuring Social Camouflage

- Both the discrepancy and observational/reflective approaches offer ways to define and measure camouflaging in ASD.
- All the methods used or suggested have their own strengths and weaknesses, thus combining multiple methods may allow for greater accuracy in measuring and identifying a complex phenomenon such as camouflaging.

88

Camouflaging Autistic Traits Questionnaire (CAT-Q)

- Compensation
- Masking
- Assimilation

Laura Hull , William Mandy, Meng-Chuan Lai, Simon Baron-Cohen, Carrie Allison,Paula Smith & K. V. Petrides. Development and Validation of the Camouflaging Autistic Traits Questionnaire (CAT-Q) *Journal of Autism and Developmental Disorders.* doi.org/10.1007/s10803-018-3792-6

89

Social Camouflage: Compensation

- Copy others facial expression or body language.
- Learn social clues from media.
- Watch others to understand social skills.
- Repeat others phrasing and tone.
- Use script in social situations.
- Explicitly research the rules of social engagement.

90

Social Camouflage: Masking

- Monitor face and body to appear relaxed.
- Adjust face and body to appear relaxed.
- Monitor face and body to appear interested in others.
- Adjust face and body to appear interested in others.
- Pressured to make eye contact.
- Think about impression made on others.
- Aware of impression made on others.

91

Social Camouflage: Assimilation

- Feel a need to put on an act.
- Conversation with others is not natural.
- Avoid interacting with others in social situations.
- ”Performing” e.g. not being oneself in social situations
- Force self to interact with others.
- Pretending to be normal.
- Need support of others to socialize.
- Cannot be oneself while socializing.

92

ASRS Reliability

93

93

ASRS Reliability Ages 2-5 Parents & Teachers (or caregivers)

Scale		Parent Ratings			Teacher Ratings		
		Normative Sample (*N* = 320)	Clinical Sample (*N* = 243)	Average	Normative Sample (*N* = 320)	Clinical Sample (*N* = 249)	Average
Total Score		.95	.98	.97	.94	.99	.97
ASRS Scales	Social/ Communication	.94	.98	.96	.95	.98	.97
	Unusual Behaviors	.91	.96	.94	.85	.97	.92
DSM-IV-TR Scale		.91	.97	.94	.91	.98	.95
Treatment Scales	Peer Socialization	.77	.96	.89	.85	.95	.91
	Adult Socialization	.67	.85	.76	.78	.85	.81
	Social/Emotional Reciprocity	.83	.96	.91	.88	.96	.93
	Atypical Language	.71	.77	.74	.59	.79	.69
	Stereotypy	.75	.86	.80	.67	.86	.77
	Behavioral Rigidity	.85	.94	.90	.82	.95	.90
	Sensory Sensitivity	.71	.89	.81	.59	.90	.77
	Attention/Self-Regulation	.83	.88	.85	.83	.89	.86

94

94

ASRS Reliability Ages 6-18 : Parents

Scale		6 to 11 Years			12 to 18 Years		
		Normative Sample (*N* = 480)	Clinical Sample (*N* = 230)	Average	Normative Sample (*N* = 480)	Clinical Sample (*N* = 185)	Average
Total Score		.97	.98	.97	.97	.97	.97
ASRS Scales	Social/ Communication	.91	.97	.94	.92	.95	.93
	Unusual Behaviors	.94	.95	.94	.93	.95	.94
	Self-Regulation	.92	.92	.92	.93	.93	.93
DSM-IV-TR Scale		.95	.96	.96	.94	.96	.95
Treatment Scales	Peer Socialization	.84	.92	.87	.84	.91	.86
	Adult Socialization	.77	.77	.77	.79	.77	.78
	Social/Emotional Reciprocity	.85	.94	.89	.88	.91	.89
	Atypical Language	.81	.85	.82	.82	.85	.83
	Stereotypy	.79	.78	.79	.77	.79	.78
	Behavioral Rigidity	.89	.92	.90	.86	.94	.89
	Sensory Sensitivity	.79	.85	.81	.77	.82	.79
	Attention	.90	.91	.90	.89	.91	.90

95

95

ASRS Reliability Ages 6-18 : Teachers

Scale		6 to 11 Years			12 to 18 Years		
		Normative Sample (*N* = 480)	Clinical Sample (*N* = 167)	Average	Normative Sample (*N* = 480)	Clinical Sample (*N* = 325)	Average
Total Score		.97	.98	.97	.97	.97	.97
ASRS Scales	Social/ Communication	.93	.96	.94	.92	.96	.94
	Unusual Behaviors	.93	.95	.94	.94	.95	.94
	Self-Regulation	.94	.93	.94	.93	.91	.92
DSM-IV-TR Scale		.94	.96	.95	.94	.96	.95
Treatment Scales	Peer Socialization	.84	.90	.86	.83	.90	.86
	Adult Socialization	.80	.81	.80	.77	.77	.77
	Social/Emotional Reciprocity	.89	.92	.90	.89	.92	.90
	Atypical Language	.75	.87	.79	.80	.85	.82
	Stereotypy	.69	.77	.71	.72	.81	.76
	Behavioral Rigidity	.90	.93	.91	.90	.94	.92
	Sensory Sensitivity	.77	.87	.80	.84	.87	.85
	Attention	.92	.92	.92	.91	.92	.91

96

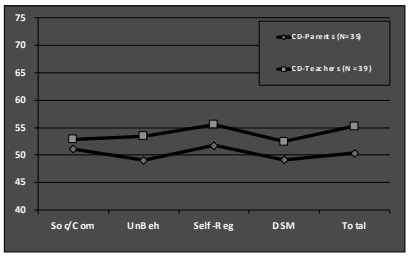
96

ASD vs Communication Disorders

97

97

ASD vs Communication Disorders



98

98

Race / Ethnic Differences

99

99

ASRS Race Ethnic Differences

Table 8.26. Differences between Race/Ethnic Groups: ASRS (6–18 Years) Parent Ratings

Scale			African American	Hispanic	White	*d*-ratio: White - African American	*d*-ratio: White-Hispanic
Total Score		*M*	50.9	45.7	49.3	0.14	0.31
		SE	0.9	1.0	0.5		
		N	122	128	536		
ASRS Scales	Social/ Communication	*M*	50.8	46.4	49.1	0.15	0.24
		SE	0.9	0.9	0.5		
		N	122	128	536		
	Unusual Behaviors	*M*	50.6	45.6	49.4	0.11	0.33
		SE	0.9	0.9	0.5		
		N	122	128	536		
	Self-Regulation	*M*	50.3	46.1	49.1	0.10	0.26
		SE	0.9	1.0	0.5		
		N	122	128	536		
DSM-IV-TR Scale		*M*	51.0	45.6	49.7	0.13	0.37
		SE	0.9	0.9	0.5		
		N	128	131	549		

100

100

Race Ethnic Differences Short Form

Table 9.12. Effect of Race/Ethnicity: ASRS Short Forms

Age	Rater		AA	HI	WH	*d*-ratio: AA - WH	*d*-ratio: WH-HI
2–5 Years	Parent	*M*	46.5	49.2	49.9	-0.34	0.06
		SE	1.4	1.7	0.8		
		N	52	57	172		
	Teacher/Childcare Provider	*M*	48.0	45.6	50.7	-0.18	0.34
		SE	1.7	1.9	1.1		
		N	47	48	195		
6–18 Years	Parent	*M*	50.6	46.2	49.6	0.09	0.29
		SE	0.9	0.9	0.5		
		N	133	135	560		
	Teacher	*M*	50.7	51.9	49.8	0.07	-0.16
		SE	0.9	0.9	0.6		
		N	132	152	521		

101

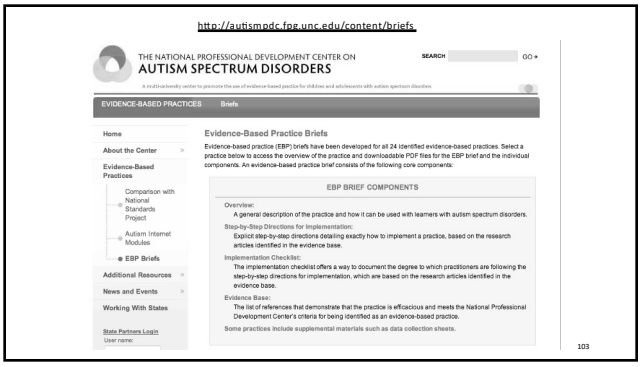
101

Intervention

- Despite strong claims no curative treatment has been studied vigorously.
- "In the absence of a definitive cure there are a thousand treatments" (Klin).
- Behavior modification, educational intervention and pharmacology have been studied.

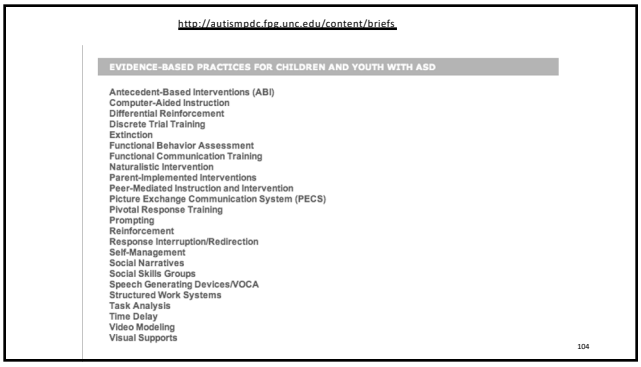
102

http://autismpdc.fpg.unc.edu/content/briefs



103

http://autismpdc.fpg.unc.edu/content/briefs



104

Considering Co-morbidity

- Considerable overlap exists between autism spectrum disorder (ASD) and mental health disorders.
- High rates of overlap are significant because they affect the nature and type of problems displayed by persons with ASD and how the disorders are assessed.
- ADHD, anxiety disorders and depression are among the disorders most commonly associated with ASD.
- Symptom presentation is similar whether ASD occurs alone or with other conditions.
- Multiple assessments after initial diagnosis of ASD are frequently necessary.
- ASD can be diagnosed very early, while symptoms of other disorders emerge at different points in human development.

105

Components of an Effective Treatment Program

- Structured behavioral treatment
- Parent involvement
- Treatment at an early age
- Intensive intervention
- Social skill development
- Focus on generalization of skills
- Appropriate school setting
- Medication?

106

Medications

- Symptom focused medications: stimulants for attention, anti-depressants for mood, anti-psychotics for "oddities".
- Condition focused medications?

107

New Drug
May Treat
ASD

Sci Transl Med 19 September 2012:
Vol. 4, Issue 152, p. 152ra127
Sci. Transl. Med. DOI: 10.1126/scitranslmed.3004214

RESEARCH ARTICLE

FRAGILE X SYNDROME

Effects of STX209 (Arbaclofen) on Neurobehavioral Function in Children and Adults with Fragile X Syndrome: A Randomized, Controlled, Phase 2 Trial

Elizabeth M. Berry-Kravis[1], David Hessl[2], Barbara Rathmell[3], Peter Zarevics[3], Maryann Cherubini[3], Karen Walton-Bowen[3], Yi Mu[2], Danh V. Nguyen[4], Joseph Gonzalez-Heydrich[5], Paul P. Wang[3,*], Randall L. Carpenter[3], Mark F. Bear[6] and Randi J. Hagerman[7]

+ Author Affiliations

*To whom correspondence should be addressed. E-mail: pwang@seasidetherapeutics.com

ABSTRACT

Research on animal models of **fragile X** syndrome suggests that STX209, a γ-aminobutyric acid type B (GABA$_B$) agonist, might improve neurobehavioral function in affected patients. We evaluated whether STX209 improves behavioral symptoms of **fragile X** syndrome in a randomized, double-blind, placebo-controlled crossover study in 63 subjects (55 male), ages 6 to 39 years, with a full mutation in the *FMR1* gene (>200 CGG triplet repeats). We found no difference from placebo on the primary endpoint, the Aberrant Behavior Checklist—Irritability (ABC-I) subscale. In the other analyses specified in the protocol, improvement was seen on the visual analog scale ratings of parent-nominated problem behaviors, with positive trends on multiple global measures. Post hoc analysis with the ABC—Social Avoidance scale, a newly validated scale for the assessment of **fragile X** syndrome, showed a significant beneficial treatment effect in the full study population. A post hoc subgroup of 27 subjects with more severe social impairment showed improvements on the Vineland II–Socialization raw score, on the ABC—Social Avoidance scale, and on all global measures. STX209 was well tolerated, with 8% incidences of sedation and of headache as the most frequent side effects. In this exploratory study, STX209 did not show a benefit on irritability in **fragile X** syndrome. Nonetheless, our results suggest that GABA$_B$ agonists have potential to improve social function and behavior in patients with **fragile X** syndrome.

108

Psychostimulants for ADHD-like symptoms in individuals with autism spectrum disorders.

Cortese S, Castelnau P, Morcillo C, Roux S, Bonnet-Brilhault F.

Institute for Pediatric Neuroscience, NYU Child Study Center, Langone Medical Center, 215 Lexington Avenue, 14th Floor, 10016 NY, USA. samuele.cortese@gmail.com.

Expert Rev Neurother. 2012 Apr;12(4):461-73.

We conducted a comprehensive review of studies assessing the efficacy and tolerability of psychostimulants for ADHD-like symptoms in individuals with autism spectrum disorder (encompassing autism disorder, Asperger's syndrome and pervasive developmental disorders not otherwise specified). PubMed, Ovid, EMBASE, Web of Science, ERIC and CINHAL were searched through 3 January 2012. From a pool of 348 potentially relevant references, 12 citations (11 studies) were retained as pertinent. Four of the included studies had a randomized controlled design. Most of the studies assessed methylphenidate immediate release. Despite inter-study heterogeneity, taken together, the results of the selected reports suggest that psychostimulants may be effective for ADHD-like symptoms in autism spectrum disorder individuals. The most common adverse events reported in the included trials were appetite reduction, sleep-onset difficulties, irritability and emotional outbursts. We discuss future directions in the field, including the need for trials assessing more ecological outcomes and combined treatment strategies tailored to the specific individual features.

109

109

Positive Effects of Methylphenidate on Social Communication and Self-Regulation in Children with Pervasive Developmental Disorders and Hyperactivity

Laudan B. Jahromi, Connie L. Kasari, James T. McCracken, Lisa S-Y. Lee, **et. al**.

Journal of Autism and Developmental Disorders, 2009)

110

Drugs that increase serotonin transmission may be useful in reducing interfering repetitive behaviors and aggression as well as improving social relatedness (few controlled studies).

111

Promoting Social Behavior With Oxytocin in High-Functioning Autism Spectrum Disorders

- Published (2/10) online in the Proceedings of the National Academy of Sciences.
- Oxytocin is a hormone known to promote mother-infant bonds.
- A French research group investigated the behavioral effects of oxytocin in 13 subjects with autism.
- Under oxytocin, children with ASD responded more strongly to others and exhibited more appropriate social behavior and affect, suggesting a therapeutic potential of oxytocin through its action on a core dimension of autism.

112

112

Oxytocin May Have Many Effects

113

113

Medication and Parent Training in Children With Pervasive Developmental Disorders and Serious Behavior Problems: Results From a Randomized Clinical Trial

MICHAELG. AMAN, PH.D., CHRISTOPHERJ. MCDOUGLE, M.D. et al.

Conclusions: Medication plus PT resulted in greater reduction of serious maladaptive behavior than Medication alone in children with PDDs, with a lower risperidone dose.

J. AM. ACAD. CHILD ADOLESC. PSYCHIATRY, 48:12, DECEMBER 2009J.

114

114

Comorbid ADHD and Anxiety Affect Social Skills Group Intervention Treatment Efficacy in Children With Autism Spectrum Disorders

Kevin M. Antshel, PhD, Carol Polacek, PhD, NP, Michele McMahon, CSW, Karen Dygert, NP, Laura Spenceley, MA, Lindsay Dygert, BS, Laura Miller, BA, Fatima Faisal

ABSTRACT: *Objective:* To assess the influence of psychiatric comorbidity on social skill treatment outcomes for children with autism spectrum disorders (ASDs). *Methods:* A community sample of 83 children (74 males, 9 females) with an ASD (mean age = 9.5 yr; SD = 1.2) and common comorbid disorders participated in 10-week social skills training groups. The first 5 weeks of the group focused on conversation skills and the second 5 weeks focused on social problem solving skills. A concurrent parent group was also included in the treatment. Social skills were assessed using the Social Skills Rating System. Ratings were completed by parents at pre- and posttreatment time periods. *Results:* Children with ASD and children with an ASD and comorbid anxiety disorder improved in their parent reported social skills. Children with ASD and comorbid attention deficit/hyperactivity disorder failed to improve. *Conclusion:* Psychiatric comorbidity affects social skill treatment gains in the ASD population.

J Dev Behav Pediatr 32:439–446, 2011) **Index terms:** autism spectrum, social skills, ADHD.

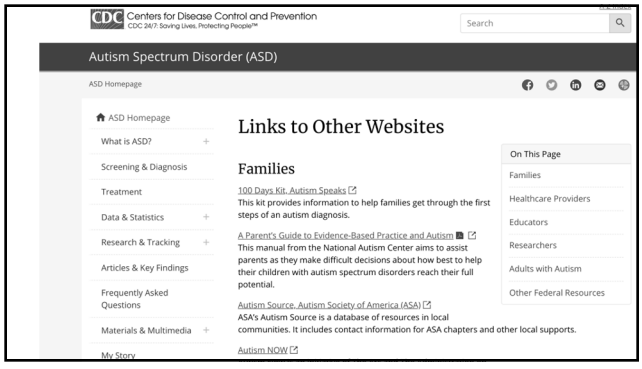
115

115

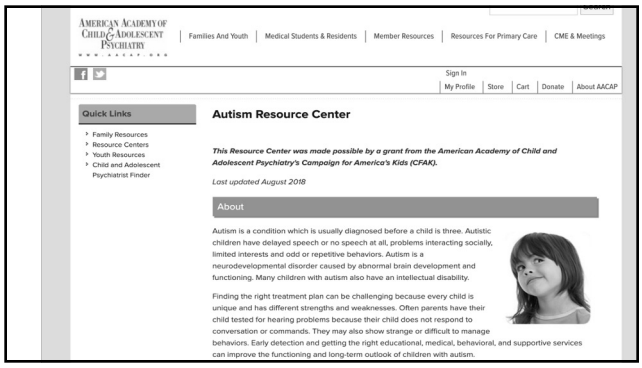
Some Possible Challenges to Counseling Youth With ASD

- Concrete thinkers
- Difficulty with humor
- Problems regulating affect
- Difficulty interpreting other's feelings
- Rule bound
- Diminished empathy
- Decreased desire to please others.

116



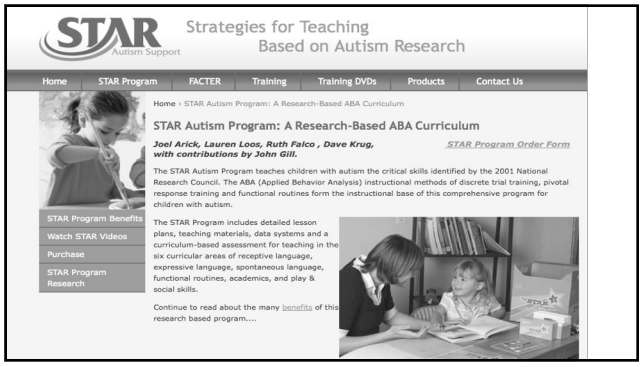
117


AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY
Families And Youth
Medical Students & Residents
Member Resources
Resources For Primary Care
CME & Meetings
Sign In
My Profile
Store
Cart
Donate
About AACAP
Quick Links
Family Resources
Resource Centers
Youth Resources
Child and Adolescent Psychiatrist Finder
Autism Resource Center
This Resource Center was made possible by a grant from the American Academy of Child and Adolescent Psychiatry's Campaign for America's Kids (CFAK).
Last updated August 2018
About
Autism is a condition which is usually diagnosed before a child is three. Autistic children have delayed speech or no speech at all, problems interacting socially, limited interests and odd or repetitive behaviors. Autism is a neurodevelopmental disorder caused by abnormal brain development and functioning. Many children with autism also have an intellectual disability.
Finding the right treatment plan can be challenging because every child is unique and has different strengths and weaknesses. Often parents have their child tested for hearing problems because their child does not respond to conversation or commands. They may also show strange or difficult to manage behaviors. Early detection and getting the right educational, medical, behavioral, and supportive services can improve the functioning and long-term outlook of children with autism.

118


AUTISM SOCIETY
SEARCH
Home
What is Autism?
Living with Autism
Get Involved
Public Policy
About Us
¿Qué es Autismo?
Donate
Resource Materials
Home / About the Autism Society / Publications / Resource Materials
Click on the image or title to download a document.
Important: The documents are in PDF format and you will need Adobe Reader to open and/or print them. You can download Adobe Reader for free at http://www.adobe.com/. Our Print on Demand service is currently unavailable. If you are interested in having any of the PDFs below printed you can download the document free of charge and take to a local printer or contact us for more information.
In 2006 the Autism Society launched Living with Autism which presents user-friendly information within four eye-catching pages. The series was developed to provide easy-to-understand, practical information related to the autism spectrum for a broad audience on a wide range of topics. The series will continually evolve, adding new pieces on a regular basis, and address topics across the spectrum and lifespan. Emphasis of all pieces in the series is on living successfully with autism, so articles will provide useful information, helpful tips and additional resources provided by those with expertise on the particular topic. The Living with Autism series is designed for individuals on the autism spectrum, their families, friends and concerned professionals.
Living With Autism

119


STAR Autism Support
Strategies for Teaching Based on Autism Research
Home
STAR Program
FACTER
Training
Training DVDs
Products
Contact Us
Home › STAR Autism Program: A Research-Based ABA Curriculum
STAR Autism Program: A Research-Based ABA Curriculum
Joel Arick, Lauren Loos, Ruth Falco , Dave Krug, with contributions by John Gill.
STAR Program Order Form
The STAR Autism Program teaches children with autism the critical skills identified by the 2001 National Research Council. The ABA (Applied Behavior Analysis) instructional methods of discrete trial training, pivotal response training and functional routines form the instructional base of this comprehensive program for children with autism.
STAR Program Benefits
Watch STAR Videos
Purchase
STAR Program Research
The STAR Program includes detailed lesson plans, teaching materials, data systems and a curriculum-based assessment for teaching in the six curricular areas of receptive language, expressive language, spontaneous language, functional routines, academics, and play & social skills.
Continue to read about the many benefits of this research based program....

120

The first randomized, controlled trial for comprehensive autism treatment for children as young as 18 months old.

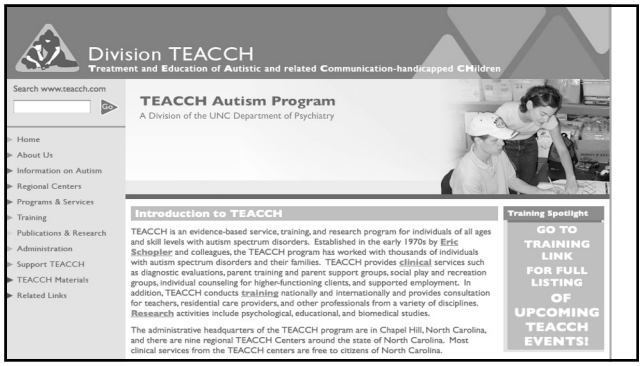
While certainly not a cure for the condition, the study did find that intense early treatment yields major improvements in IQ scores, language processing, and in the ability to manage everyday tasks essential for early childhood development and education.

Published in *Pediatrics* the University of Washington study was funded by the National Institute of Mental Health. It involved 48 children ages 18 to 30 months, half of whom were randomly assigned to receive the Early Start Denver Model, an intensive autism therapy protocol. The other half were assigned to a control group and received less intensive therapy.

After two years, those who participated in the Denver Model group had average IQ scores 17.6 points higher than the control group, putting them within the range of normal intelligence, while those in the other group gained just seven points, remaining in the zone of intellectual disability.

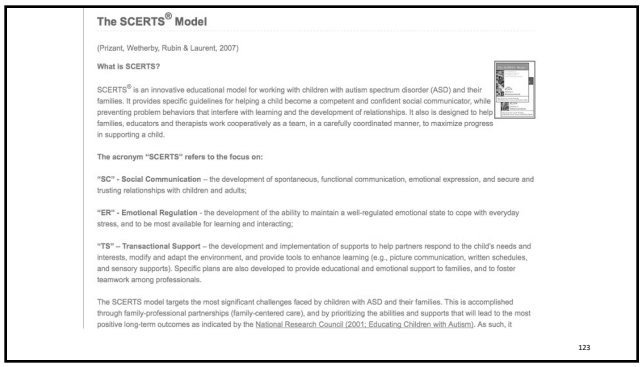
121

121



122

122

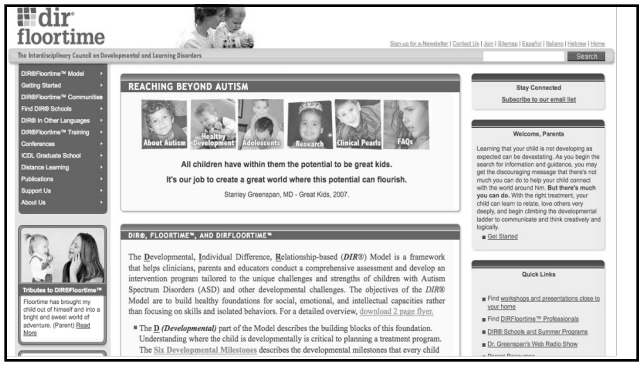


123

123


The Greenspan Floortime Approach
Learn Floortime from Dr. Stanley Greenspan
Register | Login
search this site...
Home
About Floortime
About Dr. Greenspan
For Parents »
For Professionals »
Testimonials
FAQ »
Contact Us
Floortime-Registration
Registration for the Greenspan Floortime Approach and workshops is now closed. The Assessment will continue to be available for sign up. (See the first column on the home page.) If you would like information regarding future courses, please fill out the contact information at the bottom of our home page under "Free Guide: Discover Your Child's Learning Style."...
Read More
Assess Your Child
Learn Floortime at
Additional

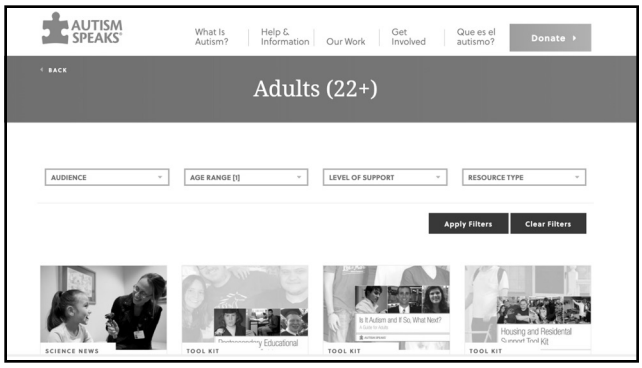
124


dir floortime
The Interdisciplinary Council on Developmental and Learning Disorders
Search
DIR®Floortime™ Model
Getting Started
DIR®Floortime™ Communities
Find DIR® Schools
DIR® In Other Languages
DIR®Floortime™ Training
Conferences
ICDL Graduate School
Distance Learning
Publications
Support Us
About Us
REACHING BEYOND AUTISM
About Autism
Healthy Development
Adolescents
Research
Clinical Pearls
FAQs
All children have within them the potential to be great kids.
It's our job to create a great world where this potential can flourish.
Stanley Greenspan, MD - Great Kids, 2007.
Tributes to DIR®Floortime™
Floortime has brought my child out of himself and into a bright and sweet world of adventure. (Parent) Read More
DIR®, FLOORTIME™, AND DIRFLOORTIME™
The Developmental, Individual Difference, Relationship-based (DIR®) Model is a framework that helps clinicians, parents and educators conduct a comprehensive assessment and develop an intervention program tailored to the unique challenges and strengths of children with Autism Spectrum Disorders (ASD) and other developmental challenges. The objectives of the DIR® Model are to build healthy foundations for social, emotional, and intellectual capacities rather than focusing on skills and isolated behaviors. For a detailed overview, download 2 page flyer.
The D (Developmental) part of the Model describes the building blocks of this foundation. Understanding where the child is developmentally is critical to planning a treatment program. The Six Developmental Milestones describes the developmental milestones that every child
Stay Connected
Subscribe to our email list
Welcome, Parents
Learning that your child is not developing as expected can be devastating. As you begin the search for information and guidance, you may get the discouraging message that there's not much you can do to help your child connect with the world around him. But there's much you can do. With the right treatment, your child can learn to relate, love others very deeply, and begin climbing the developmental ladder to communicate and think creatively and logically.
Get Started
Quick Links
Find workshops and presentations close to your home
Find DIRFloortime™ Professionals
DIR® Schools and Summer Programs
Dr. Greenspan's Web Radio Show

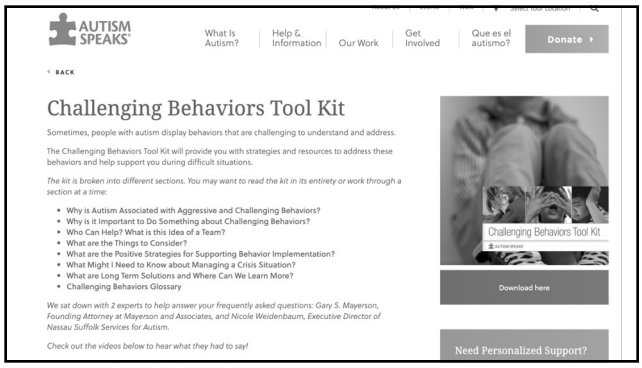
125


PLAY and LANGUAGE for AUTISTIC YOUNGSTERS™
THE PLAY PROJECT®
HOME
ABOUT
HOME CONSULTING
TRAINING
DVD
EVENTS
RESOURCES & LINKS
NEWS
CONTACT & REGISTER
Welcome! The P.L.A.Y. Project is a proven therapy program for children with autism. PLAY Project therapists train parents to help children connect, communicate and build relationships with others.
Professional Training
By doing what your child loves,
Upcoming Events

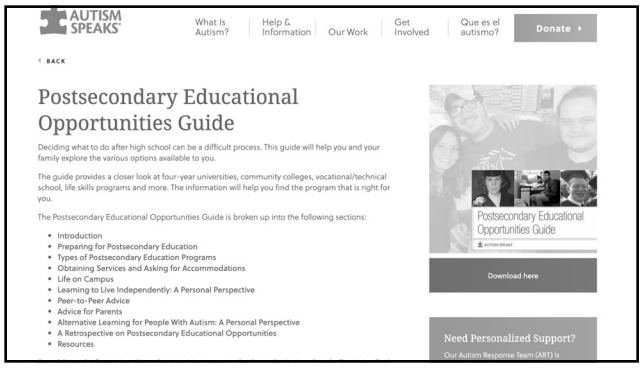
126


AUTISM SPEAKS
What Is Autism?
Help & Information
Our Work
Get Involved
Que es el autismo?
Donate
BACK
Adults (22+)
AUDIENCE
AGE RANGE [1]
LEVEL OF SUPPORT
RESOURCE TYPE
Apply Filters
Clear Filters
SCIENCE NEWS
TOOL KIT
TOOL KIT
TOOL KIT

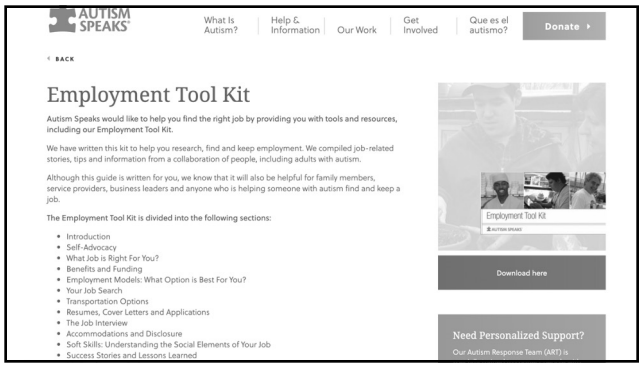
127


AUTISM SPEAKS
What Is Autism?
Help & Information
Our Work
Get Involved
Que es el autismo?
Donate
BACK
Challenging Behaviors Tool Kit
Sometimes, people with autism display behaviors that are challenging to understand and address.
The Challenging Behaviors Tool Kit will provide you with strategies and resources to address these behaviors and help support you during difficult situations.
The kit is broken into different sections. You may want to read the kit in its entirety or work through a section at a time:
Why is Autism Associated with Aggressive and Challenging Behaviors?
Why is it Important to Do Something about Challenging Behaviors?
Who Can Help? What is this Idea of a Team?
What are the Things to Consider?
What are the Positive Strategies for Supporting Behavior Implementation?
What Might I Need to Know about Managing a Crisis Situation?
What are Long Term Solutions and Where Can We Learn More?
Challenging Behaviors Glossary
We sat down with 2 experts to help answer your frequently asked questions: Gary S. Mayerson, Founding Attorney at Mayerson and Associates, and Nicole Weidenbaum, Executive Director of Nassau Suffolk Services for Autism.
Check out the videos below to hear what they had to say!
Challenging Behaviors Tool Kit
Download here
Need Personalized Support?

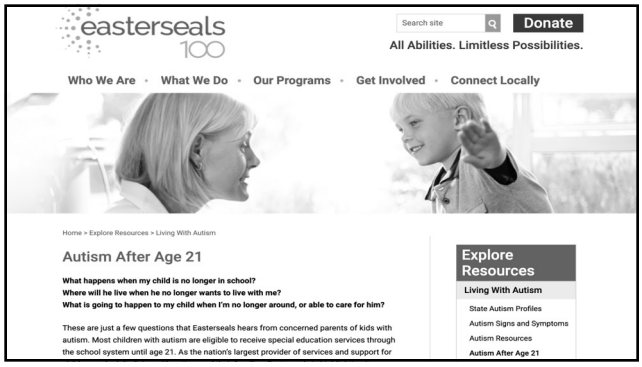
128


AUTISM SPEAKS
What Is Autism?
Help & Information
Our Work
Get Involved
Que es el autismo?
Donate
BACK
Postsecondary Educational Opportunities Guide
Deciding what to do after high school can be a difficult process. This guide will help you and your family explore the various options available to you.
The guide provides a closer look at four-year universities, community colleges, vocational/technical school, life skills programs and more. The information will help you find the program that is right for you.
The Postsecondary Educational Opportunities Guide is broken up into the following sections:
Introduction
Preparing for Postsecondary Education
Types of Postsecondary Education Programs
Obtaining Services and Asking for Accommodations
Life on Campus
Learning to Live Independently: A Personal Perspective
Peer-to-Peer Advice
Advice for Parents
Alternative Learning for People With Autism: A Personal Perspective
A Retrospective on Postsecondary Educational Opportunities
Resources
Postsecondary Educational Opportunities Guide
Download here
Need Personalized Support?

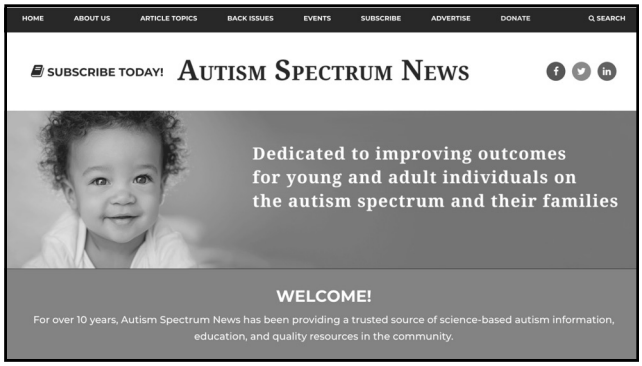
129


AUTISM SPEAKS
What Is Autism?
Help & Information
Our Work
Get Involved
Que es el autismo?
Donate
BACK
Employment Tool Kit
Autism Speaks would like to help you find the right job by providing you with tools and resources, including our Employment Tool Kit.
We have written this kit to help you research, find and keep employment. We compiled job-related stories, tips and information from a collaboration of people, including adults with autism.
Although this guide is written for you, we know that it will also be helpful for family members, service providers, business leaders and anyone who is helping someone with autism find and keep a job.
The Employment Tool Kit is divided into the following sections:
Introduction
Self-Advocacy
What Job is Right For You?
Benefits and Funding
Employment Models: What Option is Best For You?
Your Job Search
Transportation Options
Resumes, Cover Letters and Applications
The Job Interview
Accommodations and Disclosure
Soft Skills: Understanding the Social Elements of Your Job
Success Stories and Lessons Learned
Employment Tool Kit
Download here
Need Personalized Support?
Our Autism Response Team (ART) is

130


easterseals
100
Search site
Donate
All Abilities. Limitless Possibilities.
Who We Are
What We Do
Our Programs
Get Involved
Connect Locally
Home > Explore Resources > Living With Autism
Autism After Age 21
What happens when my child is no longer in school?
Where will he live when he no longer wants to live with me?
What is going to happen to my child when I'm no longer around, or able to care for him?
These are just a few questions that Easterseals hears from concerned parents of kids with autism. Most children with autism are eligible to receive special education services through the school system until age 21. As the nation's largest provider of services and support for
Explore Resources
Living With Autism
State Autism Profiles
Autism Signs and Symptoms
Autism Resources
Autism After Age 21

131


HOME
ABOUT US
ARTICLE TOPICS
BACK ISSUES
EVENTS
SUBSCRIBE
ADVERTISE
DONATE
SEARCH
SUBSCRIBE TODAY!
AUTISM SPECTRUM NEWS
Dedicated to improving outcomes for young and adult individuals on the autism spectrum and their families
WELCOME!
For over 10 years, Autism Spectrum News has been providing a trusted source of science-based autism information, education, and quality resources in the community.

132

The "Prime Directive" is Independence

- Reduce reliance on prompts.
- Help individual's predict and control. environment and behavior.
- Increase self-esteem and self-efficacy.
- Develop independence through a "learning to swim" mindset.

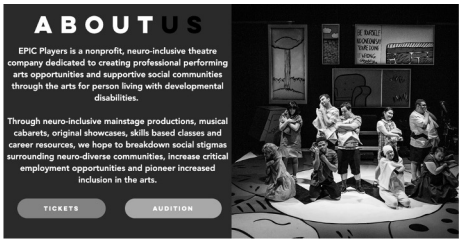
133

Theater as a Medium to Develop Social Skills

- Theater arts offer an opportunity for individuals with ASD to venture into the community in a win-win relationship.
- EPIC's performances help the general community better understand the nature of having ASD.
- At the same time, actors with ASD have the opportunity to interact in a medium that we believe will foster not only the development of self-esteem, but appropriate social interaction—the latter very clearly being the primary hurdle to successful adult transition for those with ASD.
- EPIC hopes to quantify our initial experiences of the benefits of theater for those with ASD through a long-term, qualitative study measuring the associative effects of theater arts, training on social skills, sense of purpose and independence in daily life activities.

134

EPIC Players



135

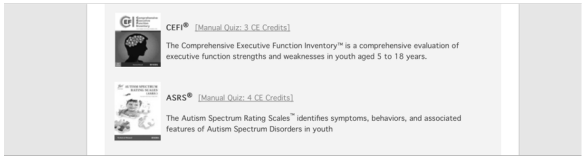
Devin Teichert
Song of Myself
December 16, 2008

Were They but There at Night

There is a bolder field where every stone
Is a glazed, glittering gem, like stars fallen from the sky
All except one, a plain grey rock alone in the center
Feeling excluded and shunned
People come, tourists, painters, photographers, collectors
To view each shining bolder, a pleasure to the beholder
Ooh! Ahh! Look at this one! Come quick!
Pockets bulge with fragments and paint cans run dry
But the grey rock remains ignored
An ugly blotch on a sweeping mural
The sun sets, everyone leaves
And they miss the centerpiece of the field
For when night falls, the grey rock in the center

136

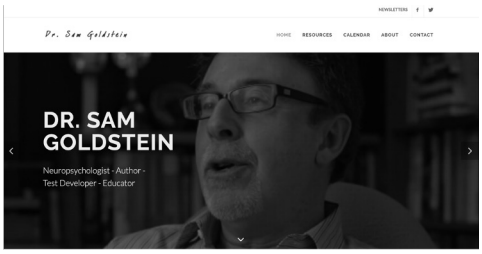
Continuing Education



137

137

www.samgoldstein.com



138


Questions?
ISPA
Coimbra • 2025
www.samgoldstein.com
info@samgoldstein.com
@drsamgoldstein
@doctorsamgoldstein
@CommonSenseScience
TEDx: https://www.youtube.com/watch?v=isfw8JJ-eWM

139