

Autism Assessment

Checklist for Autism Spectrum Disorder

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Checklist for Autism Spectrum Disorder

- Problems with social interaction
- Perseveration
- Somatosensory disturbance
- Atypical communication and development
- Mood disturbance
- Problems with attention and safety

Use of Checklist for Autism Spectrum Disorder to Diagnose Autism

- Presence of ½ (15) or more symptoms in the past or currently, including at least 1 from each of the first 4 categories
- As indicated by information from
 - parent interview
 - clinical observation
 - teacher or daycare report

Checklist for Autism Spectrum Disorder Validity

Tryon, Mayes, Rhodes, & Waldo, 2006

All children with clinical diagnoses of autism or Asperger's disorder scored in the autistic range and all typical children scored in the normal range

Mayes & Calhoun, 2004

Children with low functioning autism and high functioning autism/Asperger's disorder all scored in the autistic range

Mayes, Calhoun, & Crites, 2001

100% diagnostic agreement between psychologist using the Checklist and psychiatrist using DSM-IV criteria

Autism Assessment

Checklist for Autism Spectrum Disorder

- One spectrum, one instrument
- Norms for 1-16 years, all IQ levels
- Free online <http://psychiatry.hmc.psu.edu>
- Simple and brief
- Requires no test materials
- Covers all core and associated symptoms of autism spectrum disorder

Studies Fail to Support Asperger's Disorder as Distinct from High Functioning Autism

Children with clinical diagnoses of Asperger's disorder actually meet DSM-IV criteria for autism

- Eisenmajer et al., 1996
- Ghaziuddin et al., 1992
- Howlin, 2003
- Manjiviona & Prior, 1995
- Mayes et al., 2001
- Miller & Ozonoff, 1997
- Szatmari et al., 1995
- Tryon et al., 2006

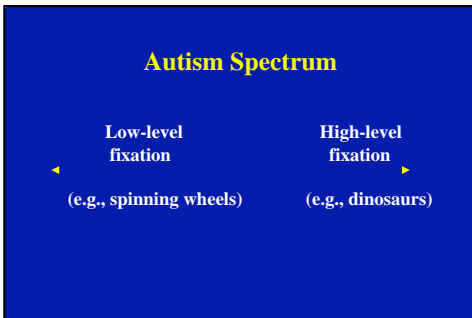
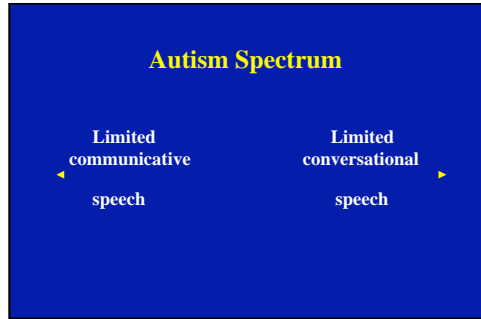
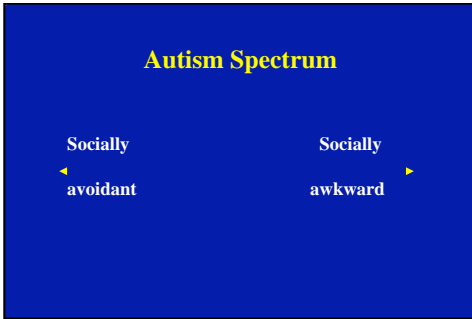
Asperger's Disorder is High Functioning Autism

- Attwood, 1998
- Eisenmajer et al., 1996
- Frith, 2004
- Macintosh & Dissanayake, 2004
- Manjiviona & Prior, 1995
- Miller & Ozonoff, 2000
- Myhr, 1998
- Ozonoff et al., 2000
- Prior et al., 1998
- Schopler, 1998
- Wing, 1998

Diagnostic Reliability

- High diagnostic agreement
 - “autism spectrum disorder”
- Poor diagnostic agreement
 - Autistic disorder
 - Asperger's disorder
 - Pervasive developmental disorder-NOS
 - Disintegrative disorder
 - Rett's disorder

Autism Assessment



- Checklist for Autism Spectrum Disorder: Norms (N=630)**
- Low functioning autism
Mean Checklist score = 23
Range = 15-30
 - High functioning autism/Asperger's disorder
Mean Checklist score = 21
Range = 15-29

Autism Assessment

Validity Study Instruments

Mayes et al. (2009) *Journal of Autism and Developmental Disorders*

- Checklist for Autism Spectrum Disorder
Low functioning autism and high functioning autism/Asperger's disorder
- Childhood Autism Rating Scale (CARS)
Low functioning autism
- Gilliam Asperger's Disorder Scale (GADS)
Asperger's disorder

Validity Study Sample

N = 520 children 1 to 16 years
190 Low functioning autism
190 High functioning autism/Asperger's
76 ADHD
64 Typical

Diagnostic Accuracy: Percent of Children at or above Cutpoint

	Checklist	CARS	GADS
Clinician			
Low functioning autism	100%	97%	88%
High functioning/Asperger's	99%	75%	92%
ADHD	0%	0%	4%
Parent			
Low functioning autism	94%	89%	72%
High functioning/Asperger's	87%	46%	74%
ADHD	11%	6%	19%
Typical	0%	0%	0%

Percent Agreement on Diagnosis (Autism Versus No Autism) by Clinicians

Low functioning autism and ADHD sample
98% agreement between Checklist and CARS
High functioning autism/Asperger's and ADHD
94% agreement between Checklist and GADS

Autism Assessment

Interrater Agreement between Clinicians and Parents

	Checklist	CARS	GADS
Correlation	.93	.87	.76
Percent agreement on diagnosis	90%	90%	84%

Checklist Means and Ranges for Each Diagnostic Group

	Mean	Range
Clinician scores		
Low functioning autism	23	15-30
HFA/Asperger's	21	14-30
ADHD	6	0-14
Parent scores		
Low functioning autism	23	14-30
HFA/Asperger's	20	12-30
ADHD	9	0-20
Typical	1	0-7

Research Study Conclusions

Checklist for Autism Spectrum Disorder

Valid in identifying low functioning autism and high functioning autism/Asperger's disorder

Childhood Autism Rating Scale (CARS)

Valid in identifying low functioning autism, but many children who have autism and normal intelligence are missed

Gilliam Asperger's Disorder Scale (GADS)

Valid in identifying high functioning autism/Asperger's, but most children with low functioning autism are incorrectly classified as having Asperger's disorder