Profiles of Children with ASD who Developed Empathy, Creativity, and Abstract Thinking, and Outstanding Social Skills

New Data from the Ongoing DIR®/Floortime™ Study
Long Term Follow Up Study
Preliminary Report
Eligibility Criteria

- Children 10 years and older who were diagnosed with ASD under 4 years old and have had outstanding outcomes after comprehensive intensive treatment, reported by parents, following the DIR®/Floortime™ model.
Social Communication Questionnaire (SCQ)
Michael Rutter, M.D., FRS, Anthony Bailey, M.D., and Catherine Lord, Ph.D.

• Evaluates communication skills and social functioning in children who may have autism or autism spectrum disorders - composed of just 40 yes-or-no questions.

• SCQ content parallels that of the ADI-R, and the agreement between SCQ and ADI-R scores is high and substantially unaffected by age, gender, language level and performance IQ. This indicates that the SCQ is a valid screener, providing a reasonable picture of symptom severity.

• *Lifetime and Current scores*
SCQ Score Differences Between Lifetime and Current

A score of 15 represents the cut off for ASD.

Mean for the General Population

Subject's Age in Years and Months at Assessment

Current

Lifetime
Social Responsiveness Scale

by John Constantino, MD

- Distinguishes autism spectrum conditions from other child psychiatric conditions by identifying presence and extent of autistic social impairment.
- The SRS provides a clear picture of a child's social impairments, assessing social awareness, social information processing, capacity for reciprocal social communication, social anxiety/avoidance, and autistic preoccupations and traits.
- The SRS measures impairment on a quantitative scale across a wide range of severity—which is consistent with recent research indicating that autism is best conceptualized as a spectrum condition rather than an all-or-nothing diagnosis.
Social Responsiveness Scale (SRS) Scores

The Social Responsiveness Scale (SRS) is a measure used to assess social responsiveness in individuals. The scores are categorized into different ranges:

- **Severe Range**: Scores above 100 indicate severe social deficits.
- **Mild Range**: Scores between 71 and 80 indicate mild social deficits.
- **Normal Range**: Scores between 37 and 52 indicate normal social responsiveness.

The chart shows the distribution of SRS scores for various subjects.
BASC-2

- Behavior Assessment System for Children
  - By Cecil R. Reynolds & Randy W. Kamphaus
  - parent and child self-reports
BASC-2 Parent Report

- **Adaptive Scale**
  - Social Skills
  - Leadership
  - Activities of Daily Life
  - Functional Communication

- **Clinical Scale**
  - *Internalizing Problems*
    - Depression
    - Anxiety
  - *Externalizing Problems*
    - Hyperactivity
    - Aggression
    - Conduct Problems
  - *Behavioral Symptoms*
    - Attention Problems
    - Withdrawal
    - Atypicality
BASC-2 Parent Rating Adaptive Scales

T-Scores

Average Range for the General Population

At Risk Range

Clinically Significant Range

Subjects
BASC-2 Parent Rating for Social Skills and Leadership

T-Scores

Average Range for the General Population

At Risk Range

Clinically Significant Range

Subjects

Social skills  Leadership
BASC-2 Parent Rating for Activities of Daily Life and Functional Communication

The graph illustrates the T-Scores for activities of daily life and functional communication. The data points are color-coded to indicate different ranges:
- Functional communication: 
- Activities of daily life:

- Average Range for the General Population
- At Risk Range
- Clinically Significant Range
BASC-2 Parent Rating for Externalizing Problems

Subjects

- Hyperactivity
- Aggression
- Conduct Problems

T-Scores

- Clinically Significant Range
- At Risk Range
- Average Range for the General Population
BASC-2 Parent Rating for Behavioral Symptoms

T-Scores

Subjects

- Attention Problems
- Withdrawal
- Atypicality

Clinically Significant Range
At Risk Range
Average Range for the General Population
BASC-2 Child Self Report

- **Adaptive Scale**
  - Personal Adjustment
    - Self-reliance
    - Self-esteem
    - Interpersonal relations
    - Relations with parents

- **Clinical Scale**
  - School Problems
    - Attitude to school
    - Attitude to teachers
  - Internalizing Problems
    - Sense of inadequacy
    - Atypicality
    - Depression
    - Locus of control
    - Anxiety
    - Social stress
  - Inattention/Hyperactivity
    - Attention problems
    - Hyperactivity
BASC-2 Child Self-Report for Self-Reliance and Self-Esteem

T-Scores

Average Range for the General Population
At Risk Range
Clinically Significant Range

Subjects

Self-reliance  Self-esteem
BASC-2 Child Self-Report for Relations with Parents and Interpersonal Relations

Subjects

- Interpersonal relationships
- Relations with parents

Average Range for the General Population
At Risk Range
Clinically Significant Range
BASC-2 Child Self-Report Clinical Scales

T-Scores

Subjects

- School Problems
- Internalizing Problems
- Inattention/ Hyperactivity
BASC-2 Child Self-Report for School Problems

- Clinically Significant Range
- At Risk Range
- Average Range for the General Population

T-Scores

Subjects

- Attitude to teachers
- Attitude to school
BASC-2 Child Self-Report for Depression and Locus of Control

Clinically Significant Range
At Risk Range
Average Range for the General Population

T-Scores

Depression
Locus of Control

Subjects
Phone Interview: Part 1

Current Academic & Social Functioning

Sample: 17 males, 1 female
Current Academic Functioning

- Over half started Kindergarten 1 year late
- 94% (17/18) currently in mainstream education
- 55% attend public school; 45% private
- 2 participants currently in college
- 77% doing “excellent” in school
Academic Achievements...

- Received prize for highest grade in physics
- Lead role in school play
- Straight A student
- Published poem
- Honors English
- Early SAT & eligible for gifted courses at college
Phone Interview: Part 2

Therapies

Sample: 22 males, 1 female
<table>
<thead>
<tr>
<th>THERAPIES USED</th>
<th>% Used</th>
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<tbody>
<tr>
<td>FLOORTIME</td>
<td>100.00%</td>
</tr>
<tr>
<td>SPEECH &amp; LANGUAGE</td>
<td>100.00%</td>
</tr>
<tr>
<td>OT/Sensory Motor</td>
<td>100.00%</td>
</tr>
<tr>
<td>Nutritional Therapy</td>
<td>80.00%</td>
</tr>
<tr>
<td>Auditory Training</td>
<td>78.95%</td>
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<tr>
<td>Family Counseling</td>
<td>76.47%</td>
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<tr>
<td>Other</td>
<td>73.33%</td>
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<tr>
<td>Visual - Spatial</td>
<td>63.16%</td>
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<tr>
<td>Problem Solving Activities</td>
<td>52.94%</td>
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<tr>
<td>Social Skills Groups</td>
<td>50.00%</td>
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<tr>
<td>Interactive Metronome</td>
<td>45.00%</td>
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<tr>
<td>Behavioral Therapies</td>
<td>38.89%</td>
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<tr>
<td>Psychotherapy</td>
<td>35.00%</td>
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<tr>
<td>Biomedical Interventions</td>
<td>31.58%</td>
</tr>
</tbody>
</table>
Phone Interview: Part 3

Lessons Learned

Sample: 17 males, 1 female
Top 3 Most Helpful Therapies

Graph shows how many times each therapy was ranked in top 3