

Social Skills of Children with Autism: Parent and Teacher Congruence

Birdwhistell, J. L., M.S., Murphy, M., M.S., & Ruble, L. A., Ph.D.
University of Kentucky
Department of Educational, School, and Counseling Psychology

Abstract

Assessment of social skills is critical for identifying young children with autism early and planning effective and personalized interventions. What is less clear is the necessity of multiple informants for intervention planning. The agreement between parent and teacher report of social skills of young children with autism was evaluated. Analyses revealed low to moderate agreement between parent and teacher report. These findings support the need for multiple informants for treatment planning. Such information helps to inform interventions that are personalized to the child.

Background Information

- Peer interaction and social competence are pivotal skills that set the foundation for the acquisition of other abilities (Strain & Danko, 1995).
- Research is mixed on how much agreement exists between different raters of social skills. A strong correlation was found between multiple informants on the Social Responsiveness Scale (SRS) between parent and teacher reports (Constantino et al., 2003).
- Other research has found only moderate agreement between parents and teachers ratings of social skills on the TRIAD Social Skills Assessment (Murray et al., 2009).
- Low agreement between different raters suggests a need for multiple cross-informants in order to construct a holistic picture of a child's skills across environments (Murray, Ruble, Willis, & Molloy, 2009).
- Research suggests that accurate social skills measurement necessitates the use of multiple informants to ensure that a holistic representation of the child's social skills is obtained in order to best inform intervention planning (Murray et al., 2009).

Purpose

- The purpose of this study is to extend research to a younger population (3 to 8 year olds) and examine parent and teacher agreement on ratings of social skills using the Early Childhood Social Skills Survey (Ruble & Dalrymple, 2005).

Research Hypothesis

- It was hypothesized that there will be low to moderate agreement between parent and teacher reports of social skills of young children with autism.

Method

- Participants included 47 children with autism ranging in age from 2 years 5 months to 8 years ($M_{age} = 5$ years).
- Approximately 89% of the participants were male.

Measure:

Early Childhood Social Skills Survey (ECSSS).

- This measure utilizes parent and teacher ratings of the quality of social skills of children with autism in their interactions with adults and children. The scale includes 16 questions scored on a Likert scale from 1 (not very well) to 4 (very well) for items representing initiating interactions (4), maintaining interactions (7), and responding to initiations of others (5).

Procedures:

- Data were obtained from a combination of two previous datasets – one from a clinical population and the other from a research study population.
- The ECSSS was completed by both the child's primary caregiver and teacher.

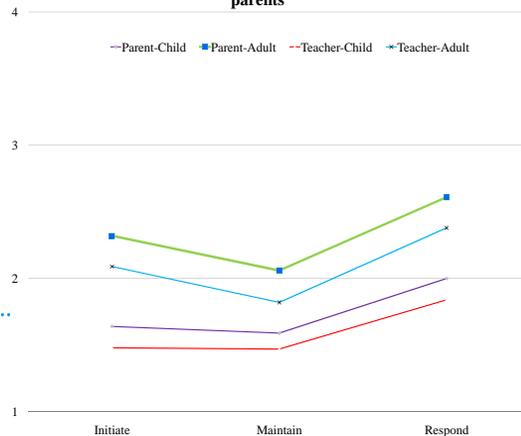
Data Analysis:

- Pearson Product Correlations were used to examine the agreement between parent and teacher report on each of the three social subscales.
- Weighted kappa analyses to examine the agreement between parent and teacher report on an item-by-item basis.

Results

- A Chronbach's alpha of 0.95 for both parent and teacher responses was calculated.
- Mean subscale scores for parent and teacher reports are provided in Figure 1.

Figure 1. Mean subscale scores reported by teacher and parents



- Correlations between parent and teacher report on the subscales were found to be weak ($r = 0.1$ to 0.3) to moderate ($r = 0.3$ to 0.5).
- Correlations based on ratings of the child's behavior with other children were higher compared to ratings of behavior with adults.
- With the exception of maintaining interactions with adults, correlations between parent and teacher report on each of the subscales reached statistical significance at $p < 0.05$.
- The kappa coefficient was uniformly low for all items, indicating poor agreement between parents and teachers on the ratings of individual skills (See Table 2).

Table 1. Pearson product-moment correlations of parent and teacher ratings by subscale total score (2-tailed).

| Subscale | Adult | Child |
|---------------------------|-------|-------|
| Initiating Interactions | .34* | .37* |
| Maintaining Interactions | .25 | .54* |
| Responding to Initiations | .33* | .35* |

$p < .05$

Table 2. Parent and teacher agreement on specific Social Skills Assessment questionnaire items.

| Item | K_w | |
|---|-------|-------|
| | Adult | Child |
| Look toward an adult talking to him/her | .15 | .09 |
| Accept adults being close to him/her | .21 | .03 |
| Watch adults for an extended period of time | .07 | .20 |
| Initiating interaction | | |
| Initiate social interactions with adults | .08 | — |
| Show something to an adult to look for a reaction | .23 | .19 |
| Direct an adults attention by pointing to share enjoyment | .33* | .76 |
| Maintaining interactions | | |
| Use greetings with adults spontaneously | .34* | .33* |
| Maintaining interactions | | |
| Take turns with familiar routines with adults | .04 | .04 |
| Offer to take turns when asked to | .39* | .23 |
| Offer to take turns or share toys | .06 | — |
| Play games around a common theme | .26 | .47* |
| Coordinate play with objects during social interactions | .10 | .14 |
| Responding to initiations of others | | |
| Imitate and expand upon actions with toys | .16 | .30* |
| Repair breakdowns during interactions | .23 | .28 |
| Responding to initiations of others | | |
| Respond to approach by smile or vocalization | .01 | .27 |
| Imitate what someone does with an object | .22 | .26 |
| Imitate body movements | .16 | .12 |
| Imitate sounds | .18 | .16 |
| Look at something someone points to | .14 | .04 |

$p < .05$

Discussion

Research Contribution

- Although children with autism share symptoms of impairments in social skills, it is important to understand how children function within specific environments.
- These findings support data previously found on older children that social skills appear to be more specific and context dependent, rather than global and stable.
- Thus, these findings inform school psychologists about the need to re-examine assumptions and consider the need for multiple-informants for intervention and educational planning.
- These findings also highlight the importance of obtaining data from home as well as school settings in order to accurately evaluate the outcomes of individualized and group social skills interventions.

Limitations

- The sample size for this study was relatively small and should be replicated in a larger sample.

Future Research

- The way in which the information obtained from multiple informants specifically impacts intervention planning and implementation should be explored.
- The measurements of social skills that are currently in place should be re-examined.
- Additional factors that may influence the perception and reporting of social skills by various-reporters should be further examined.

References

- Constantino, J. N., Davis, S. A., Todd, R. D., Schindler, M. K., Gross, M. M., Brophy, S. L., et al. (2003). Validation of a brief quantitative measure of autistic traits: Comparison of the Social Responsiveness Scale with the Autism Diagnostic Interview- Revised. *Journal of Autism and Developmental Disorders*, 33, 427-433.
- Murray, D. S., Ruble, L. A., Willis, H., Molloy, C. A. (2009). Parent and teacher report of social skills in children with autism spectrum disorders. *Language, Speech, and Hearing Services in Schools*, 40, 109-115.
- Strain, P. S., & Danko, C. D. (1985). Caregivers' encouragement of positive interaction between preschoolers with autism and their siblings. *Journal of Emotional and Behavioral Disorders*, 3, 2-13.

Correspondence concerning this presentation should be addressed to: Jessie Birdwhistell, Department of Educational, School, and Counseling Psychology, University of Kentucky, Lexington, Kentucky 40506-0017,

E-mail: Jessie.Bird@uky.edu

