Developing and Implementing Successful Behaviorally Based Social Skills for Individuals Diagnosed with Autism

Justin B. Leaf
Autism Partnership Foundation
TAKE A MINUTE
LOOK BACK AT YOUR LIVES
OR AS A PARENT
SOCIAL BEHAVIOR

General agreement that “autism” is the serious social disability that is the defining feature of ASD

Volkmar & Van der Wyk (2018)
Children with typical development revealed a higher level of participation in peer interaction (both initiations and responses) compared with high functioning children with autism, both in the general categories of social interaction.

Bauminger et al., 2003
“Some support for this notion is found in the fact that autistic children’s rating of the quality of their relationship with their best friend were lower than those of typical children.”

Bauminger & Kasari (2000)
Suggest that the rate of depression among children with autism and Asperger syndrome is higher than within a community control group (e.g., “typically developing children”)

Kim et al., 2000
AND CAN LEAD TO THOUGHTS
OF SUICIDE OR SUICIDE

“Our study found suicide ideation or attempts
to be 28 times greater in children with autism
than in typical children...”

Gorman et al., 2013
QUALITY
OF LIFE
BEHAVIORALLY BASED SOCIAL SKILLS GROUPS

• Overview
  • An Opportunity For Three or More Children to Come Together and Simultaneously Learn Social Behaviors

• What Makes it a Behaviorally Based Social Skills Group?

• Advantages
  • Peers in Close Proximity
  • School Readiness
  • Effective
  • Efficient
NOT JUST ANY SOCIAL SKILLS GROUP

PROGRESSIVE ABA
CRITICAL COMPONENTS OF SOCIAL SKILL GROUPS

• Quality Teachers
COMPONENTS OF QUALITY STAFF

- Fun
- Reinforcing
- Systematic
- Adaptable/Flexible
- Objective
- Analytic
- Creative
- Receptive
- Widely Competent
- Big Picture vs Little Picture
- Work Ethic
GOAL OF TRAINING
GOAL OF TRAINING
CRITICAL COMPONENTS OF SOCIAL SKILL GROUPS

• Quality Teachers
• A Variety of Teaching Procedures
GROUP DISCRETE TRIAL TEACHING

DTT
CONDITIONAL INSTRUCTIONS
COOL VERSUS NOT COOL™
COOL VS NOT COOL

• A Social Discrimination Program

• Discriminate Between
  • Appropriate Behavior (Cool)
  • Inappropriate Behavior (Not Cool)

• Used to Teach:
  • General Social Skills
  • Social Language
  • Reduction of Stereotypic Behavior
  • Reduction of SIB or Aggression
  • School Behavior
COOL VS NOT COOL
EMBEDDED INSTRUCTION
FRUIT SALAD
DID YOU SEE THAT
BOOGIE WALK & LEVEL SYSTEM
CRITICAL COMPONENTS OF SOCIAL SKILL GROUPS

• Quality Teachers
• A Variety of Teaching Procedures
• Reinforcement Systems
CRITICAL COMPONENTS OF SOCIAL SKILL GROUPS

• Quality Teachers
• The Right Mix of Children
• A Variety of Teaching Procedures
• Reinforcement Systems
• Comprehensive Curriculum
DO NOT ONLY USE
RATHER
SO MANY SKILLS THAT CAN BE TAUGHT

Behavioral Control
Frustration Tolerance
Recall
Understanding Contingencies
Attending
Observational Learning
Conditional Instructions
Receptive Instructions
“Figuring it Out”
Play Areas
Duck-Duck Goose
Favorable Affect
Learning from Feedback
Flexibility
Delayed Instructions
Rule Governed Play
General Knowledge
Pop Culture Knowledge
Playing with A Friend
Asking for Help
Joining In
Walking in Line
Talking to a Friend
Responding
Being Silly
Losing Graciously
Trying
Friendship Development
Figuring it Out
Play Areas
Duck-Duck Goose
Favorable Affect
Learning from Feedback
Flexibility
Delayed Instructions
Rule Governed Play
General Knowledge
Pop Culture Knowledge
Playing with A Friend
Asking for Help
Joining In
Walking in Line
Talking to a Friend
Responding
Being Silly
Losing Graciously
Trying
Friendship Development
SOCIAL SKILLS TAXONOMY

Awareness  Interaction  Relatedness
Communication  Learning
MOUSE TRAP
WHEN YOU DO THIS YOU GET
CLINICAL EXAMPLE
ABA Social Skills Group

October 23, 2012
TRT: 9:53
RESEARCH EXAMPLE
An Evaluation of a Behaviorally Based Social Skills Group for Individuals Diagnosed with Autism Spectrum Disorder

Justin B. Leaf1, Jeremy A. Leaf1, Christine Milne1, Mitchell Taubman1, Misty Oppenheim-Leaf1, Norma Torres1, Donna Townley-Cochran1, Ronald Leaf4, John McEachin1, Paul Yoder2, Autism Partnership Foundation


Abstract In this study we evaluated a social skills group which employed a progressiv ... the children immediately prior to the intervention, immediately following the intervention, and during 6 and 32-week maintenance probes. Results of the study demonstrated that participants made significant improvements with their social behavior (p<.001) following intervention, and the results were maintained up to 32 weeks after intervention had concluded.

Keywords Autism • Applied behavior analysis • Progressive ABA • Social skills • Social skills groups

Introduction

Social skills groups (SSGs) are an intervention strategy in which three or more students, sometimes including students diagnosed with autism spectrum disorder (ASD), come together and are simultaneously taught a variety of social behaviors. SSGs have been found to be effective in teaching a wide variety of behaviors, including: social interaction (e.g., Kamps et al. 1992), greetings (e.g., Buhr et al. 2003), handling disagreements (e.g., Langone et al. 2012), sportsmanship (e.g., Laugero et al. 2009), and changing the game when bored (e.g., Kasamian et al. 2014). There are many potential benefits for implementing SSGs for individuals diagnosed with ASD; these benefits include possible increased observational learning (e.g., Leaf et al. 2013), placing peers in closer proximity to each other, possible promotion of generalization (e.g., Sartini et al. 2013), closer resemblance to typical classroom settings, and more efficient instruction for teachers working with individuals diagnosed with ASD (e.g., Leaf et al. 2013).

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2 Vanderbilt Peabody College, 416B One Magnolia, Circle VU Mailbox, 228, Nashville, TN, USA
PURPOSE OF THIS STUDY

• Using a Randomized Control Trial

• Evaluating a 16 week (32 session) Behaviorally Based Social Skills Group For High Functioning Individuals Diagnosed with ASD
## PARTICIPANT OVERVIEW

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group A</th>
<th>Group B</th>
<th>P Value</th>
<th>Significant Difference</th>
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<tbody>
<tr>
<td>Number of Participants Meeting Inclusion Criterion</td>
<td>8</td>
<td>7</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Average Age in Months</td>
<td>55 Months</td>
<td>58 Months</td>
<td>0.555</td>
<td>Not Significant</td>
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<tr>
<td>Average IQ Score</td>
<td>101.4</td>
<td>105.7</td>
<td>0.448</td>
<td>Not Significant</td>
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<tr>
<td>Average Vineland Adaptive Score</td>
<td>83.9</td>
<td>82.9</td>
<td>0.918</td>
<td>Not Significant</td>
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<tr>
<td>Average Expressive 1 Word Standard Score</td>
<td>108.8</td>
<td>109.1</td>
<td>0.933</td>
<td>Not Significant</td>
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<tr>
<td>Average Peabody Picture Vocabulary Standard Score</td>
<td>104.2</td>
<td>108.6</td>
<td>0.435</td>
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THE TEACHERS
<table>
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<tr>
<th>Teacher Name</th>
<th>Education Level</th>
<th>Position at AP</th>
<th>Years of Experience with ABA</th>
<th>Years of Experience at AP</th>
<th>Previous History of Groups</th>
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</thead>
<tbody>
<tr>
<td>Jeremy</td>
<td>Masters</td>
<td>Specialized Treatment Analyst</td>
<td>5 Years</td>
<td>5 Years</td>
<td>School Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group Leader</td>
</tr>
<tr>
<td>Christine</td>
<td>First Year in Terminal Masters Program</td>
<td>Specialized Treatment Analyst</td>
<td>5 Years</td>
<td>5 Years</td>
<td>Group Leader</td>
</tr>
<tr>
<td>Donna</td>
<td>Masters</td>
<td>Intern</td>
<td>5 Years</td>
<td>10 Months</td>
<td>None</td>
</tr>
<tr>
<td>Norma</td>
<td>Bachelors</td>
<td>Treatment Analyst</td>
<td>3 Years</td>
<td>3 Years</td>
<td>Group Support</td>
</tr>
</tbody>
</table>
DEPENDENT VARIABLES

• Scores on Four Assessments
  • Social Skills Improvement System (SSIS)
  • Social Responsiveness Scale (SRS)
  • Walker McConnell (WM)
  • Aberrant Behavior Checklist (ABC)

• All Done By Blind Evaluator
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

GROUP B

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4

GROUP B
GENERAL SET UP

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GROUP A

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OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

GROUP B

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
COMPLETE CHAOS
Observational Period 1
PRE-MUSICAL CHAIRS
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

GROUP B

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

GROUP B

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
GENERAL SET UP

- RECRUITMENT
  - INTERVIEW
    - GROUP A
    - GROUP B
      - OBSERVATIONAL PERIOD 1
      - GROUP A INTERVENTION
      - OBSERVATIONAL PERIOD 2
      - GROUP B INTERVENTION
      - OBSERVATIONAL PERIOD 3
      - OBSERVATIONAL PERIOD 4
GENERAL SET UP

RECRUITMENT

INTERVIEW

GROUP A

GROUP B

OBSERVATIONAL PERIOD 1

GROUP A INTERVENTION

OBSERVATIONAL PERIOD 2

GROUP B INTERVENTION

OBSERVATIONAL PERIOD 3

OBSERVATIONAL PERIOD 4
RESULTS
The Effects of the Coop Versus Not Coop Procedure to Teach Social Game Play to Individuals Diagnosed with Autism Spectrum Disorder

Jenny R. Leaf, Jocelyn R. Leaf, Christine Mike, Drew Tennyson-Cook, Mary L. Yoder, and Michael J. Blixen

Abstract: This study evaluated the use of the coop versus not coop procedure in teaching three children diagnosed with autism spectrum disorder. The study took place in a social skills group for individuals diagnosed with ASD and the study was conducted in a classroom setting. The study was designed to evaluate the effectiveness of the coop versus not coop procedures in improving social skills of children with autism spectrum disorder. The results indicated that the coop procedures were more effective in improving social skills than the not coop procedures. The study contributes to the understanding of social skills training for individuals with autism spectrum disorder.
trial methodology. Also, the majority of studies on SSGs for individuals diagnosed with ASD have been conducted with older children (e.g., Kaat and Lecavalier 2014; Reichow and Volkmar 2010). In this study, the average age of the participants was 4 years 10 months; no participant was older than 7 years of age and some participants were only 3 years old at the start of the study. Therefore, this study adds to the current literature on SSGs as it demonstrates that behaviorally based SSGs can be effective for a younger population.

Researchers have also stated a needed area in the research is to evaluate long term maintenance (e.g., Kaat and Lecavalier 2014; Rao et al. 2008). In this study it was found that participants in Group A maintained their skills 16 weeks and 32 weeks after intervention; participants in Group B were maintained their skills 16 weeks after intervention. Therefore, in this study we were able to add to the literature by evaluating long term maintenance and demonstrating that participants maintained their behavior following intervention. Additionally, researchers have

### Table 6

<table>
<thead>
<tr>
<th></th>
<th>Early treatment</th>
<th>Later treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>Within-subject d</td>
</tr>
<tr>
<td>Blind evaluator’s social skills aggregate</td>
<td>2.9 (.73)</td>
<td>2.1***</td>
</tr>
<tr>
<td>SSG teacher’s social skills aggregate</td>
<td>2.2 (.98)</td>
<td>1.4***</td>
</tr>
<tr>
<td>Researcher’s social skills aggregate</td>
<td>2.9 (.67)</td>
<td>3.0***</td>
</tr>
<tr>
<td>Blind evaluator’s social symptom aggregate</td>
<td>−1.5 (.57)</td>
<td>−2.1***</td>
</tr>
</tbody>
</table>

***p < .001
Distribution of Mean Effect Sizes From All Meta-Analyses

- Mean = .50
- Median = .47
- sd = .29
- N = 302

From Lipsey & Wilson, 1993
NO MORE CHAOS
POST MUSICAL CHAIRS
OVERVIEW OF RESULTS

• Clinical Results
• Single Subject Results
• Group Design Results
• Social Validity Results
• Overall Results
TAKE A MINUTE
THANK YOU

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