Social Skills in High School Students on the Autism Spectrum: Challenges, Interventions, & Outcomes

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- Worked on CSESA project
- Member of ASHA
- Member of International Society for Autism Research
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CSESA project team

Intervention developers

- Janine Stichter – Social Competence Intervention
- Erik Carter – Peer Networks and Peer Supports

Study participants including school staff, high school students with ASD and families
Agenda

Background

Social Challenges for High School Students on the Autism Spectrum

Intervention Approaches for High School Settings

Outcomes

Questions/Discussion
Background
Social Competence in ASD

Core deficit area for individuals across the autism spectrum

Social competence is meaningful in different ways across the lifespan

Major impact in the post-secondary years

- Challenges with making and maintaining friendships
- Difficulties finding and keeping jobs
- Limited independence in living situations

Beadle-Brown et al., 2006; Billstedt et al., 2005; Howlin et al., 2004
Center on Secondary Education for Students with ASD (CSESA) Project

5 year center grant (research and leadership)

Included a 3-year randomized control trial
  ◦ 60 high schools across 3 states
  ◦ 547 high school students with ASD

Comprehensive intervention
  ◦ Academics (reading comprehension), Independence & Behavior, Peer & Social competence, Transition & Families
  ◦ Including 3 different social/peer-related interventions

Study is complete – waiting on final results

Website: csesa.fpg.unc.edu
Social Challenges for High School Students on the Autism Spectrum
Social Competence

Encompasses a broad set of skills
- Social-communication skills
- Social-cognitive skills
- Maintenance of relationships

Context of secondary settings
- Many communication partners across the day
- Increased importance of peer culture
- Complexities and nuances of relationships

Brown & Klute, 2003; Carter et al., in press; Lynch et al., 2013
Areas of Need for Students with ASD

Social-communication skills
◦ Expressive communication, comprehension, pragmatics

Social-cognitive skills
◦ Theory of mind, problem-solving

Relationships
◦ Forming and maintaining friendships, differentiating between types of relationships

Behavioral
◦ Impact of circumscribed interests, repetitive behaviors, interfering behaviors, etc.

APA 2013; Carter et al., 2014; Kanne & Mazurek, 2011; Paul et al., 2009
Social Competence in the High School Environment

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Social Context</td>
<td>• Complex peer relationships and less adult supervision&lt;br&gt;• Social rules are more complex and nuanced</td>
</tr>
<tr>
<td>Educational Model</td>
<td>• Different classrooms, teachers, and peers&lt;br&gt;• Less opportunities for inclusion for some students</td>
</tr>
<tr>
<td>Adolescent Development</td>
<td>• Asserting independence&lt;br&gt;• More preferences about interventions, approaches, and goals</td>
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<tr>
<td>Service Delivery Models</td>
<td>• Less direct services for SLPs&lt;br&gt;• Relying on consultative work</td>
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Intervention Approaches for High School Settings
## Evidence-Base for Interventions

<table>
<thead>
<tr>
<th>Student interventions</th>
<th>Peer interventions</th>
<th>Educator interventions</th>
<th>School-wide interventions</th>
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</thead>
</table>
| • Social skills training  
• Social cognitive instruction  
• Communication systems  
• Behavioral interventions | • Peer education  
• Peer interaction training  
• Peer-mediated support interventions | • Fading adult proximity  
• Facilitative role (rather than direct) | • Disability awareness  
• School-wide peer programs |

Bellini et al., 2007; Carter et al., 2014; NPDC, 2011; Reichow & Volkmar, 2010
Peer & Social Interventions in CSESA

- Peer Networks
- Peer Supports
- Social Competence Intervention – HS
Peer Networks

A social group established around a student with ASD that:
- Meets weekly and interacts outside of the meeting
- Helps the student become more involved in school life
- Receives regular guidance from an adult facilitator

Previous work has shown students with disabilities who are supported by peers:
- Interact regularly with more peers
- Enjoy more sustained interactions with peers
- Increase the number of reported friendships
- Participate in more school activities

Carter et al., 2011; 2013; Koegel et al., 2012
Steps for Peer Networks

1. Identify and invite 3-6 peers
2. Hold training meeting for peers (optional)
3. Hold orientation meeting with focal student and peers
4. Facilitate regular social network meetings
5. Schedule regular social contacts between meetings
6. Provide feedback and support, and fade support
Peer Network Meeting

Check-in about week and previous social contacts

Conversation and/or activities
◦ Card/board games, music, eating lunch, discussing common interests

Discuss upcoming opportunities to connect

Reminder of next meeting

*NOTE: Facilitator should be modeling and facilitating peer interactions throughout meetings as needed, and gradually fading
### Key Strategies

#### FACILITATORS
- Model ways to interact
- Highlight similarities
- Teach interaction skills
- Interpret behavior
- Redirect interactions to focal student and peers

#### PEERS
- Engage socially with focal student
- Initiate interactions
- Model social interactions and skills
- Include focal student in activities outside of group
Tips

Recruitment and Coordination
- Teachers (and student leaders) with social capital are key
- Embed in existing groups if possible (clubs, athletic teams, performing/visual arts groups)
- Form around common interests if possible
- Run peer trainings during several lunch periods (if school-wide)

Implementation
- Can run several groups in one room with one facilitator
- Use common interests to generate activity ideas
- Model facilitation strategies for new facilitors
Peer Network Video
Peer Supports

One or more peers without ASD partnered with a student with ASD that:

- Provide ongoing social and academic support within the classroom
- Receive guidance and support from an adult facilitator

Previous work shows that students with disabilities who are support by peers:

- Have more interactions with classmates
- Are more actively engaged in class activities
- Exhibit gains in social skills
- Increase reported friendships

Carter et al., 2011; Koegel et al., 2012
Steps for Peer Supports

1. Identify and ask 2-3 peers
2. Create a peer support plan
3. Hold an initial orientation meeting for the peers
4. Implement peer supports
   ◦ Peers and focal student sit in close proximity
   ◦ Peers interact with focal student in class
   ◦ Facilitator supports peers and focal student working together
# Peer Support Plan

## Example One of Peer Support Plan

The Biology class is a great place for Brad to work on goals related to developing social and conversational skills, as well as expanding his typing and writing skills. Below are some ideas for how Brad might become more involved in class activities during Biology, as well as some ideas for how the peers at Brad’s table could support him.

### At the beginning of class...

- **Brad could:**
  - Talk quietly with his peers (when it is okay with the teacher)
  - Pass out worksheets or other materials to the class (if there are any that day)
  - Listen and respond to Ms. Hale as she does attendance
  - Boot up his laptop, if he will be taking notes in class

- **Pears could:**
  - Ask Brad about his day or upcoming school events
  - Help Brad pass out any worksheets
  - Make sure Brad has all of the same materials for class, such as a book, worksheets, lab materials, etc.
  - Help Brad get out his notebook, pen, paper, etc. for class

- **The facilitator could:**
  - Try to draw some of the peers at the table into conversation with Brad—you may have to do some modeling or give them some ideas of things they could ask about or prompt Brad to ask questions of his peers
  - Make sure Brad has the same materials as his classmates, such as a book, any worksheets, paper, pencil, lab materials, etc.
  - Look through the materials quickly to see if there are any things that could be adapted readily

### When there are lectures or whole group instruction...

- **Brad could:**
  - Listen to Ms. Hale as she presents information to the class
  - Quietly ask his peers questions about the material Ms. Hale is presenting
  - Take notes by typing important specific key words or phrases that are being written down by a peer (preferably) or the facilitator
  - Copy by hand those same key words or phrases with the facilitator’s help or highlight notes
  - Turn off the lights when Ms. Hale is using the overhead projector

- **Pears could:**
  - Make sure Brad has all of the same materials for the activity as they do
  - As you are taking your own notes, copy down on a separate piece of paper some of the important words or ideas from the class discussion; Brad can then type these as his own notes or copy them down with the facilitator’s help. Write fairly large so Brad can see clearly.
  - Periodically check to make sure Brad is doing okay with typing or writing his notes
  - Occasionally lean over and quietly summarize a key point or interesting fact for Brad, or ask him simple questions that help him follow along
  - Encourage Brad with lots of positive feedback such as “Wow, you take really good notes!”

- **The facilitator could:**
  - Make sure Brad has the same materials as his classmates
  - Always brainstorm ways Brad can be engaged in the discussion; Can he answer a question? Can he share an idea?
  - Help Brad to take modified notes by typing key words/ phrases on the laptop (preferred) or writing them out by hand
  - Encourage Brad to look at Ms. Hale or the whiteboard as instruction is taking place
  - Let the peers know when they are doing a great job interacting with or supporting Brad
  - Prompt Brad to ask his peers to double check his notes

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Carter et al., 2013 – CESA Training
## Key Strategies

<table>
<thead>
<tr>
<th>FACILITATORS</th>
<th>PEERS</th>
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<tbody>
<tr>
<td>Model ways to interact</td>
<td>Engage socially with focal student</td>
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<tr>
<td>Identify varied strengths and differences</td>
<td>Model social and academic skills</td>
</tr>
<tr>
<td>Interpret behavior of focal student</td>
<td>Support classroom engagement</td>
</tr>
<tr>
<td>Redirect interactions to focal student and to peers</td>
<td>Provide support as needed but also support independence</td>
</tr>
<tr>
<td>Ask peers to help</td>
<td>Include and connect the focal student</td>
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<tr>
<td>Checking in</td>
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Tips

Recruitment and Coordination
- Train staff broadly – this intervention can help many students
- Look at student schedules and invite specific teachers
- Ask teachers/focal student to identify potential peers

Implementation
- Consider adaptations for focal students who may be more resistant to support – full class peer supports, student with ASD as peer support to others in group
- Create a peer support plan
- Appropriate for all class types, but implementation/social opportunities can be quite difference across classes
Peer Supports Video
Social Competence Intervention (SCI)

**Target Population**
- HS students with ASD or challenges in social competence
- Average or above average IQ

**Structure**
- 32 lessons
- 45 minutes, 2-3x per week
- Small group (~6 students)

**EBPs**
- Applied behavior analysis
- Cognitive behavior intervention
- Scaffolded instruction

Stichter et al., 2010; 2013
About SCI-HS

CURRICULUM & CONTENT

5 units
- Communicating ideas
- Conversation & Collaboration
- Perspective Taking
- Problem Solving
- Interactions & Application

STRATEGIES

Behavior & reinforcement systems
Specific verbal feedback
Least-to-most prompting
Live and video modeling
Repetition
Structured & naturalistic practice
Tips

Planning and Set-Up
- Start planning early – requires class time and small groups
- Consider rotating for different years/semesters
- Get a strong facilitator – SLPs have been great facilitators
- Build in buffer time over semester for missed lessons

Implementation
- Hard to juggle lessons/materials early on but gets easier
- Learn the terminology
- Pay attention to group dynamics
SCI-HS Video

Stichter et al., 2010; 2013
Outcomes from Interventions
Results

Fidelity and social validity data available for Cohort 1 and part of Cohort 2

Student outcome data will be available in spring

Peer networks and peer supports
  ◦ Implemented across nearly all 30 intervention schools
  ◦ Used with a variety of students with ASD

SCI-HS
  ◦ Implemented in majority of intervention schools, but some difficulties with start-up depending on school model and availability of staffing
  ◦ Used with students with ASD mostly accessing general curriculum
Fidelity of Implementation

Project created measure - designed similarly across interventions

Uses a 0-3 scale on between ~12 items (number of items varied by intervention)

Peer Networks
- Average of 2.5 (scale of 0-3)
- Progress monitoring/data collection were lowest

Peer Supports
- Average of 2.4 (scale of 0-3)
- PSP, orientation, and progress monitoring/data collection were lowest

SCI-HS
- Average of 2.4 (scale of 0-3)
- Use of behavioral system and progress monitoring/data collection were lowest
Social Validity from Implementers

Usage Rating Profile – Intervention (Chafouleas et al., 2009)
Rated on a 6-point scale (1-strongly disagree to 6-strongly agree)

<table>
<thead>
<tr>
<th></th>
<th>Peer Networks</th>
<th>Peer Supports</th>
<th>SCI-HS</th>
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<tbody>
<tr>
<td>Training &amp; Coaching</td>
<td>5.5</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Feasibility &amp; Acceptability</td>
<td>5.4</td>
<td>5.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Usefulness and Effectiveness</td>
<td>5.4</td>
<td>5.3</td>
<td>5.1</td>
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Wrap-Up
CSESA Peer and Social Interventions

Appear to be feasible and usable overall

May be good interventions for high school students with autism even with the complexity of high school settings

Peer interventions were some of our most successful for implementation and sustainability
Potential Roles of SLP in HS related to Social Competence

Advocate
- School-wide peer programs and disability awareness
- Emphasizes social aspects of Common Core
- School culture

Consultant
- Working with teachers and paraprofessionals - fading proximity and increasing social opportunities
- Working with peers – peer supports and peer networks

Interventionist
- Existing programs – PEERS, SCI-H
- Evidence-based practices - NPDC
Resources

CSESA Website: http://csesa.fpg.unc.edu/
- Intervention materials in coming year
- Updates on final results from study
- Understanding Autism curriculum

AFIRM Modules: http://afirm.fpg.unc.edu/
- Online learning modules for key evidence-based practices including peer-mediated interventions

Ordering SCI-HS: https://education.missouri.edu/sci/

Additional information on peer networks and peer supports here
Questions

Please email me if you have any questions after the convention
◦ jessica.dykstra@unc.edu