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Building Social Relationships through Evidence Based Social Skills Programming for Children and Youth on the Autism Spectrum

Laying the Foundation for Teaching Social Skills and Activating Social Cognitive Processing in Students on the Autism Spectrum

Instructor

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Bellini Family…Coast of Oregon

Four Primary Goals

Goal 1:

To enhance your knowledge of social skills and social cognitive processing in youth on the autism spectrum

Goal 2:

To enhance your understanding of the importance of social skills on student outcomes, and increase your knowledge of the ingredients of effective social skills programming

Goal 3:

To change the way you *think* about social skills programming

Goal 4:

To change the way you *teach* social skills

Social Skills Programming for Individuals on the Autism Spectrum: A Historical Perspective

General Viewpoint as late as 1990:

Youth on the autism spectrum had a limited capacity to learn social skills and develop social relationships

The Result:

Social skills programming was relegated to secondary status in educational and therapeutic programs

Early Intervention/Early Childhood Education Usage Practices in the State of Indiana

		% Used	Hours/Week	Contrib. to Growth
1.	Speech Therapy	89.2	2.0	76 (2)
2.	Occupational Therapy	83.1	1.7	65.6 (7)
3.	Classroom Aide	46.7	15.4	65.9 (6)
4.	Consultation	45.1	1.6	46.7 (16)
5.	Augmentative Communication	43.1	11.6	62.7 (9)
6.	Sensory Integration	40.0	3.1	69 (3)
7.	Behavior Supports	30.8	7.8	50 (14)
8.	Physical Therapy	29.7	1.1	51.7 (12)
9.	Discrete Trial Training	26.2	16.2	68.4 (4)
10.	Other	25.5	5.3	63 (8)
11.	Music Therapy	23.1	2.4	50 (15)
12.	Counseling/Psychotherapy	22.6	2.3	60.8 (10)
13.	Parent Training	21.0	3.5	78.2 (1)
14.	Floor Time	20.5	5.5	51.1 (13)
15.	Social Skills	15.9	3.8	67.5 (5)
16.	Recreational Therapy	12.8	3.4	57.9 (11)

(Hume, Bellini, & Pratt, 2005)

The Usage and Perceived Outcomes of Early Intervention and Early Childhood Programs for Young Children With Autism Spectrum Disorder

Kara Hume
Scott Bellini
Cathy Pratt
Indiana University,
Bloomington

This study investigated families of children with autism spectrum disorders using early intervention and early childhood services, as well as the perceived efficacy and developmental outcomes related to the services and service delivery methods. Results indicated that a variety of recommended practices are not being used by families and interventionists and that intensity of engagement is less than suggested. Parents indicated that parent training was the most effective service in contributing to their child's growth. Significant, yet small, correlations were found between several intervention services/service delivery models and developmental outcomes across areas, including social, emotional, and cognitive development. The importance of assessing social validity related to outcomes is addressed, as are potential implications for service providers.

The importance of early intervention (EI) and early childhood education (ECE) for young children with autism spectrum disorder (ASD) has been well documented in the literature (Hurth, Shaw, Izeman, Whaley, & Rogers, 1999; National Research Council, 2001; Rogers, 1999, 1996; Simpson, 1999; Woods & Wetherby, 2003). Rogers (1996) found that some types of early intervention appeared to reduce the debilitating impact of autism and that young children with autism may make gains more quickly than young children with other severe neurodevelopmental disorders. The results of a retrospective study corroborated the belief that children with autism have significantly better outcomes when an intervention begins before age 5 (Fenske, Zalenski, Krantz, & McClannahan, 1985). The importance of early intervention has recently been highlighted as a priority in legislation as well. The National Institutes of Health Interagency Autism Coordinating Committee (IACC) developed a research roadmap and matrix that encompasses goals and activities for autism research across the next 10 years. Research exploring and confirming the efficacious elements of early intervention is a critical piece of the plan (IACC, 2003).

Although the importance of early intervention and early childhood programs has widespread support, researchers and proponents of specific methodologies continue to debate the effective ingredients in an EI/ECE program. Questions remain about dose, intensity, mode of delivery, age of implementation, and setting. To alleviate the difficulty practitioners and family members face when attempting to navigate through the EI/ECE literature, several researchers have recently compiled areas of agreement and recommended practice across EI/ECE programs (Hurth et al., 1999; National Research Council, 2001). Through an extensive literature review and surveys from representatives of nationally recognized programs (those with evidence of effectiveness in peer-reviewed journals), Hurth et al. identified six elements of effective EI programs, including specific strategies, settings, and curricular areas: (a) earliest possible start to intervention, (b) individualization of services for children and families, (c) systematic and planned teaching, (d) specialized curriculum, (e) intensity of engagement, and (f) family involvement. Recommended practices around family involvement were described as regular parent participation in training,

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Why Teach Social Skills:
Outcomes Associated with Social Skill Difficulties

Behavior Problems

Poor Academic Performance

Peer Failure >>> Rejection and Isolation

Bullying Relationships (Bully and Victim)

Anxiety

Depression

Employment Issues

Anti-Social/Violent Behaviors

Substance Abuse

Suicidal Ideation

The Importance of Early Social Skills on Major Life Outcomes

Social-Emotional Skills Entering Kindergarten Predicts...

- Level of Educational Attainment
- Employment Status and Income
- Criminal Activity
- Substance Abuse
- Mental Health

(Jones et al, 2015)

The Relationship between Social Integration, Social Supports, and Physical and Emotional Health

Negative Interactions elicit stress and promote negative physical and mental health outcomes

A strong *Social Support* system prevents and eliminates the stress associated with negative life events

Social Integration promotes mental and physical health and reduces susceptibility to certain medical conditions

Positive Social Relationships promote positive psychological states, such as self-worth, self-efficacy, and general happiness

(Cohen, 2004)

The Impact of Happiness on Educational Performance

Happiness is associated with the following academic variables:
- Achievement
- Engagement
- Attitudes toward School
- Resilience

Datu, et al. (2017)

Positive social relationships are critical to student happiness

Review   **Open Access**

The Ingredients of Effective Social Skills Programming for Children and Adolescents on the Autism Spectrum: A Synthesis of Meta-Analytical Research

Scott Bellini[1*] and Olivia Heck[2]

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Abstract

Difficulties with social skills and developing social relationships is a key diagnostic characteristic of autism spectrum disorders, and is often an enduring and pervasive issue throughout the life of a person on the autism spectrum. Previous research has demonstrated a clear link between social skill deficits and numerous negative developmental outcomes. The development of effective social interaction skills is critical to successful social, emotional, language, and cognitive development, yet research on social skills programming has produced conflicting results related to the effectiveness of many social skill interventions. The purpose of this article is to synthesize the results of both literature reviews and meta-

The Ingredients of Effective Social Skills Programming

- Insufficient "Dosage"
- Contrived and Decontextualized Intervention Settings
- Failure to Match Skill Deficit with Type of Intervention Strategy
- Failure to Assess Social Skills Prior to Intervention
- Use of Ambiguous Intervention Objectives
- Poorly Implemented Interventions
- Lack of Systematic Programming

Bellini (2007; 2019)

Students' Social-Emotional Learning

District of Columbia

Coding Criteria and Legend:
Color denotes number of Students' SEL dimensions addressed in required coursework for majority of colleges of education

All dimensions (4 & 5 of 5)

Most dimensions (3 of 5)

Some dimensions (2 of 5)

One dimension (1 of 5)

No dimensions

Key Finding 2: The promotion of Students' SEL is given little attention in required courses in teacher preparation programs in colleges of education in the U.S. The overwhelming majority (51-100%) of teacher education programs in 49 states did not address any of the five core Students' SEL dimensions. Only Utah and the

A Meta-Analysis of School-Based Social Skills Interventions for Children With Autism Spectrum Disorders

SCOTT BELLINI, JESSICA K. PETERS, LAUREN BENNER, AND ANDREA HOPF

ABSTRACT

Social skills deficits are a central feature of autism spectrum disorders (ASD). This meta-analysis of 55 single-subject design studies examined the effectiveness of school-based social skills interventions for children and adolescents with ASD. Intervention, maintenance, and generalization effects were measured by computing the percentage of non-overlapping data points. The results suggest that social skills interventions have been minimally effective for children with ASD. Specific participant, setting, and procedural features that lead to the most effective intervention outcomes are highlighted, and implications for school personnel are discussed. Finally, the results are compared to the outcomes of similar meta-analyses involving social skills interventions with other populations of children.

IMPAIRMENT IN SOCIAL FUNCTIONING IS A CENTRAL feature of autism spectrum disorders (ASD) and has been well documented in the literature (Attwood, 1998; Myles et al., 2005; Rogers, 2000). Thus, individuals with ASD have diffi- the interests of others. Although social skills deficits are a central feature of ASD, few children receive adequate social skills programming (Hume, Bellini, & Pratt, 2005). This is a troubling reality, especially considering that the presence of social impairments may portend the development of more detrimental outcomes, such as poor academic achievement, social failure and peer rejection, anxiety, depression, substance abuse, and other forms of psychopathology (Bellini, 2006; La Greca & Lopez, 1998; Tantam, 2000; Welsh, Park, Widaman, & O'Neil, 2001). Most important, social skills deficits impede one's ability to establish meaningful social relationships, which often leads to withdrawal and a life of social isolation. Social skills are critical to successful social, emotional, and cognitive development. As such, effective social skills programming should be an integral component of educational programming for children with ASD.

**SOCIAL SKILLS INTERVENTIONS FOR CHILDREN WITH ASD**

What is the Building Social Relationships Program?

The Building Social Relationships program is a ***systematic*** social skills program that ***teaches social skills*** and ***activates social cognition***

The Building Social Relationships Program

5 Step Approach

1. Identify and assess areas of need
2. Discern between skill acquisition deficits and performance deficits
3. Select appropriate intervention strategies
4. Implement intervention strategies
5. Evaluate program and modify as needed
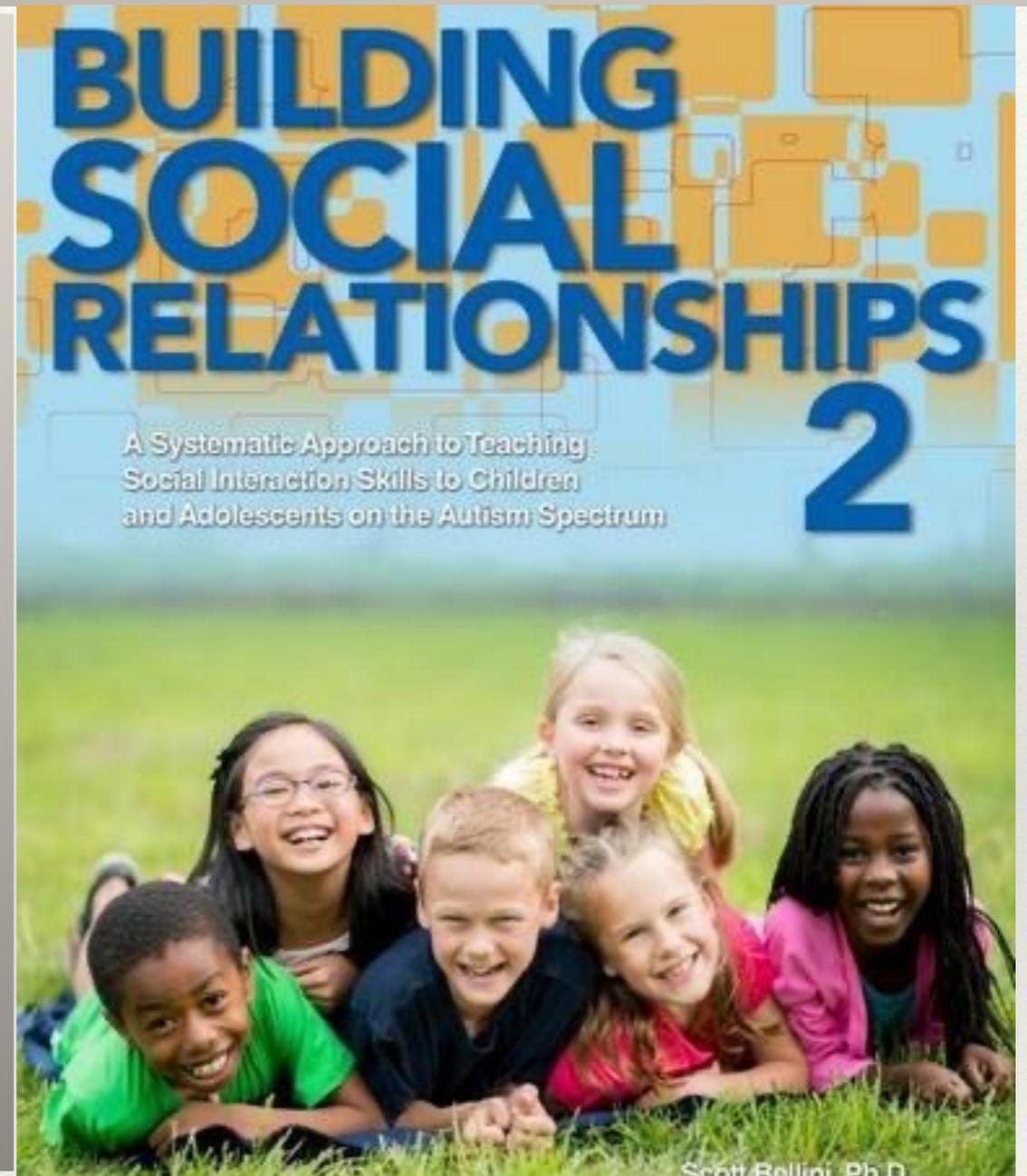
BSR-2 Book

A Systematic Approach to Teaching Social Skills to Children With Autism Spectrum Disorders: A Guide for Practitioners

Scott Bellini, Lauren Benner, and Jessica Peters-Myszak, Indiana Resource Center for Autism, Indiana University, Bloomington

Social skills training (SST) is a topic of great importance in the field of autism as social skill deficits are a prominent feature of autism spectrum disorders (ASD). Common social deficits include (a) difficulty with receptive and expressive use of nonverbal cues such as facial expressions, gestures, and body language; (b) difficulty establishing peer relationships and friendships; (c) lack of shared enjoyment and failure to consider the interests of others; and (d) lack of social and emotional reciprocity (American Psychiatric Association, 2000). Deficits in social cognition are also common, including difficulties taking another person's perspective, difficulties with social problem solving, and lack of self-awareness (Bellini, 2006). Thus, improving and/or facilitating the acquisition and performance of social skills across multiple settings should be the primary purpose of SST. Unfortunately, few children receive SST as an integral part of their treatment and educational programming (Hume, Bellini, & Pratt, 2005). To make matters worse, those youth who are receiving SST may not be benefitting from the programming.

Although SST can be viewed as an essential component of any treatment or educational plan for children with ASD, the results of numerous meta-analytical studies have questioned the effectiveness of this modality. In general, these studies have demonstrated that traditional SST programs are only minimally effective in teaching social skills to youth with learning disabilities, emotional and behavioral disorders, and ASD (Bellini, Peters,

Benner, & Hopf, 2007; Forness & Kavale, 1996; Gresham, Sugai, & Horner, 2001; Mathur, Kavale, Quinn, Forness, & Rutherford, 1998; Quinn, Kavale, Mathur, Rutherford, & Forness, 1999). Results of these studies indicate that traditional SST is particularly ineffective in promoting the transfer of skills across settings and persons. In addition, when compared with 12 other intervention modalities, SST training ranked as the ninth most effective strategy, well behind behavioral, language, academic, and psychopharmacological interventions (Forness & Kavale, 1996).

Bellini et al. (2007) conducted the only meta-analysis of SST for youth with ASD. The meta-analysis included 55 published research studies investigating school-based SST for youth with ASD. Nearly half of the reviewed studies produced low treatment effects, and a majority of the studies produced low generalization effects across persons, settings, and play stimuli. Although the collective outcomes of school-based SST for youth with ASD were disappointing, the results do help to elucidate factors that lead to more beneficial social outcomes for youth with ASD. A synthesis of the Bellini et al. (2007) meta-analysis with other meta-analytical reviews reveals the following eight recommendations for effective social skills programming (Bellini, 2009): (a) Increase the dosage of social skill interventions, (b) provide instruction within the child's natural setting, (c) match the intervention strategy with the type of skill deficit, (d) conduct a reliable and valid social skill assessment, (e) develop clear and measureable treatment objectives, (f) facilitate the

generalization of skills across settings and persons, (g) ensure intervention fidelity, and (h) implement systematic social skills programming.

The final recommendation (i.e., implement systematic social skills programming) is critical as it incorporates many of the other recommendations for programming. That is, SST cannot be systematically delivered without the inclusion of reliable and valid social skills assessment.

The present article will focus on the eighth and final recommendation by outlining a program to systematically deliver social skills instruction to children with ASD. The article will discuss the structure, format, procedures, and methods used at the Social Skills Research Center (SSRC) to teach social skills and measure the social outcomes of youth with ASD. The primary purpose of the article is to provide a model for practitioners seeking to deliver systematic social skills programming to children with ASD. The collective outcomes of children participating in the SSRC program over the course of a 15-month period will be presented. The purpose of presenting these data is to provide an example of how to use data to evaluate overall program effectiveness and to make programming modifications. The article will conclude with a discussion of clinical observations gleaned from the analysis of these data.

What Is Systematic Programming?

Merriam-Webster dictionary defines *systematic* as "methodical in plan and procedure, and marked by thoroughness and regularity; presented or formulated as a coherent

Figure 5 Mean Percentage of Unprompted Social Engagement With Peers During School Observations Pretreatment and Posttreatment for School Year 1 (*n* = 5)
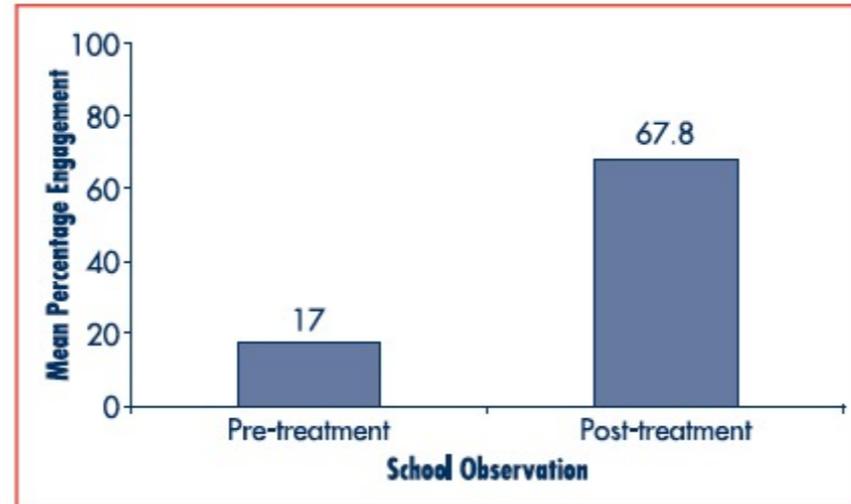

91.4 (*SD* = 9.4). Mean scores on the ASSP increased from 110.6 (*SD* = 11.7) to 121(*SD* = 10.3). Increases were observed for 6 of the 8 children on all three measures of social competence.

There are a number of benefits to examining the collective outcomes of three 9-week sessions rather than just one session. It allowed us to determine whether skills were maintained from one 9-week session to the next. Collectively, baseline or pretest scores increased from one session to the next on all measures. For returning children, we no longer view the baseline measures as a pretest for the current session but rather as a maintenance measure for the prior session. The collection of data across 15 months also revealed various patterns with regard to the scores of our various assessment measures. For instance, we have found that the SSRS is sometimes not sensitive to change, at least during the first 9 weeks of the program. Often, scores on the SSRS are the last of our outcome metrics to change. It is not uncommon for us to see improvements on the ASSP and in the social engagement data during the first 9-week session but not on the SSRS. A child with ASD might be making steady improvements in social behavior, but her standard

Figure 6 Mean Percentage of Unprompted Social Engagement With Peers During School Observations Pretreatment and Posttreatment for School Year 2 (*n* = 5)
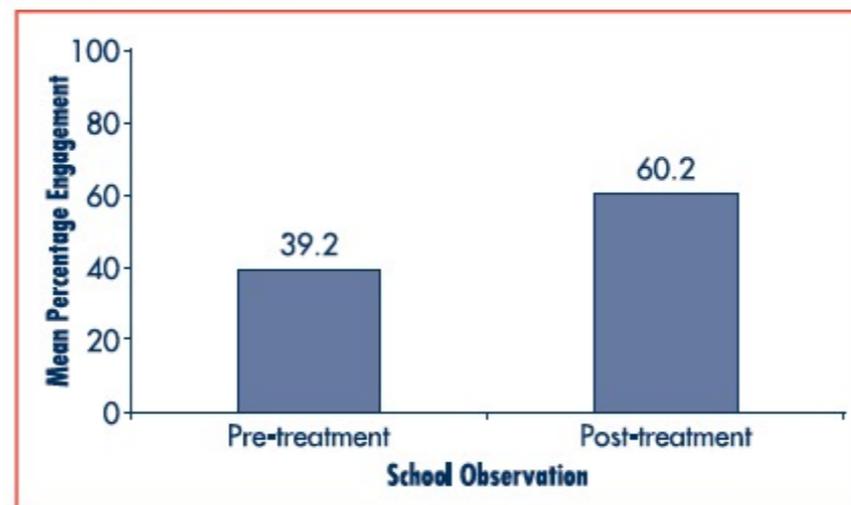
# Five Basic Tenets of the Building Social Relationships Program

Tenet #1: *Individuals on the autism spectrum want to establish meaningful social relationships*

Tenet #2: *If we want youth on the autism spectrum to be successful socially, then we have to teach them the skills to be successful*

Tenet #3: *Successful social behaviors are not always "appropriate" social behaviors*

Tenet #4: *Social success is dependent upon our ability to adapt to our environment*

Tenet #5: *Social interaction skills are not the equivalent of academic skills*

The Essence of Social Interaction Skills and the BSR Program

- Three **Integrated** Components:
  - Thinking
    - Knowledge
    - Social Problem Solving
    - Perspective Taking
    - Observational Learning
    - Self-Awareness
    - Attention
  - Feeling
    - General Mood
    - Anxiety
    - Depression
  - DOING!
    - Execution
    - Body Position/Movement
    - Fluency
    - Timing

Doing

Thinking

Feeling
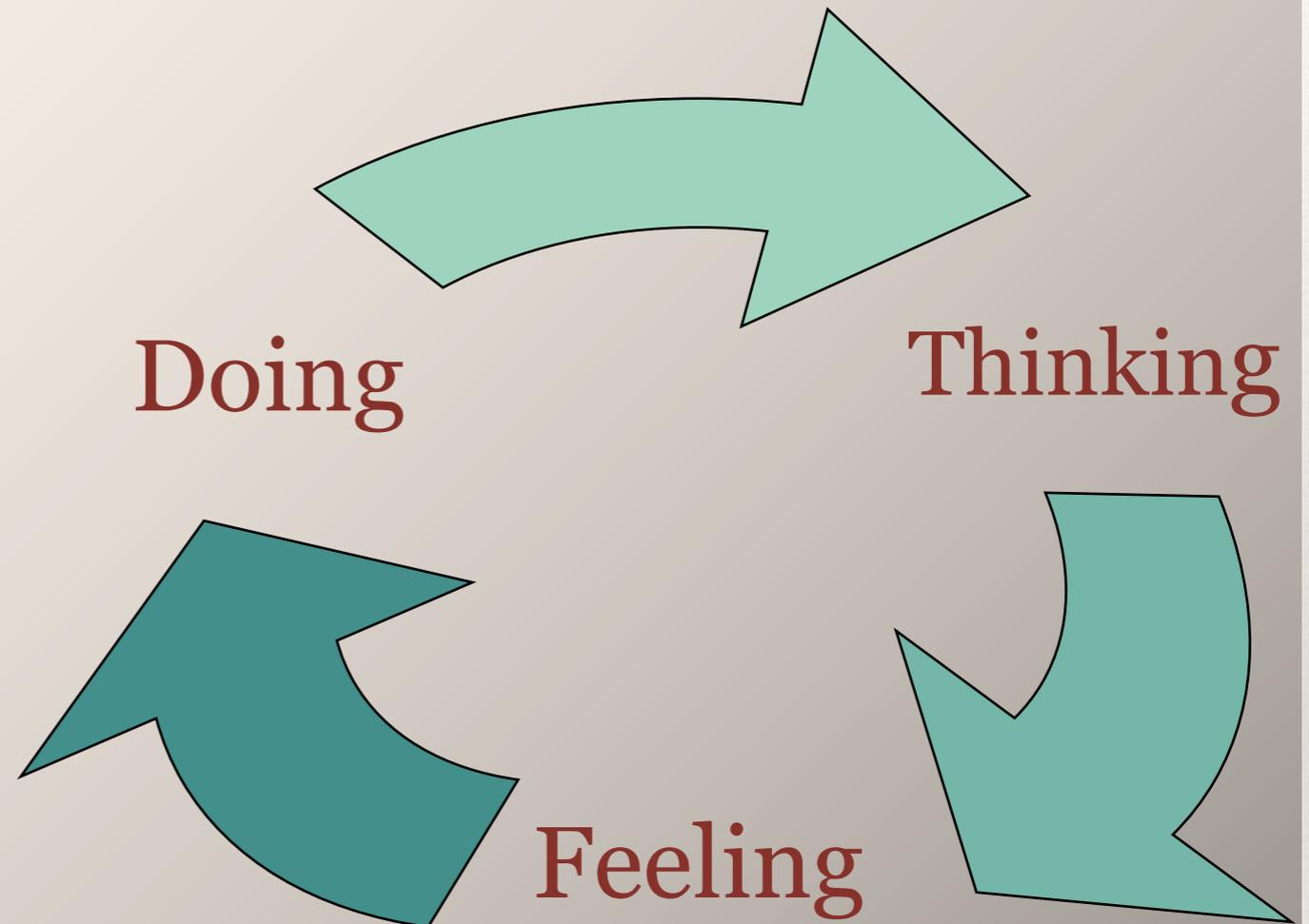
Thinking: Social Cognition

Doing

Thinking

Feeling
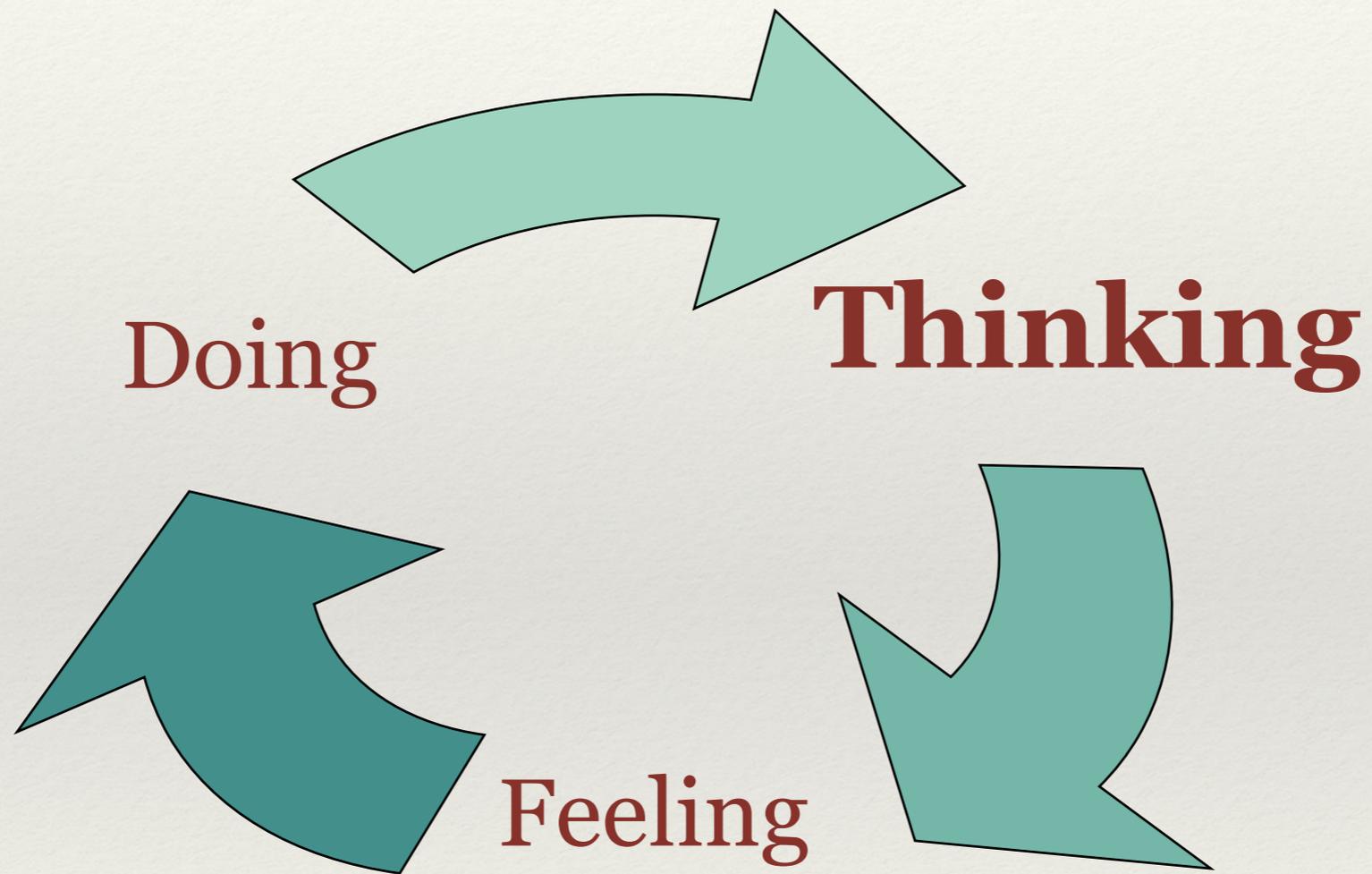
Social Knowledge

In addition to the memory and decision making centers, <u>Procedural Knowledge</u> also involves the "motor control" center of of the brain, the Cerebellum
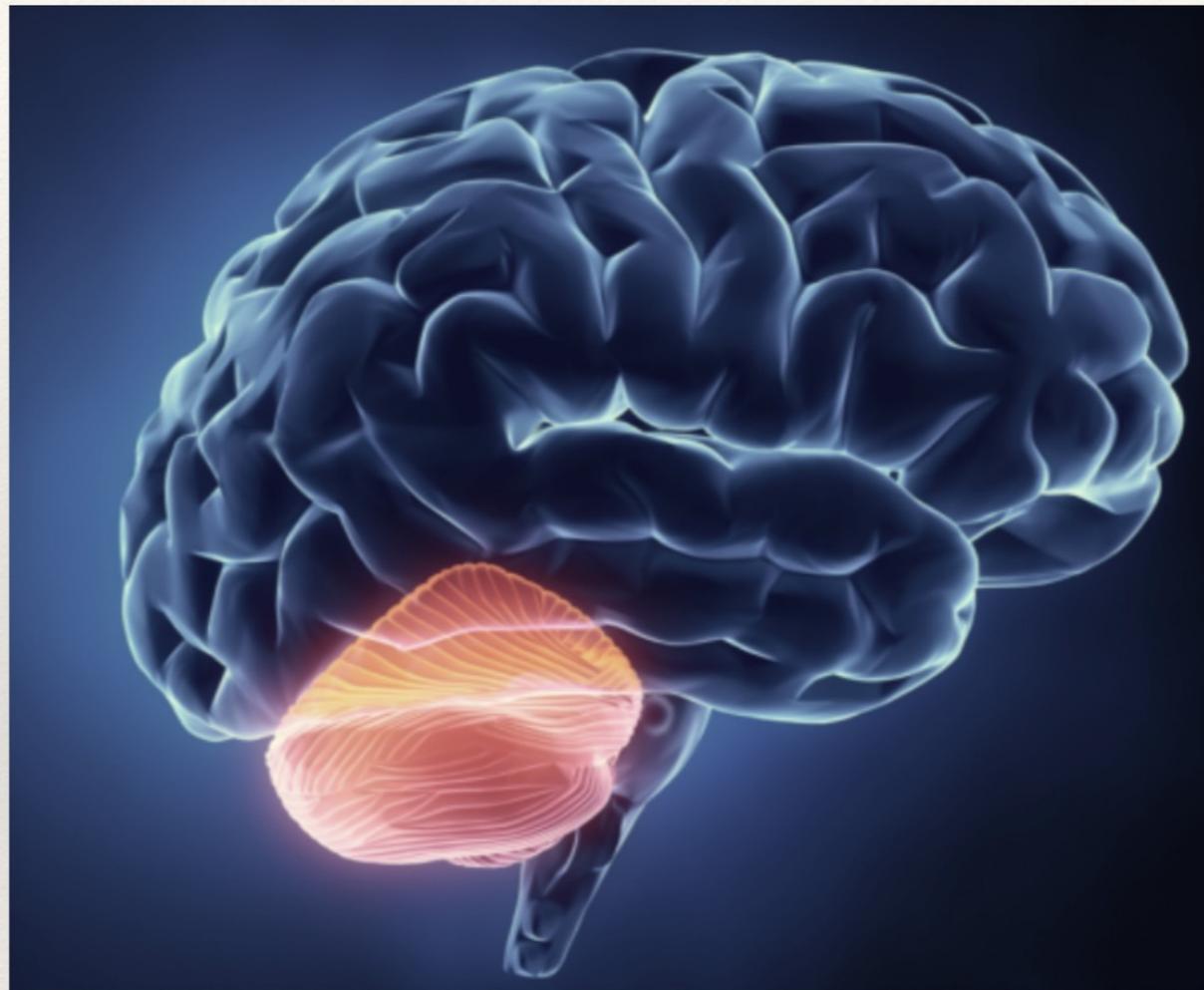
The Cerebellum

How To Drive a Stick Shift in 9 Easy Steps

Updated May 14, 2019

Follow These Steps to Drive a Stick Shift

1. **Press the clutch all the way to the floor board** with your left foot (the gear shifter must be in the neutral position).

2. **Turn the ignition key.** If you are certain that the car is in neutral, you can remove your foot from the clutch. Ensure that the parking or emergency brake is not in use.

3. **Press the brake**, or the center pedal, with your right foot.

4. **Position the gear shifter** so that the transmission is in the first gear.

5. **Remove your right foot from the brake pedal**. If you are on a flat surface, the vehicle should move very little.

6. **Slowly begin to place less pressure on the clutch** with your left foot. Depending on the vehicle, you may feel it begin to slowly roll forward.

7. As you gently release the clutch, **begin to press the accelerator** very delicately with your right foot.

8. Once you have released the clutch completely, you should now only be pressing the accelerator with your right foot. Congratulations — you're driving in first gear. Continue to build speed until you feel that you need to shift into second gear.

9. To switch to the second gear, take your right foot off of the accelerator while simultaneously activating the clutch with your left foot. Your car will continue to roll. Move the gear shifter into second gear. Release the clutch as you begin to apply the accelerator again. Repeat this process to continue to build speed.

Social Problem Solving

Refers to the ability to analyze a social situation and make a behavioral decision

Specific Social Behaviors Associated With Social Problem Solving

- [a] Compromises during disagreements with others
- [a] Talks about topics that other people find interesting
- [a] Avoids being manipulated by peers
- [a] Considers multiple viewpoints

- [a] Understands the jokes or humor of others
- [a] Correctly interprets the intentions of others
- [a] Cognitive flexibility

Bellini, 2016

Six Steps of the Social Problem–Solving Process

1. Describe the social scenario, setting, behavior, or problem (What's happening in this picture/video or what has happened?)

2. Recognize the feelings/thoughts of participants (How does he/she/you feel? What is he/she thinking?)

3. Understand the feeling of participants (Why is he/she/you feeling/thinking that way? Ask child to provide evidence)

4. Predict the consequences (What do you think will happen next? What will be the consequences of this behavior?)

5. Select alternative behaviors (What could he/she/you have done differently)

6. Predict consequence for alternative behaviors

Perspective Taking

Refers to the social-cognitive process of taking another person's viewpoint, or seeing the world thru their "eyes."

Important to distinguish between **Perspective Taking** and ***Theory of Mind***

1. **Theory of Mind** represents *static* knowledge of how the mind processes information

2. **Perspective Taking** is a *dynamic*, "on-line" cognitive process

Perspective-Taking Strategies

Social-Cognitive Process Activated: *Reading nonverbal cues, taking another person's perspective, inferring the interests of others*

Type of Skill Deficit Targeted: *Skill acquisition deficit and performance deficit*

This category includes a broad group of intervention strategies that address recognizing and understanding the emotions, thoughts, and interests of others. These strategies target both perspective taking and pre-perspective taking skills, such as identifying and interpreting nonverbal cues. Some of the strategies teach perspective taking while others attempt to activate perspective taking in youth who already have the skill in their repertoire. Specific strategies include

- Use of pictures and videos to read emotions

- Thought bubble activity

- If-then statements

- Interest inventory

- Mind reading worksheets

- Mind reading computer programs

- Modified false-belief tasks

Self -Awareness

Refers to monitoring, regulating, and evaluating our own behavior

Self-Regulation

Modifying behavior before and during perfomance

Self-Evaluation

Analyzing behavior before, during, and after performance

Self-Monitoring

Keeping track of behavior during performance
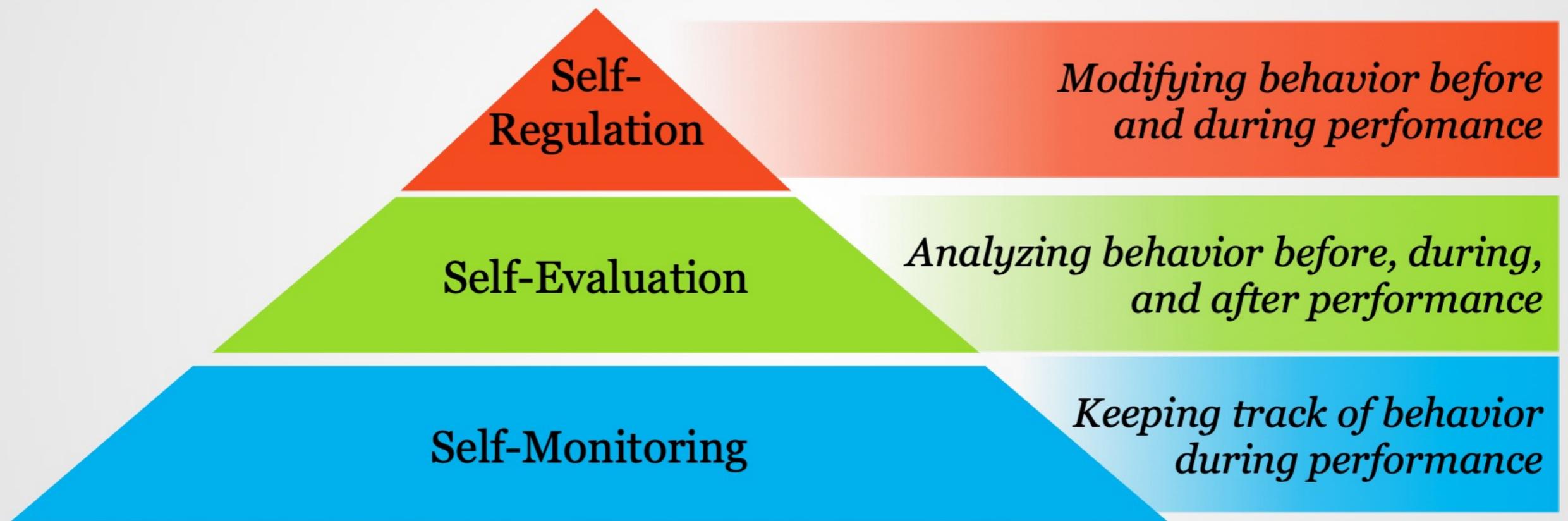
Three Levels of Self-Awareness

ACTIVATING SELF-AWARENESS DURING PLAY

As is the case with all social-cognitive activities, we cannot implement these strategies in the contrived setting of the therapy session only. Instead we must continually look for opportunities to infuse social-cognitive instruction throughout the child's natural environment. One example of this is using self-regulation during a common keep-away game called "monkey in the middle." Monkey in the middle is a game where two or more kids throw a ball back and forth to each other while trying to keep it away from a child (or children) in the middle. In the BSR program, we play this game with a therapeutic twist. The "monkey" or "monkeys" in the middle must avoid making physical contact with the other kids. If they do make contact (which is very hard to avoid in this game), they are given a brief 30-second "penalty" where they are momentarily removed from the game. But there is one additional caveat: if they accidentally make contact with another kid, they may avoid the penalty if they immediately raise their hand (within 5 seconds). This is a great game for children who have difficulty maintaining personal space as well as for any child who needs to activate self-monitoring and self-regulation.

Steps in Implementing a Self-Monitoring and Self-Evaluation Strategy

1. Identify a behavior, skill, or emotion. Initially, select overt behaviors (personal space, voice volume, asking questions during conversations, etc.) that can be observed by both the child and another person. Once the child learns how to successfully monitor overt behaviors, you may shift the training to cognitive processes such as thoughts. Expression of feelings (facial expressions, body language, and gestures) may be targeted from the onset as long as they are observable.

2. Define a behavior, skill, or emotion. Define the behavior you have targeted for the intervention clearly enough so that the child can understand it and identify it. This will be the behavior that the child will be monitoring.

3. Introduce the behavior, skill, or emotion to child. Modeling (both live and video) is a nice way to introduce the skill as it provides a visual representation. If the child does not already possess the skill or behavior in her behavioral repertoire, teach the skill before implementing the self-monitoring portion of the intervention.

4. Select a self-monitoring procedure. Many different self-monitoring forms may be used; some are available on the Internet or in various textbooks. You may also create your own forms to address the individual needs of the child. Once you have determined the type of monitoring form to use, you need to decide where behavior will be recorded and how often. Some forms require the child to record the frequency or presence of a behavior during or immediately following a predetermined period of time, for instance, during recess. Typical forms ask the child to "place a check-mark in the box each time you respond to questions from peers," or "how many times did you initiate an interaction with your peers at recess?" The use of paper forms is most appropriate when the child is monitoring behavior that he is viewing on a video screen be-

Observational Learning

Refers to the ability to imitate (model) and/or learn from the behavior of others.

According to Bandura, there are three prerequisites for successful modeling:

1. **Attention:** The ability to attend to behavior of others

2. **Memory:** The ability to remember what it is that you have seen

3. **Behavioral Reproduction:** The ability to perform the behavior that you have observed

Stop, Watch, and Follow Along

Social-Cognitive Process Activated: Observational learning (modeling)

Type of Skill Deficit Targeted: Skill acquisition deficit and performance deficit

As discussed in Tenet #4 (see Chapter 2), children on the autism spectrum have difficulty identifying the "standard pattern of behavior" in a new behavioral setting. When confronted with a new or novel situation, these children struggle to adapt their behavior to the environment, leading to anxiety and sometimes even inappropriate behavior. This is primarily due to the fact that children on the spectrum fail to model or observe the behavior of other people. In the past, I attempted to address this difficulty by writing social narratives or by providing a social script to prepare the child for the new situation. In most cases, it was effective. However, it was only effective for the setting described in the story or script. It would not generalize to the next new setting (and the one after that). Frankly, it would be impossible write a story for every future "new" setting. Today, instead of scripting, we address this issue by targeting the underlying deficit (i.e., observational learning). The BSR program uses a strategy that teaches the process of observational learning—that is, we teach the child how to observe and follow along with the behavior of others in novel situations.

Stop, watch, and follow along requires the student to observe a novel situation, figure out the standing pattern of behavior of the setting, and then imitate the behavior of others. This strategy is best suited in a social skills group format.

Attention

Attending to relevant stimuli in the environment is critical to cognitive, communicative, and social-emotional development.

Individuals on the autism spectrum are thought to exhibit **over-selective attention,** leading them to attend to one stimulus in the environment, while forsaking all others.

*Over-selective attention, interferes with **Joint Attention** and **Divided Attention,** which are critical to successful social interactions.*

Joint Attention: *Attending to a stimulus in unison with another person.*

Divided Attention: *Attending to multiple stimuli simultaneously, or rapidly shifting attention between stimuli.*

Missing the Forest for the Trees

Divided Attention Activities

*Social-Cognitive Process Activated*: Dividing/Shifting attention, cognitive flexibility, reciprocity

Type of Skill Deficit Targeted: Skill acquisition and performance deficit

Youth on the autism spectrum are thought to engage in over-selective and over-sustained attention, whereby they attend to one (often irrelevant) stimulus in the environment (e.g., a ceiling fan or other sensory interest) and fail to attend to other, more relevant stimuli such as instructions, or an initiation or communicative attempt of another person (see the section on "Attention" in Chapter 3 for a description of attentional processing). Our BSR program has developed a variety of activities to foster the activation of divided attention in youth on the spectrum. The primary goal of each of these activities is to encourage the child to rapidly shift or simultaneously divide his attention across multiple stimuli. This section outlines two of those strategies:

- Musical chairs with visual cues

- Conversation game during play activity

The Essence of Social Interaction Skills and the BSR Program

- Three **Integrated** Components:
  - Thinking
    - Knowledge
    - Social Problem Solving
    - Perspective Taking
    - Observational Learning
    - Self-Awareness
    - Attention
  - Feeling
    - General Mood
    - Anxiety
    - Depression
  - DOING!
    - Execution
    - Body Position/Movement
    - Fluency
    - Timing

Doing

Thinking
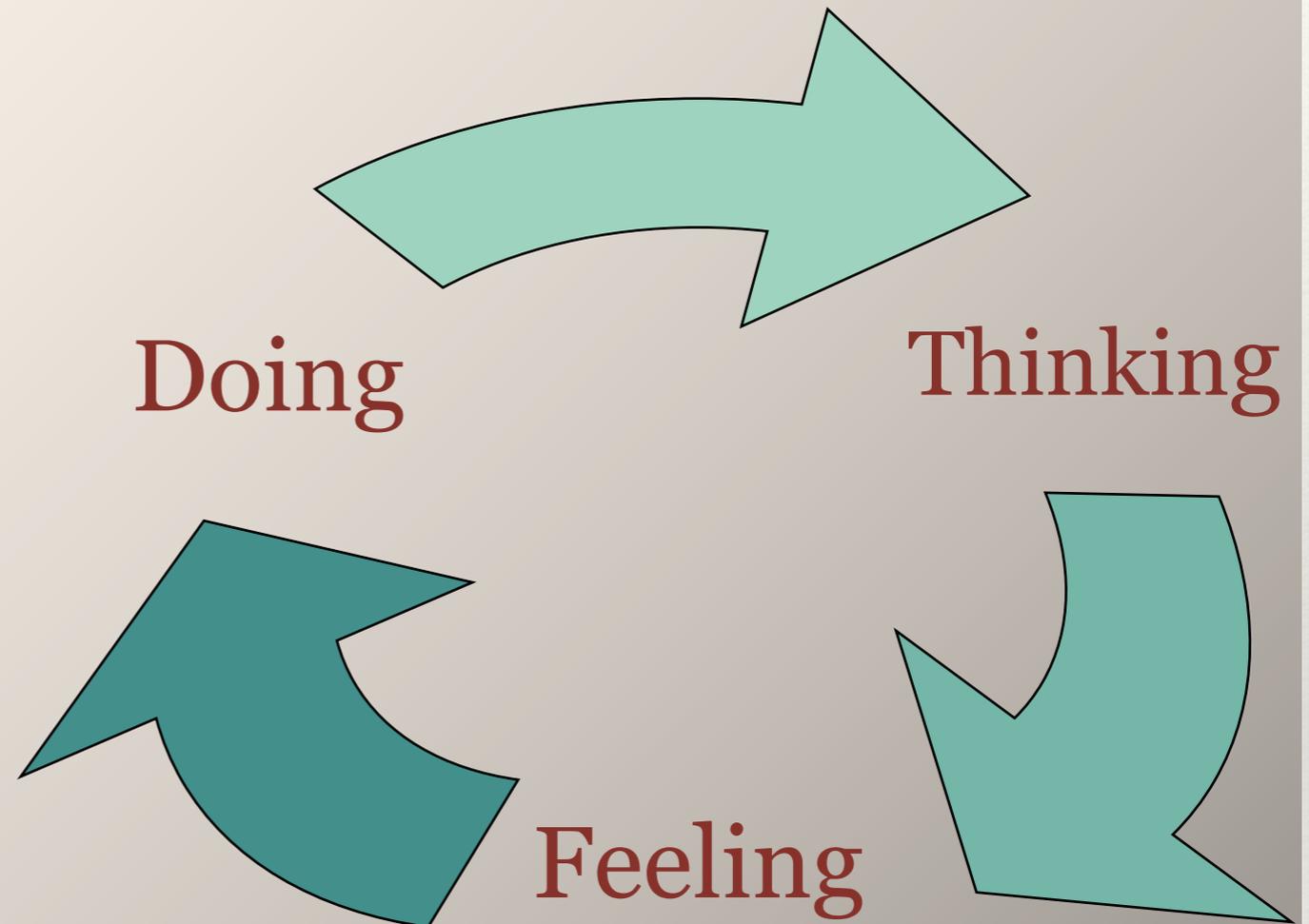
Feeling

Feeling: Emotional Regulation
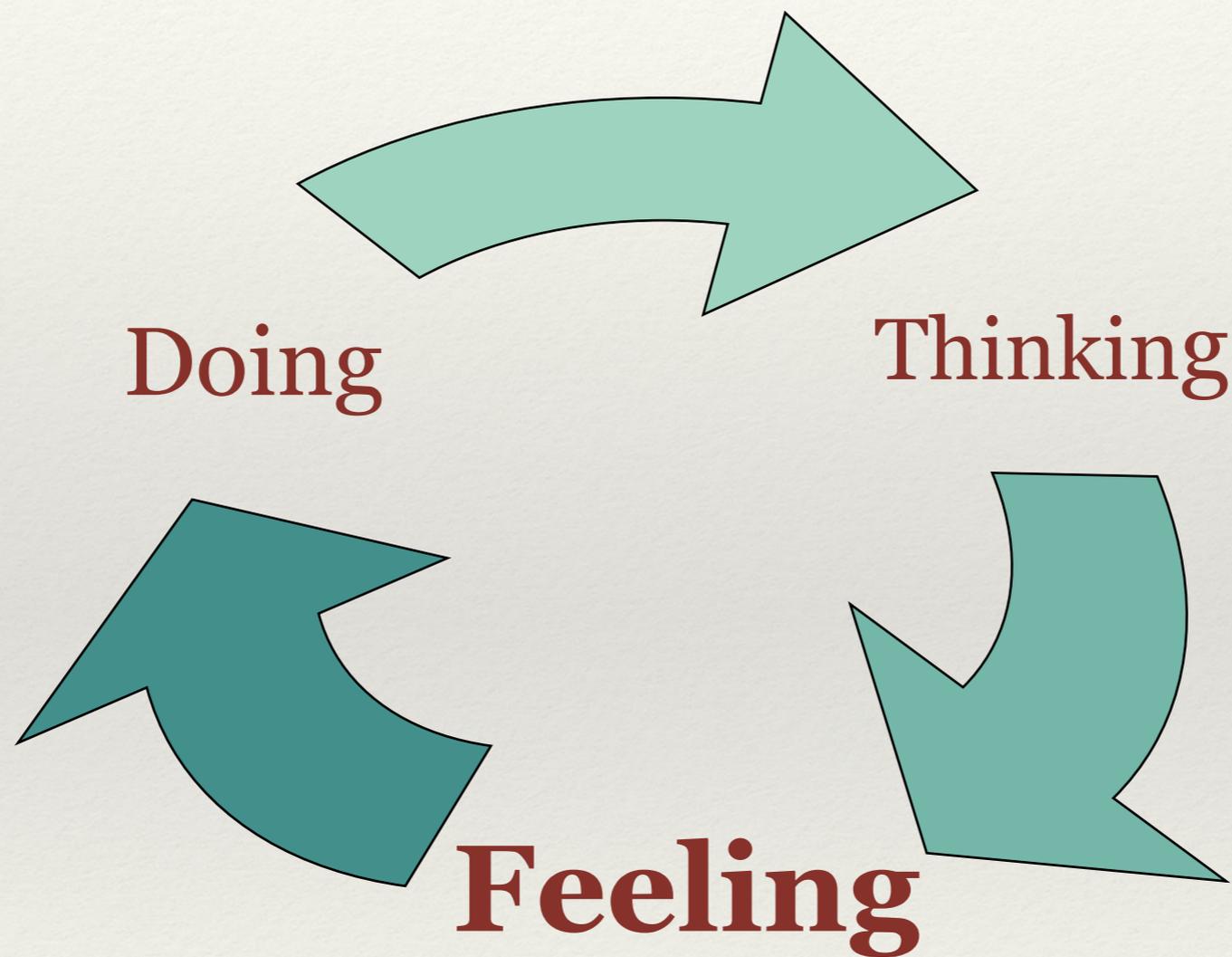
Social Anxiety and Avoidance

Individuals on the autism spectrum **exhibit higher levels of social anxiety** than the general population (50% v. 10%), which significantly interferes with their ability to initiate and maintain social relationships.

Specific Behaviors Associated With Social Anxiety and Withdrawal

- Actively avoids social situations

- Exhibits or expresses fear of public performances

- Engages in solitary activities in the presence of peers

- Expresses fear that other children will laugh or make fun of him/her

- Prefers one-on-one interactions with peers to group interactions

- Engages in solitary interests and hobbies

- Exhibits or expresses fear or anxiety regarding social interactions

- Experiences negative peer interactions

Bellini, 2016

The Development of Social Skill Deficits and Social Anxiety (Bellini, 2006; 2016)
Autism Spectrum Disorders (Bellini, 2006)
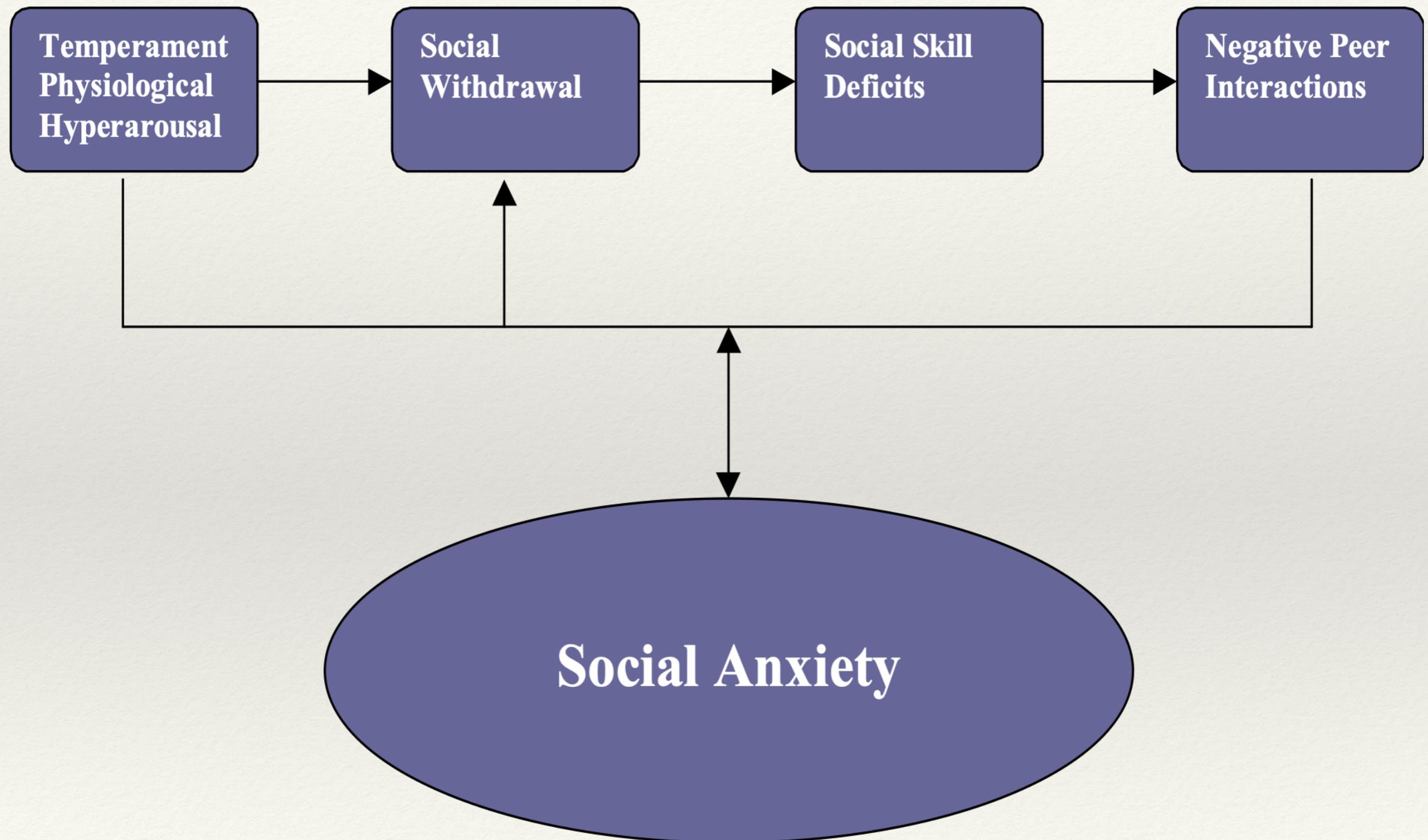
The Essence of Social Interaction Skills and the BSR Program

- Three **<u>Integrated</u>** Components:
  - Thinking
    - Knowledge
    - Social Problem Solving
    - Perspective Taking
    - Observational Learning
    - Self-Awareness
    - Attention
  - Feeling
    - General Mood
    - Anxiety
    - Depression
  - DOING!
    - Execution
    - Body Position/Movement
    - Fluency
    - Timing

Doing

Thinking

Feeling
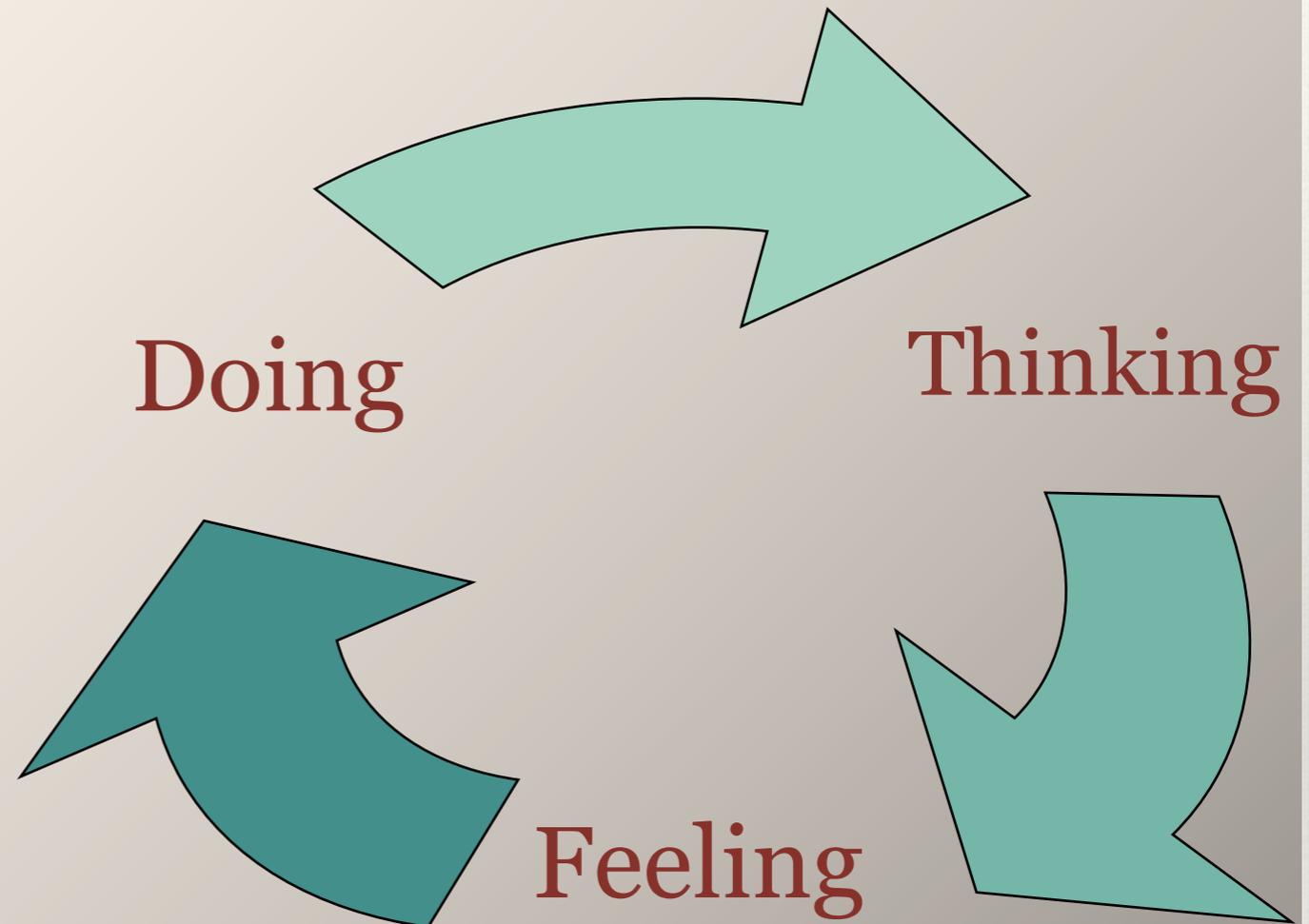
Doing: Behavioral Execution

Doing

Thinking

Feeling
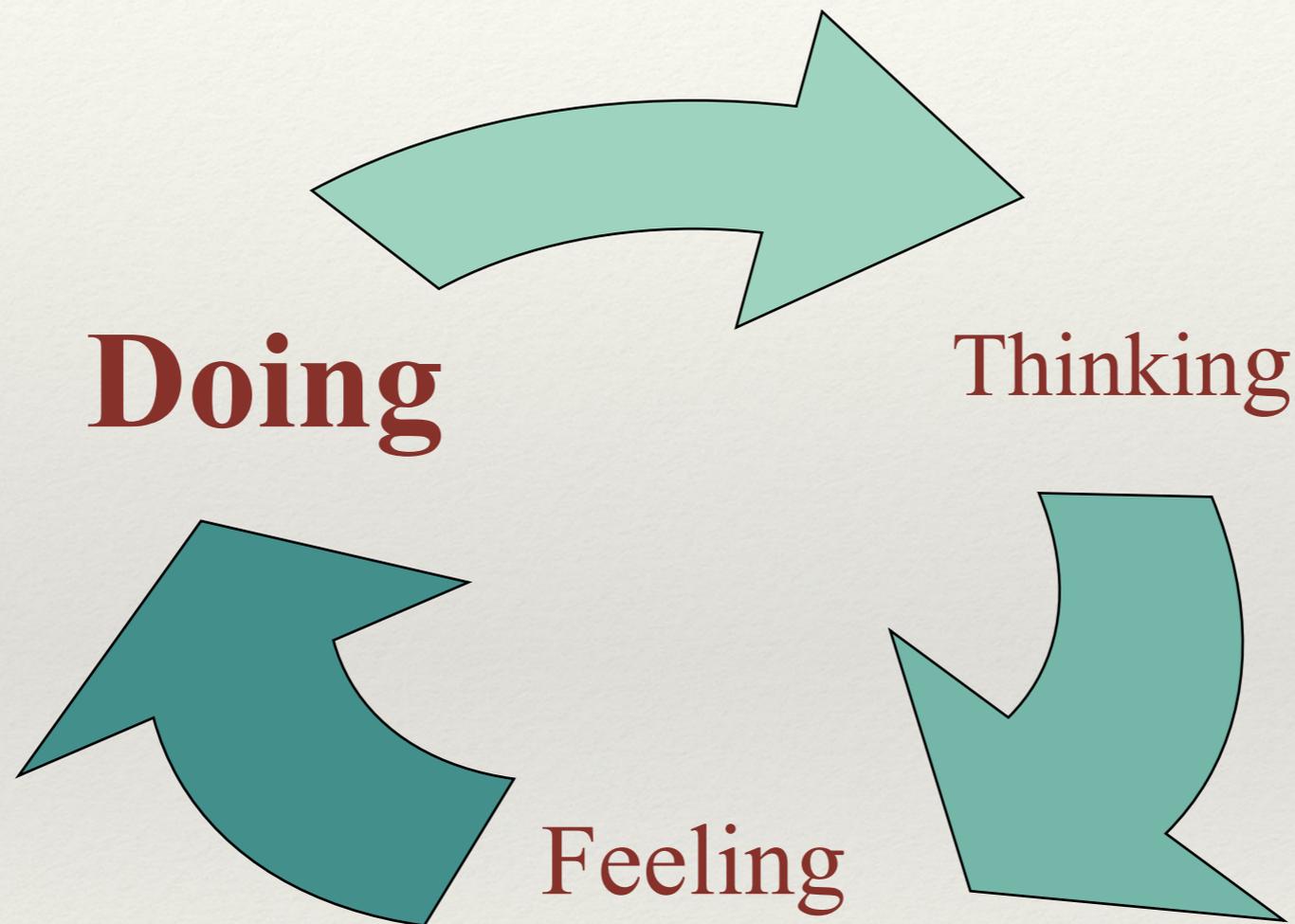
Motor Movements in Social Interactions

Successful social interactions require **fluent**, **well-timed**, and **well-positioned** motor movements.

Common motor difficulties in children on the Autism Spectrum:
1. Motor Planning
2. Motor Initiation
3. Fine and Gross Motor Coordination (Motor Execution)
4. Proprioception
5. Motor Imitation

Common Social Skill Difficulties in Children on the Autism Spectrum

Difficulties with Non-verbal Communication

Difficulties with Reciprocity in Interactions

Difficulties with Social Initiation

Detrimental Social Behaviors associated with Difficulties with Perspective Taking and Self-Awareness

The Building Social Relationships Program

5 Step Approach

1. Identify and assess areas of need
2. Discern between skill acquisition deficits and performance deficits
3. Select appropriate intervention strategies
4. Implement intervention strategies
5. Evaluate program and modify as needed
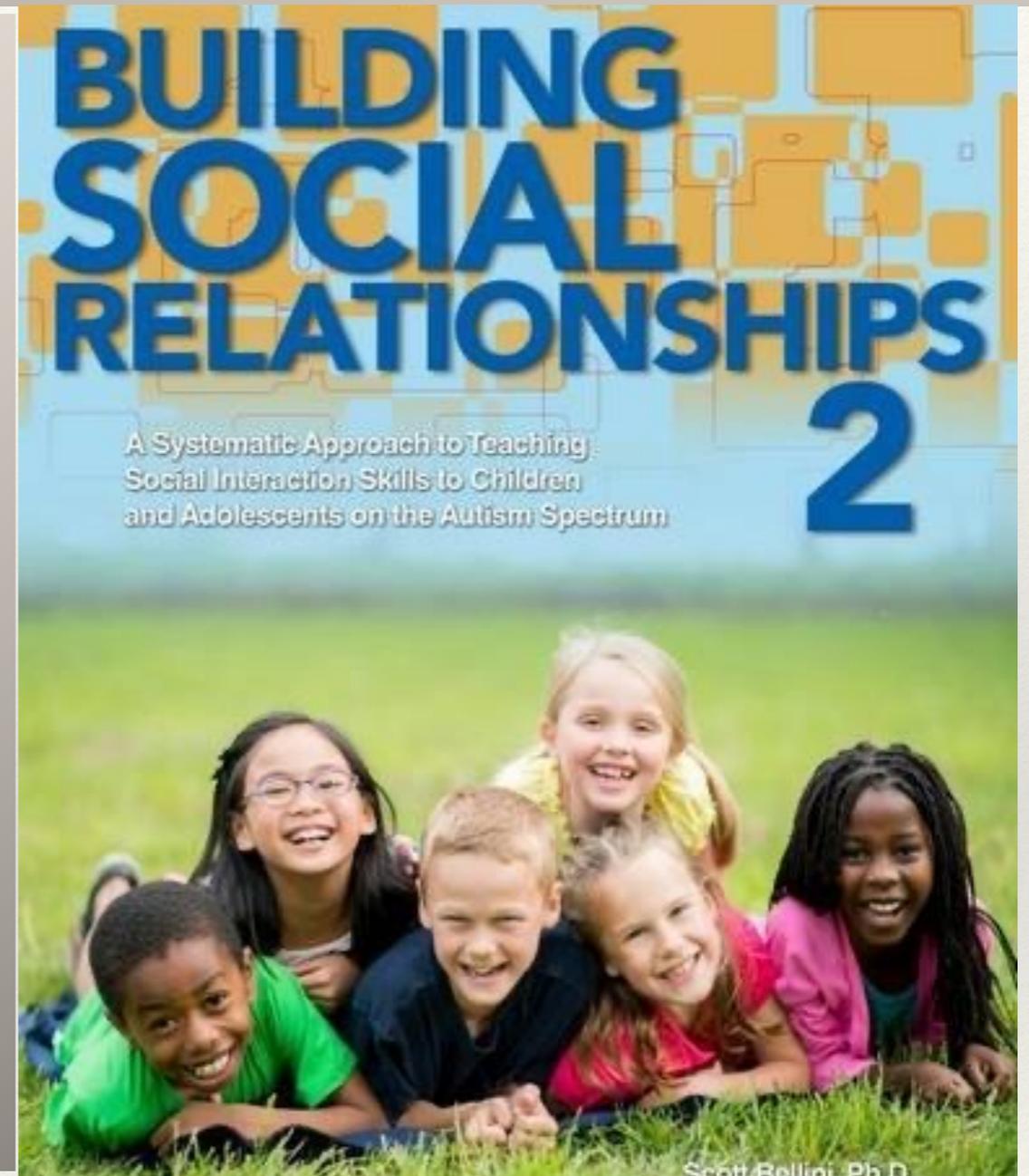
BSR-2 Book

Social skills programming must begin with comprehensive assessment of social-emotional functioning

Purpose of Assessment:

1. Measure present level of performance
2. Identify skills to teach

Autism Social Skills Profile-2

Scott Bellini, Ph.D., HSPP

Indiana University, Bloomington

Child's Name_____
First   Last

Birthdate_____ Age_____ Sex ☐Female ☐Male Today's Date_____
Month   Day   Year   Month   Day   Year

School_____ Grade_____
City

Your Name_____
First   Last

Relationship to Child   ☐Mother ☐Father ☐Guardian ☐Other _____

Street Address_____

City_____ State_____ Zip _____ Phone (_____)_____

The following phrases describe skills or behaviors that your child might exhibit during social interactions or in social situations. Please rate **HOW OFTEN** your child exhibits each skill or behavior independently, **WITHOUT ASSISTANCE FROM OTHERS** (i.e., without reminders, cueing and/or prompting). You should base your judgment on your child's behavior over the last **9 weeks**.

Please use the following guidelines to rate your child's behavior:

Circle **N** if your child **never** or **almost never** exhibits the skill or behavior.
Circle **S** if your child **sometimes** or **occasionally** exhibits the skill or behavior.
Circle **O** if your child **often** or **typically** exhibits the skill or behavior.
Circle **V** if your child **very often** or **always** exhibits the skill or behavior.

Please do not skip any items. If you are unsure of an item, please provide your best estimate. You may use the "with prompting" section to indicate whether the particular skill can be performed with additional assistance from adults. For instance, if your child will exhibit a particular skill or behavior more frequently when cueing or prompting is provided, or when interacting with adults rather than peers, please place an "X" in the "with prompting" section. Please use the "Additional Information" section at the end of the rating scale to provide additional information on the child's social skills and social cognitive functioning.

Social Skills Assessment Flowchart: Three Types of Assessment (Bellini, 2016)

Autism Social Skills Profile-2

Never	Sometimes	Often	Very Often
N	S	O	V

Component Skill	How Often?	With Prompting?	Scoring			
			SER	SPA	DSB	Total
Invites Peers to Join Him/Her in Activities	N₁ S₂ O₃ V₄		■		■	
Joins in Activities with Peers	N₁ S₂ O₃ V₄		■		■	
Takes Turns during Games and Activities	N₁ S₂ O₃ V₄			■	■	
Interacts with Peers during Unstructured Activities	N₁ S₂ O₃ V₄		■		■	
Asks Questions about a Broad Range of Topics	N₁ S₂ O₃ V₄		■	■		
Asks Questions to Request Information about a Person	N₁ S₂ O₃ V₄			■		
Engages in One-On-One Social Interactions with Peers	N₁ S₂ O₃ V₄		■	■		
Interacts with Groups of Peers	N₁ S₂ O₃ V₄		■	■		
Maintains the "Give and Take" of Conversations	N₁ S₂ O₃ V₄			■	■	
Talks About or Acknowledges the Interests of Others	N₁ S₂ O₃ V₄			■	■	
Exhibits Poor Timing with His/Her Social Initiations	N₄ S₃ O₂ V₁		■	■		
Page 2 Scoring Summary			SER	SPA	DSB	Total

Type I Assessment:

General Interview of Social Functioning

Parent Interview
Teacher Interview
Child Interview

Rating Scales

Social Competence
Emotional/Affective Functioning
Behavioral Functioning

Type II Assessment:

Naturalistic Observation
Structured Observation

Type III Assessment:

Role Play

Social Cognitive Asessment

Select Objectives and Component Skills
Select Objectives
Identify Component Skills Necessary to Reach Objectives
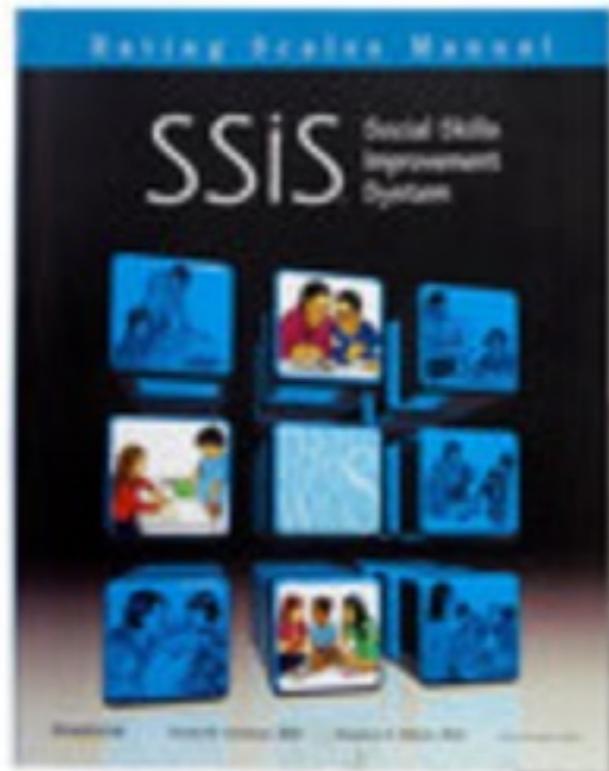
Social Engagement Recording Form

Child: Tommy

Date: November 19, 2015

Setting: Recess

Observer: Bellini

Social Engagement (Partial Interval, 10 seconds in length)
1 = Engagement   0 = No Engagement

Time Begin: 10:15

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
I	I	I	I	I	I	I	I	I	I	I	I	I	0	0	0	0	0	0	0	0	0	0	0

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
I	I	0	I	I	0	0	0	0	0	0	0	0	0	0	0	0	0	I	I	I	I	I	I

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

Time End: 10:30

Social Initiations and Responses (Event/Frequency Recording)

Record each observation of an iniation and/or response to initiation
during the 15-minute observation

Social Initiations:	Opportunities for Response:
卌	‖‖‖
	Social Responses: ‖‖

Notes:

Played with three different children during observation. Failed initiation due to low voice volume and not establishing attention prior to asking peer to play. Work on B-A-T in next session.

Factors Contributing to Social Failure

Performance Deficits

Inadequate Social Skills & Cognition

Social Failure

Cruel/Rejecting Peers

Detrimental Social Behaviors
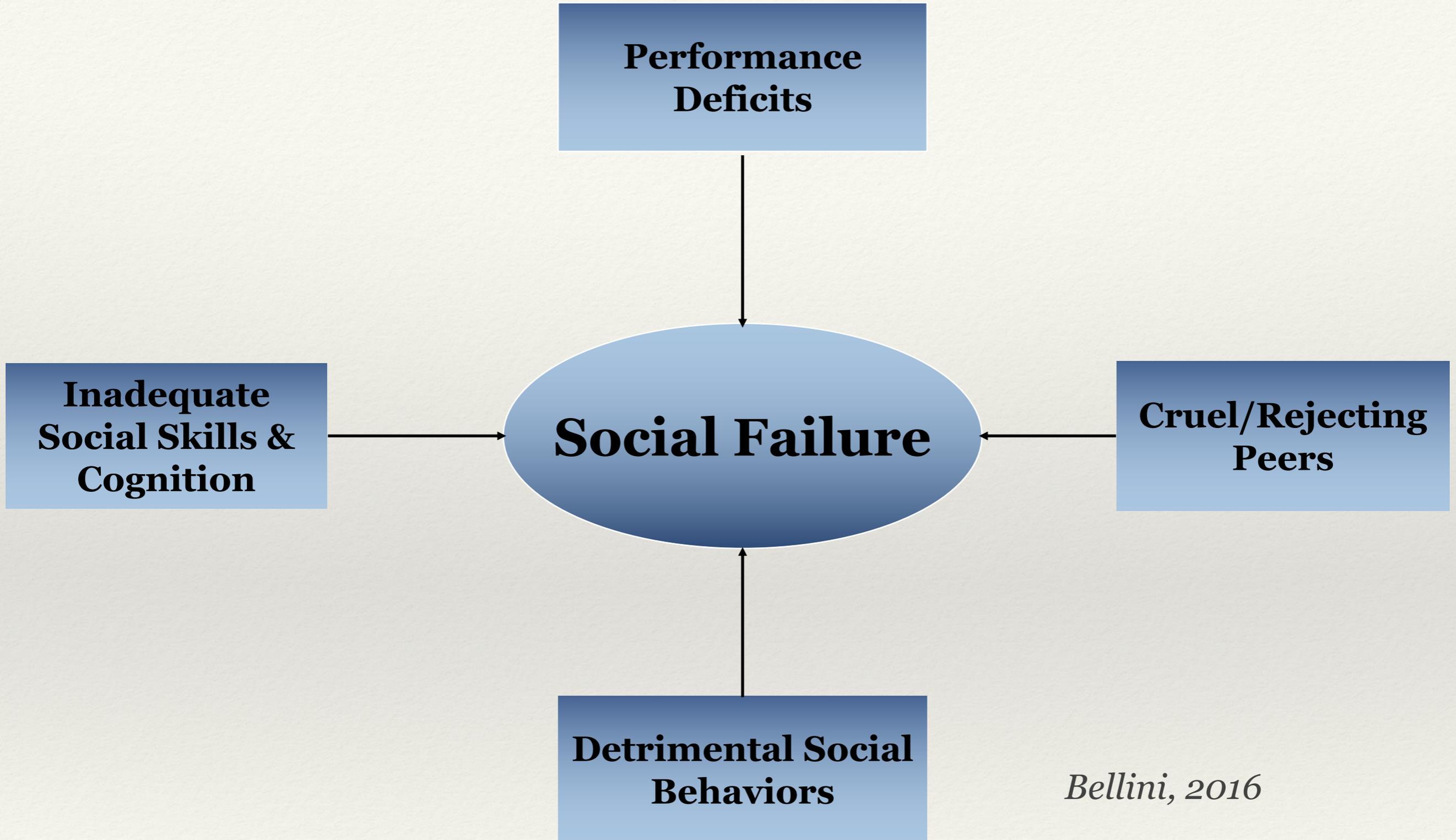
Bellini, 2016

Social objectives should be *clear and measurable* and component skills should be individualized to the child's needs

Discerning between Objectives and Component Skills in the BSR Program:

Objectives represent what you will measure

Component Skills represent what you will teach

LINKING SOCIAL OBJECTIVES TO COMPONENT SKILLS

Social Objective:

Scotty will increase initiations to peers during free play

Component skills needed to successfully reach objective (skills to be taught):

Reading nonverbal and contextual cues

Knowledge of social rules (i.e., when to join a conversation with two people without interrupting)

Observational learning

Perspective taking

Regulation of emotion

Coordination and timing of motor movements (i.e., position of body and proximity during initiation)

Use of eye contact to initiate interaction

Conversational planning

The Relationship Between Social Objectives and Component Skills (Bellini, 2016)

We must discern between a skill acquisition deficit and a performance deficit, prior to selecting intervention strategies

Skill Acquisition Deficit:

Refers to the absence of a particular skill or behavior

Goal of Intervention:

Teach new skills or develop recently acquired skills

Performance Deficit:

Refers to a skill or behavior that is present, but not demonstrated or performed

Goal of Intervention: Enhance performance of existing skills

How to Discern between a SAD and PD

- **Does the child perform the skill across multiple settings and persons?**

- **Does the child perform the skill when reinforcement is provided?**

- **Does the child perform the skill without support or assistance?**

- **Does the child perform the skill fluently and effortlessly?**

- **Does the child perform the skill when environmental modifications are made?**

Evidence Based Practices for Youth on the Autism Spectrum

National Professional Development Center on Autism:
http://autismpdc.fpg.unc.edu/node/19

National Autism Center
http://www.nationalautismcenter.org/national-standards-project/phase-2/

Evidence Based Practices Used in the BSR Program

Self-Management

Social Narratives

Social Skills Training

Prompting

Peer Mediated Interventions

Modeling

Structured Play Group

Video Modeling

Reinforcement+

Cognitive Behavioral Intervention

Technology Aided Instruction

Time Delay Prompt Fading

CASEL Core SEL Competencies

Core SEL Competencies

BSR Intervention Strategies: Social Skill Instructional Strategies

- Social Narratives
  - Social Skill Targeted: Social Initiation and Social Responding
- Behavioral Rehearsal
  - Social Skill Targeted: Social Initiation and Social Responding
- Conversation Game
  - Social Skill Targeted: Reciprocal Conversation
- Structured Play (Prompting)
  - Social Skill Targeted: Social Initiation, Social Responding, and Social Engagement
- Video Modeling
  - Social Skill Targeted: Social Initiation, Social Responding, and Social Engagement

BSR Intervention Strategies:
Social Cognitive Strategies (Cont.)

- Stop, Watch, and Follow Along
  - Social Cognitive Skill: Observational Learning
- Reading Non-Verbal Cues and Inferring Feelings in Pictures
  - Social Cognitive Skill: Pre-Perspective Taking
- Modified False-Belief Tasks
  - Social Cognitive Skill: Perspective Taking
- "Yes/No" (Peg Board) Activity
  - Social Cognitive Skill: Joint Attention
- Social Problem Solving (with pictures and videos)
  - Social Cognitive Skill: Social Problem Solving
- Self-monitoring Activity During Monkey in the Middle and Telephone Game
  - Social Cognitive Skill: Self-Awareness

- Modified I-Spy
  - Social Cognitive Skill: Joint Attention
- Point it Out
  - Social Cognitive Skill: Joint Attention
- Follow the Leader
  - Social Cognitive Skills: Perspective Taking, Joint Attention, Self-Awareness
- Infer Interests
  - Social Cognitive Skill: Perspective Taking
- Musical Chairs with Visual Cues
  - Social Cognitive Skill: Divided Attention
- Conversation Game during Play Activity
  - Social Cognitive Skills: Divided Attention

The Social Skills Research Clinic (SSRC): Structure of Sessions

- **Part 1: (20 minutes)**
  - Social cognitive instruction that targets at least two of the following areas each session:
    - Social Problem Solving
    - Perspective Taking (and pre-perspective taking skills)
    - Self-Awareness
    - Observational Learning
    - Joint Attention
    - Selective/Divided Attention
    - Declarative Knowledge (social rules, norms, etc.)
- **Part 2: (20 minutes)**
  - Behavioral strategies that target one or more of the component skills (i.e., "Featured Skills) such as:
    - Joining in Others Play
    - Asking Others to Join in Play
    - Asking Questions
    - Responding to Initiations
    - Taking Turns
- **Part 3: (5 minutes)**
  - Data collection/Free play

Social Skill Strategies Covered Today

Social Narratives and Behavioral Rehearsal

Reciprocal Interaction Strategies

Peer Mediated Interventions

Prompting and Structured Play Groups

Video Self-Modeling

Social Narratives and Behavior Rehearsal

Social Narratives

An evidence based approach for teaching specific social skills or social concepts by presenting the social skill or concept in the form of a story

- ☑ Use pictures with your Social Narratives to provide social context

- ☑ Combine **Social Narratives** with **Behavioral Rehearsal** for maximum effectiveness (targets both "Thinking" and "Doing")

Example of a Social Narrative

Social Narrative with Visual Context

Social Narratives

Social Skills to Teach: *Reading nonverbal cues, taking another person's perspective, inferring the interests of others, initiating interactions, reciprocal interactions, making eye contact, social rules and concepts*

Type of Skill Deficit Targeted: *Skill acquisition deficit and performance deficit*

THE ANNIE STORY: PLAYING WITH FRIENDS

I like making friends at school. There are a lot of kids at my school to play with. When I see other kids playing a game, I can walk over to them and say, "Can I play with you?"

Sometimes I want other kids to play a game I want to play. If I want a friend to play on the monkey bars with me, I should say, "Do you want to play on the monkey bars with me?"

It makes me very happy to play with other kids.

THE ANNIE STORY: PLAYING WITH FRIENDS

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Behavioral Rehearsal/ Role-Playing

*Acting out situations or activities in a structured environment to **<u>practice</u>** newly acquired skills and strategies*

From Building Social Relationships-2 (Bellini, 2016)

Behavioral Rehearsal

Social Skills to Teach: *Reading nonverbal cues, reciprocal conversations, initiating interactions, responding to initiations, making eye contact, social rules, nonverbal communication*

Type of Skill Deficit Targeted: *Performance deficit*

Example of Behavioral Rehearsal + Social Narrative

Suggestions for Behavior Rehearsal

1. Use both scripted and spontaneous behavioral rehearsal scenarios.

2. Select interaction skills or social rules that can be "acted-out" or practiced.

3. Use covert and verbal rehearsal to introduce skills and facilitate transfer of skills to the natural environment.

4. Use overt rehearsal to enhance performance and fluency of the skill.

5. Provide prompts to ensure successful performance of the skill during the behavioral rehearsal.

6. Add complexity and difficulty to the behavioral rehearsal as the child progresses.

7. Perform three repetitions of the role-play for newly introduced skills and three repetitions for previously learned skills.

8. Provide prompting to ensure that the child performs the behavior or skill in the natural environment.

From Building Social Relationships-2 (Bellini, 2016)

Behavioral Rehearsal and "Batting" Practice

"Batting Practice" is a Behavioral Rehearsal Strategy used to teach the proper sequence for initiations

Example of "Batting Practice"

"B-A-T" or "Batting" practice:

B = Body Position

A = Attention

T = Talk

AN EXAMPLE OF USING BEHAVIORAL REHEARSAL TO IMPROVE INITIATION SKILLS (B-A-T PRACTICE)

Behavioral rehearsal is an extremely effective strategy to improve the initiation skills of youth on the autism spectrum. We use the acronym B-A-T in teaching children how to effectively initiate interactions with peers: "B" represents body position; "A" represents attention; and "T" represents talk.

Body position refers to moving your body into a position that indicates to the other person that you will be talking with them. For example, we should face the other person and stand within an arm's length if possible (note that this "arm's length" doesn't work for all situations, but it is a good starting point). Many of our children start initiations when they are too far away from the other person and sometimes while facing in the opposite direction.

Attention refers to gaining the other person's attention (usually via eye contact) prior to talking to them. Too often, our children begin talking to the other person prior to gaining their attention. The result is that the other person doesn't notice them, at least initially, resulting in a failed initiation. Children do not need to maintain eye contact in this activity, but they must use it to start the initiation.

Finally, after you move your body into position and gain the other person's attention, you now can **Talk** to the other person, which concludes the B-A-T process. Primarily, the purpose of the B-A-T acronym is to teach the child that the initiation does not begin with talking. It ends with talking. The concept of B-A-T is first introduced to the child with a social narrative, verbal description, or video modeling, depending on the needs of the child.

Reciprocal Interaction Strategies

Reciprocal Interaction Strategies

Social Skills to Teach: Conversational skills (initiating planning, and maintaining), reciprocity, reading nonverbal skills, processing speed, cognitive flexibility, social problem solving, perspective taking

Type of Skill Deficit Targeted: Skill acquisition deficit

Reciprocal Interaction Strategies

A group of strategies that teach children to how engage in and maintain reciprocal interactions and conversations with others

Strategies in this Section:

1. Conversation Game

2. News Reporter

3. Conversation Map

Conversation Game

Activity that requires the child to maintain a reciprocal conversation with another person

Steps and Procedures:

☑Pair child with another child (group session or class-wide instruction) or therapist (individual session)

☑Start the game by one person asking a question to their partner (any question)

☑The other person then answers the first question and then in turn, asks a question to their partner

☑Continue for 1-2 minutes depending upon age and skill level of the child

☑Provide prompting as necessary if the child fails to respond to a question or takes too long to answer a question

☑Can be modified to facilitate and encourage topic maintenance

News Reporter

Activity designed to promote "asking questions about others." Used primarily with children who rarely ask questions to others, or who only ask questions about their own topical interests.

Example of "News Reporter"

- What is your name?

- How old are you?

- What is your favorite food?

- What is your favorite color?

- What is your favorite television show?

- What do you like to do for fun?

Steps and Procedures:

☑Pair child with another child (group session or class-wide instruction) or therapist (individual session)

☑Start the game by telling the children about the job of a newspaper reporter

☑Tell the children (doesn't have to be verbatim) that they are going play the role of a "reporter" whose job it is to interview another person and to get as much information about that person as they can.

☑Provide the "reporter" with the list of basic questions (children should be encouraged to develop their own questions once they get comfortable with the activity).

☑Provide prompting as necessary if the child fails to ask a question and to keep the interview moving.

☑Encourage the child to ask follow-up and "probing" questions in the spirit of great journalism

☑Encourage the child and family to play "Reporter" at home and report back during the next session

☑For children who engage in one-sided conversations or ask repetitive questions, you can put them in the position of the interviewee

Conversation Map

Strategy that teaches children how to plan and initiate a conversation or interaction with others

Conversation map provides the child with a guide, or pathway, to follow when they initiate interactions with others

Implementation Considerations:
☑ Best suited for individual sessions but can be done in groups (in which case group members provide "assistance" to target child)
☑ Integrates perspective taking, social problem solving, and inferring the interests with others with specific initiation and reciprocity skills
☑ Must be modified based on language and developmental level of the child

From Building Social Relationships-2 (Bellini, 2016)

Example of Conversation Map

Conversation Map Questions

1. Person you would like to talk to or play with?
   Name of person:
   Grade/class of person:

2. Reason you would like to talk with the person?
   - To ask a question
   - To play with or hang out with the person
   - Just talk with the person

3. Person's interests?
   - Things he/she likes to do
   - Things he/she likes to talk about

4. Things you might say or talk about?
   - Would the other person be interested in talking about this?

5. How might you begin conversation?
   - What will you say?
   - How might the other child respond (3 possible responses)?

6. When would be the best location to talk to this person?
   - In class
   - In the hallway
   - At recess
   - When he/she is with other children
   - When he/she is by herself

7. Practice

From Building Social Relationships-2 (Bellini, 2016)

Peer Mediated Intervention

Peer-Mediated Interventions

Social Skills to Teach: Reciprocal conversations, initiating interactions, responding to initiations, maintaining engagement

Type of Skill Deficit Targeted: Performance deficit

Peer Mediated Intervention

An evidence based approach for facilitating social interactions between children on the autism spectrum and their peers

Components of a PMI Program:

☑ Non-disabled peers are systematically taught to initiate and to respond to peers with ASD

☑ Can be used in both group social skills programs and also natural environments

☑ Can be used to enhance performance and generalization of skills in the natural environment

☑ **KEY POINT**…Use of peer mentors allows adults to serve as facilitators rather than as playmates for the child with ASD

Training Peer Mentors

Implementing a Peer-Mediated Intervention Program

Prior to Beginning Program

1. Describe role of a peer mentor

2. Provide a detailed description of roles and responsibilities (to parents too)

3. Teach peer mentors about autism spectrum disorders (be child specific)

Every Week (Ongoing Training)

1. Reaffirm importance of peer buddies (provide verbal praise)

2. Introduce new skills and review previously learned skills or topics (provide verbal description and model demonstration of skill)

3. Have peer mentors practice skills with adult facilitator and other peers

For more information on peer-mediated interventions, see *Vanderbilt/Minnesota Social Interaction Project Play Time/Social Time: Organizing Your Classroom to Build Interaction Skills* (Odom & McConnell, 1993) and *S.O.S.: Social Skills in Our Schools: A Social Skills Program for Children With Pervasive Developmental Disorders, Including High-Functioning Autism and Asperger Syndrome and Their Typical Peers* (Dunn, 2006).

From Building Social Relationships-2 (Bellini, 2016)

From Building Social Relationships-2 (Bellini, 2016)

Prompting and Structured Play Groups (SPG)

Example of Peer
Training Session:
"Social Coaching"

Social Coaching

1. Verbally introducing the social skill,

2. Soliciting a verbal response in which children describe the skill,

3. Providing a short series of positive examples of the use of the social skill with a child in the group, and

4. Having each child demonstrate the use of the skill with another peer in the group.

Prompting

An evidence based strategy that consists of providing supports and assistance (i.e., "prompts") to help the child acquire skills and successfully perform behaviors.

Benefits of Prompting:

☑ Can be used as both a skill acquisition and performance enhancement strategy

☑ Prompts and be delivered in individual, group, and naturalistic social settings

☑ Prompts can be delivered by both adults and peers

☑ **Key point**: Prompting is not your enemy…prompt **dependence** is your enemy!

Prompting Social Performance

Social Skills to Teach: *Reading nonverbal cues, reciprocal conversations, initiating interactions, responding to initiations, joint attention, divided attention, social problem solving, perspective taking*

Type of Skill Deficit Targeted: *Skill acquisition deficit and performance deficit*

Types of Prompts

Types of Prompts

Natural prompts	An environmental stimulus that naturally occurs prior to target behaviors, such as a social initiation directed at the child from another person
Gestural prompts	A nonverbal gesture or other visual cue that directs an individual to perform a task or to attend to a particular stimulus
Verbal prompts	Most common prompt used with children; includes things like specific verbal directions or general statements
	• *General verbal prompts* are implicit statements designed to jog a child's memory to perform a task (less supportive)
	• *Specific verbal prompts* are instructions that explicitly direct the child's behavior (more supportive)
Modeling prompts	Demonstrating part or all of the desired behavior to the student, who imitates the action immediately
Physical prompts	Physically guiding a child in the performance of a target behavior

From Building Social Relationships-2 (Bellini, 2016)

Most Supportive   **Least Supportive**

Physical Prompt … Modeling Prompt … Verbal Prompt … Gestural Prompt … Natural Prompt

Prompting Procedures

Attentional v. Behavioral Prompts in the BSR Program

Behavior Prompts*: Prompt that directs the child to perform a behavior*

Attentional Prompt*: Prompt that directs the child to attend to the natural prompt*

☑ *In the BSR Program, 75% of all prompts are attentional prompts.*

From Building Social Relationships-2 (Bellini, 2016)

BSR Prompting Guidelines

General Principles

[a] Prompt only if necessary … be patient!

[a] Start with least supportive, yet effective prompt

[a] Prompt *initiation, responding,* and *maintaining engagement*

  – Prompt targeted skills up to 10 times during SPA

[a] For *initiations*, prompt target child to initiate with peer mentor

[a] For *responses*, prompt peer mentor to initiate with target child

[a] For *responses*, provide attentional prompt prior to providing behavioral prompt (i.e., prompt the child to attend to the initiation attempt of the other person prior to prompting the child to respond)

[a] If attentional prompt fails, prompt the child to respond to the initiation

From Building Social Relationships-2 (Bellini, 2016)

Prompt Fading

Most to Least v. Time Delay Prompt Fading Procedure

Most to Least Prompt Fading: Less supportive prompts are provided just before or simultaneously to more supportive prompts until they are "faded" to the natural prompt

Progressive Time Delay Procedure: Prompt is "faded" by systematically extending the time interval between the natural prompt and the supportive prompt

☑Research indicates (and my clinical experience supports) that Progressive Time Delay procedures are more effective and efficient in fading prompts

In the BSR Program, 75% of all prompts are attentional prompts.

From Building Social Relationships-2 (Bellini, 2016)

Prompt-Fading Procedures

Most to Least Method

- ✓ Start by "pairing" prompts (i.e., less supportive prompt presented prior to or simultaneously with more supportive prompt)
- ✓ Fade verbal prompts from specific to general
- ✓ Fade to a less supportive prompt after 3-5 consecutive correct trials
- ✓ Continue until you fade back to the natural prompt

Progressive Time Delay

- ✓ Start by providing an immediate supportive prompt (0-second delay)
- ✓ Fading begins after 3-5 consecutive correct trials at a 0-second delay
- ✓ Provide same level of prompt at 3-second delay
- ✓ After 3-5 consecutive correct trials, provide same level of prompt at 7-second delay
- ✓ Move to 10-second delay if child still requires prompting and repeat process
- ✓ Continue to until child begins to respond to the natural prompt prior to presentation of supportive prompt

From Building Social Relationships-2 (Bellini, 2016)

Structured Play Groups (SPG)

Organized "play" activities designed to facilitate high levels of social engagement between children on the autism spectrum and their peers.

Initial Goal of SPG: To provide as much prompting as necessary to achieve near 100% levels of engagement

☑ Note: We almost never achieve 100% levels of engagement…but we certainly try!

Ultimate Goal of SPG: To systematically fade prompts so that social engagement remains high, but prompting reaches near zero levels

Steps and Procedures

☑ Organize social game or activity with child on the autism spectrum and at least one other peer

☑ Prompt as necessary (using Prompting "Cheat Sheet") to maintain social engagement between child on the autism spectrum and peer mentor

☑ After high levels of engagement are achieved, implement a prompt fading procedure to reduce amount of support

☑ Note: In the BSR Program we video record the SPG activities and then show the edited clips later as part of the Video Self Modeling intervention

Procedures

- Prompt after 20 seconds of non-engagement
- Allow 10 seconds for child to respond to prompt (natural or supportive)
  - If child does not respond, provide an attentional prompt
  - If child does not respond, provide a behavior prompt
  - If child does not respond, provide a more supportive prompt
  - If child does not respond after 10 seconds, provide an even more supportive prompt
    - [a] If child does not respond, wait 60 seconds then repeat process

Video-Self Modeling

Modeling and Youth with ASD

Changes in behavior, thinking, or emotions that occur through observing another person, or model.

Note on the Historical Perspective on Modeling in Children with ASD: Live Modeling v. Video Modeling

# Three Prerequisites to Successful Modeling (Bandura)

According to Bandura, there are three prerequisites for successful modeling:

1. **Attention:** The ability to attend to behavior of others
2. **Memory**: The ability to remember what it is that you have seen
3. **Behavioral Reproduction**: The ability to perform the behavior that you have observed

Zone of Proximal Development (Vygotsky)

Skills a Child Can Perform With Support

Supported Skills

Autonomous Skills
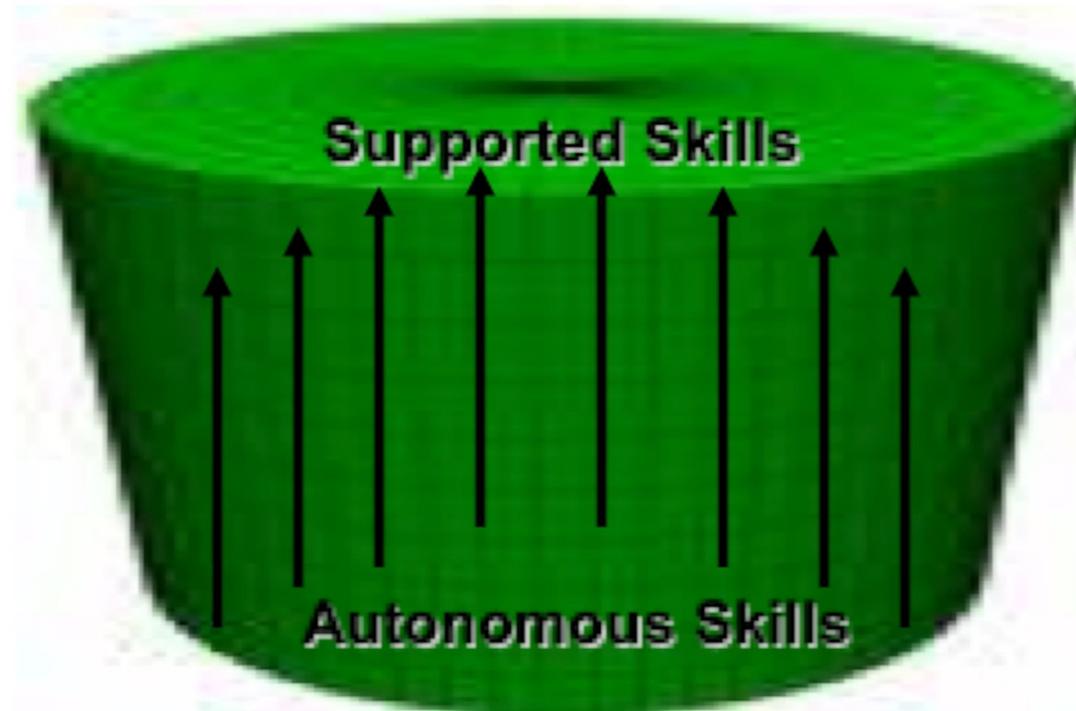
Skills a Child Can Perform Independently

A Meta-Analysis of Video Modeling and VSM Interventions (Bellini & Akullian, 2007)

- Moderate to highly effective in 19 out of 23 studies published in peer reviewed journals
- Outcomes included social-communication, functional skills, and behavioral functioning
- Interventions effective across the age span (ages 3 to 20) and across the autism spectrum (varying levels of language and cognitive functioning)
- Study Determined that Video Modeling met criteria for an Evidence Based Practice as defined by Horner et al. (2005)

Why is Video Modeling is Particularly Effective for Children with Autism?

1. Capitalizes on the benefits of visually cued instruction

2. Provides a visual representation of success

3. Directs attention to instructional cues and salient contextual cues

4. Decreased anxiety

5. Leverages the child's motivation to watch videos

Benefits of VSM for Children and Youth

Benefits of Video Modeling and Video Self-Modeling

1. Promotes acquisition of new skills

2. Enhances performance of existing skills (increases mastery and fluency and decreases anxiety)

3. May be combined with other strategies (e.g., coaching, social problem solving, self-monitoring)

4. Allows for the use of "hidden" supports and prompt fading

5. Increases self-confidence through the viewing of efficacious behavior

6. Promotes self-awareness

Video Self-Modeling (VSM)

*Intervention where observers are shown videotapes of themselves **successfully** engaging in a skill or activity*

Independent and efficacious performance is facilitated via positive self-review and use of hidden-supports

Using self as the model, ensures that the model has similar attributes and ability of target child

Example of VSM using "Hidden Supports"

VSM has been used Successfully with the Following Populations/Disorders/Issues:

- ☑ Problem Behaviors
- ☑ Academic Engagement
- ☑ Impulsivity
- ☑ Adaptive Behavior/Daily Living Skills
- ☑ Athletic Performance
- ☑ Reading Fluency and Comprehension
- ☑ Math Achievement
- ☑ Articulation Disorders
- ☑ Selective Mutism
- ☑ Autism (behavior, social skills, communication)
- ☑ Phobias/Anxiety (Speaking, Social, Specific, etc.)

Examples of VSM Editing

A "How-to" Example of Editing Videos Using iMovie

Frequent Questions: When can you Start using VSM? Is there a minimum Age and Developmental Level?

Here's an Example

"Clean-Up" age 20 months

Lessons Learned in Research and Practice

1. Keep it short...1-2 minutes will suffice

2. Keep it simple...do not talk during showing of the video and don't try to win an academy award!

3. Keep it positive...show only efficacious behavior, not mistakes or failures

The Semi-Manualized Version of the BSR Model:
A Sneak Peek!

- Is Data Driven
- Targets both Social Behaviors and Social Cognition
- Combines both Skill Acquisition Strategies and Performance Enhancement Strategies
- Target Skills are Determined in Advance of the 9 Week Program
- Session Structure Plans are Created in Advance of the 9 Week Program*

*Unlike the Original BSR Model, every minute of every session is pre-determined at the beginning of the 9 week program. That is, the strategies and techniques have been "manualized" or structured for the therapist or instructional team.

Preliminary Outcome Data
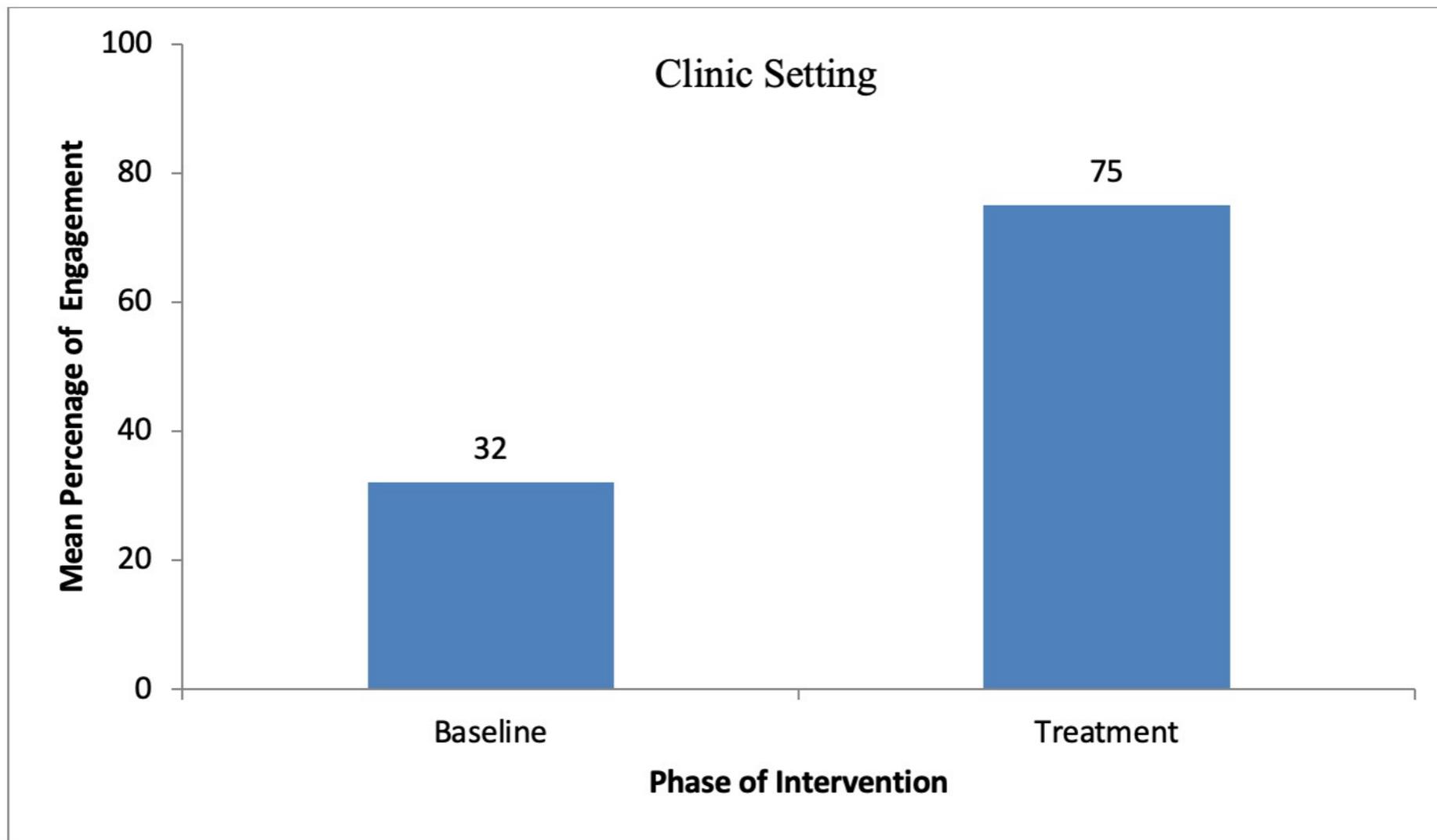
*Figure 2*. Mean percentage of unprompted social engagement within the clinic for baseline and treatment phases (*n* = 14)
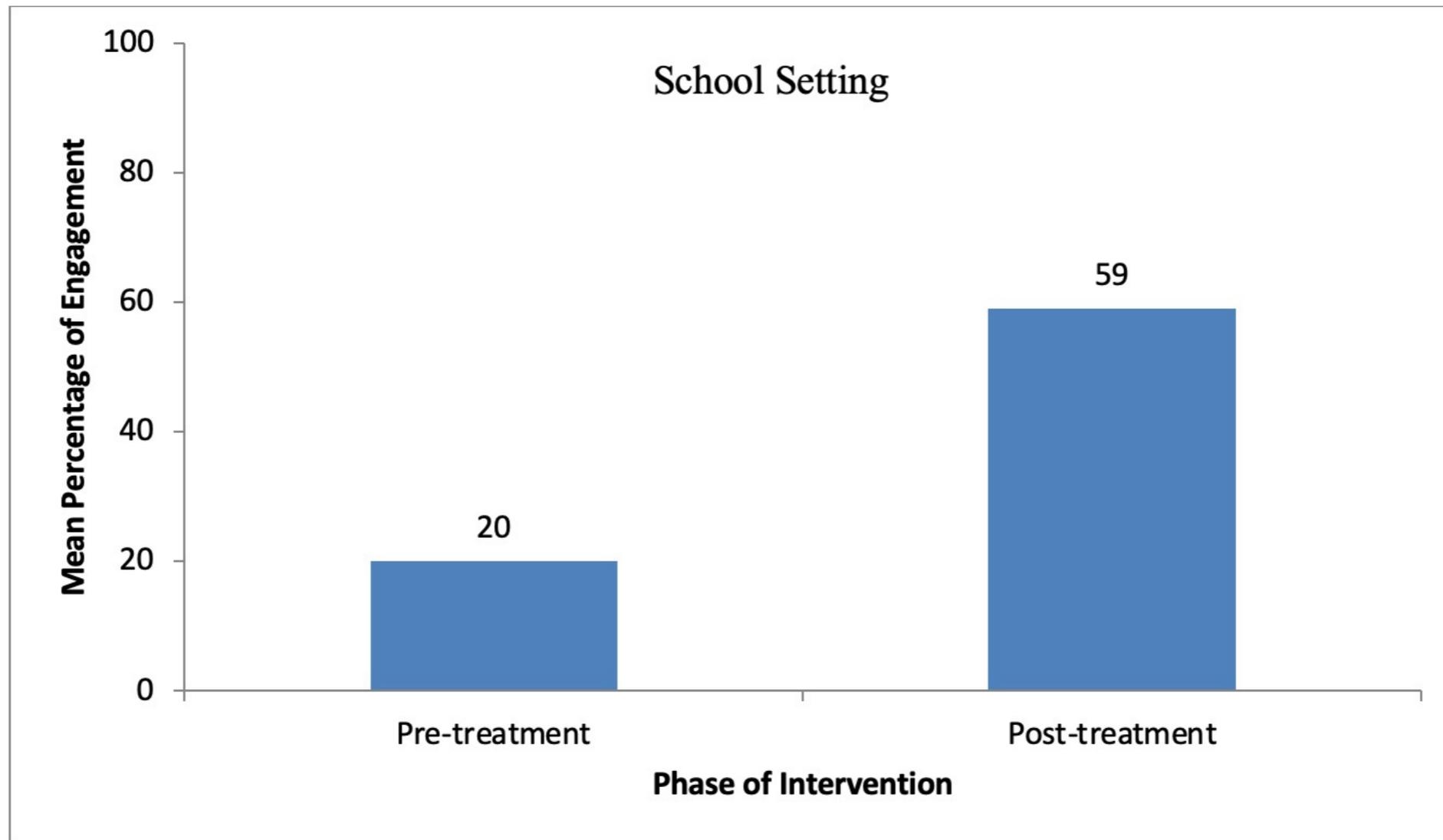
Figure 3. Mean percentage of unprompted social engagement with peers during school observations pre- and post-treatment (*n* = 10).

In Closing

- **Start with Assessment...End with Assessment**
  - Don't start with what you want teach, start with what the child needs to learn

- **Programming with a purpose...be systematic.**
  - Use systematic model to guide programming

- **Stop "Chasing" Behaviors**
  - Address underlying skill deficits

- **Develop a LARGE intervention tool chest**
  - Keep learning and never stop challenging your personal and theoretical assumptions

Thank you for participating in this training!

Building Social Relationships through Evidence Based Social Skills Programming for Children and Youth on the Autism Spectrum

For updates and more information on the BSR Program, including the new BSR On-Line Training Courses check out:
BelliniBSR.com