Welcome to Special Learning's
Webcast Training Series
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Special Learning

Topic: Elementary School Social Skills:
Predictors of future success (Part 2 of 4)

Speaker: Michele LaMarche, BCBA

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Professional Training Series

Elementary School Social Skills:
Predictors of future success (Part 2 of 4)

Presented by: Michele LaMarche, BCBA

Speaker Bio

Michele LaMarche is a BCBA and co-founder of Special Learning, Inc. She is also the founder and Executive Director of Step By Step Academy (SBSA), a highly-regarded center-based non profit Autism treatment facility in Columbus, Ohio. Since its formation almost ten years ago, SBSA has touched the lives of over one thousand students through rigorous application of Applied Behavior Analysis (ABA) treatments, resulting in exceptional outcomes.

Michele, with over fifteen years of professional experience in the field of ABA, uses her knowledge of behavioral treatment to produce ground breaking, effective, empirically validated curricula, a critical factor in successfully mainstreaming hundreds of students with ASD. With her credentials and work through Special Learning and SBSA, she has changed the lives of countless individuals and families affected by ASD.

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Objectives

 Upon completion of *Elementary School Social Skills: Predictors of future success (Part 2 of 4)*, participants will:

1. Identify the social skills that elementary-aged children with autism may need to be taught.
2. Describe when to begin teaching social skills and why each skill is necessary.
3. List evidenced-based strategies to teach social skills.

End Code: msml27012s

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Social Skills and ASD

- A defining characteristic of autism spectrum disorder
  - Some social skill abilities are shown to be predictors of future success
  - Individual likely has multiple social skill deficits
  - Wide range of specific skills to teach and behaviors to address
  - Ongoing training typically needed
  - Part of all diagnosis of ASD
  - Predictors of future success

- Evidence shows social skills can be learned
  - Social skills are complex, still being studied, and may be difficult to teach
  - Treatment strategies often vary dependent on a child's level of functioning and language repertoire
  - May be difficult to generalize or contrive natural situations to apply
  - Learning to perform a social task does not necessarily mean one has grasped the overall concept
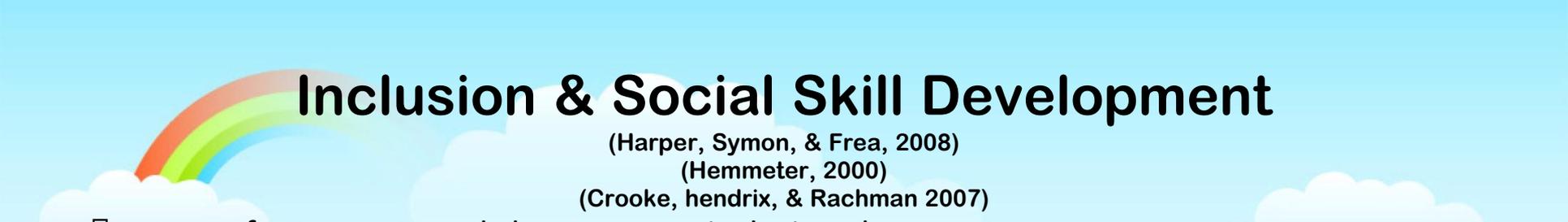
Inclusion & Social Skill Development

(Harper, Symon, & Frea, 2008)
(Hemmeter, 2000)
(Crooke, hendrix, & Rachman 2007)

- Move from segregated classrooms to inclusion classrooms
    - What is inclusion?
        - The integration of an individual with disabilities into an education setting with students who do not have disabilities
        - Students with disabilities participant in activities with peers and remain in the general education classroom
- Inclusion requires more than just placement
    - The integration of students into typical classrooms does not result in an automatic increase in the development of social skills
    - Must teach the skills necessary to interact with peers, even within an inclusive setting
    - Students don't learn how to socialize just be being around and with peers
- Successful Inclusion:
    - Teaches social skills necessary
    - Integrates students with disabilities into typical classrooms
    - Involves students in classroom activities and routines
    - Promotes frequent teaching opportunities to increase social skills
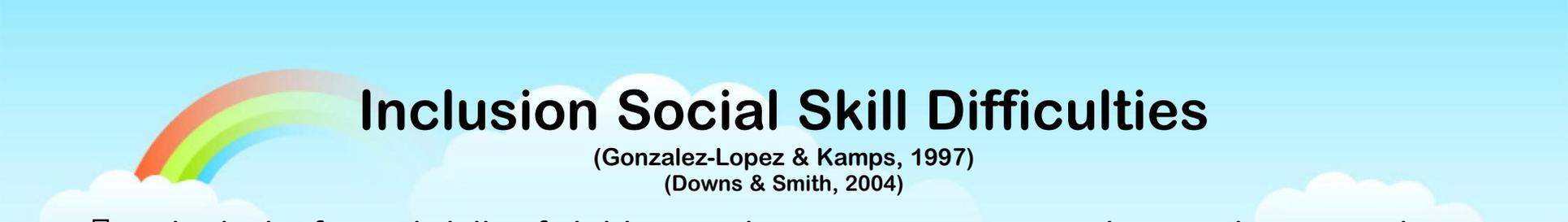
Inclusion Social Skill Difficulties

(Gonzalez-Lopez & Kamps, 1997)
(Downs & Smith, 2004)

- The lack of social skills of children with autism presents teachers and peers with a variety of difficulties within a classroom setting

- Children with autism may engage in difficult behaviors such as:
  - Problem behavior as a result of social interaction such as vocal protest or aggression
  - Lacking appropriate communication and inability to initiate conversation with peers
  - Lack of appropriate play behaviors, inability to join in play such as taking a toy from a peer
  - Decreased motivation to engage in peer interaction and disinterest in those around them

- In addition, not engaging in <u>social behaviors</u>, <u>theory of mind</u>, and <u>reciprocity</u> may result in the inability to engage in **cooperative behaviors**

- What are considered cooperative behaviors?
  - When multiple people are focused on a similar goal and work together in order to achieve it
  - Example: children playing a game and assuming specific roles, characters

Intervention within Inclusive Settings

(Crooke, hendrix, & Rachman 2007)

- Discrete skill-based approach
  - For children with little or no language
  - Social skill training involving explicit teaching of the skill and providing reinforcement
- Social Thinking approach
  - For higher functioning children with language such as children diagnosed with Asperger's syndrome or high functioning autism
  - Specific social cognitive tasks
- Many more not referenced by this article

Social Skills in Elementary-aged Children
(Wagner, 1999)

- Social skills may be lacking in elementary-aged children for several reasons:
    - Children may not have a repertoire of appropriate ways to, or may not, respond to approaches from others
    - They may misunderstand or not understand the meaning of social skills from others in his/her environment
    - Peers may not know how to interact with others with disabilities and/or children with disabilities may not be motivated to engage with others leading to lack of practice engaging in social skills
    - Children may be unable to control emotions
    - Children may not understand the language used during social interaction
    - May not recognize or know how to respond to social cues

Elementary-aged Social Skill Deficits

 Elementary-aged children with autism and other developmental disorders may experience deficits in the following areas, but not limited to:

- Theory of mind
- Executive functioning
- Emotion regulation and understanding
- Attending
- Ability to interact with peers
- Following directions
- Turn-taking with peers
- Cooperative behaviors

Elementary-age Social Skills Reviewed Today

- Theory of Mind
- Executive Functioning
- Social Cognition, Social Thinking
- Perspective
- Symbolic Play
- Complex Social Sequences
- Social-Emotional Skills
- Emotion Recognition
- Responding to Peers, initiating Interactions, understanding and responding to facial expressions
- Participation in cooperative activities, playing an organized sport game, socializing with peers during lunch

Common Evidence-Based Strategies

Literature indicates social skills can be taught, however:

- No large-scale improvements
- No evidence of generalization
- (Crooke, 2008)

- Social Stories®
- Peer-mediated intervention
- 1:1 paraprofessional support and prompting
- Discrete Trial Training
- Role Play
- Prompt methods – modeling & visual prompts

Evidence-Based Strategies Discussed Today

- Pivotal Response Training
- Social cognitive approach (Social Thinking approach)
- Discrete skill-based approach
- "Thoughts as pictures" strategy
- "Brain as machine" strategy
- Video Modeling
- Systemizing
- CMR (Concept Mastery Routine)
- LEGO® therapy
- SULP therapy (The Social Use of Language Programme)
- Preteaching, Prompting, Praise including instruction, demonstration, and role-play
- Social-Behavioral Learning Strategy – SODA story

Let's begin

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Important Definitions

- Mental states
- Theory of Mind
- Joint Attention
- False Beliefs
  - First-Order false beliefs
  - Second-Order false beliefs
- Executive Functioning
- Social Cognition

A Review of Joint Attention

(Jones & Carr, 2004)

- As mentioned in the previous training in part 1 of this series, joint attention is...

    - A social-communicative behavior that typically developing children begin to engage in at 9 to 18 months old
    - Occurs when 2 people share the same experience
    - Usually occurs in the form of shared gestures and gazes toward an object or event

- Children with autism do not typically develop joint attention skills

Joint Attention
(Jones & Carr, 2004)

 Joint attention in typically developing children:

- Developed with parents first, then peers
- Child can be the initiator or the responder within a joint attention interaction
- Includes the development of coordinated behaviors such as "check back," "gaze alternation," and gesturing
- Has a social function and usually develops with early communication skills
- Typically mastered once reaching 1.5 years old

Joint Attention

(Jones & Carr, 2004)

- Joint attention in children with autism:

  - Lack of motivation to engage in social interaction leads to lack of joint attention
  - Lack of joint attention is typically seen in children before they turn 1 year old
  - Impairment in joint attention changes over time
  - Teaching joint attention may require 2 areas of focus: initiation and responding
  - Related to deficits in language, social development, pretend play, theory of mind

Joint Attention

(Jones & Carr, 2004)

- Teaching the pivotal behavior of joint attention in early intervention increases:

    - communication
    - social development
    - pretend play
    - theory of mind

    - All behaviors associated with social skills

Theory of Mind

(Fisher & Happe, 2005)
(Baron-Cohen, Tager-Flusberg, & Cohen, 2000)
(Charlop-Christy & Daneshvar, 2003)

- Definition:
    - the ability to understand that other people experience different mental states, such as different beliefs, opinions, emotions, and intentions, other than one's self
    - Understanding the subjective states of others

- Developmental timeline
    - Preschool: theory of mind begins to appear
    - 2 years old: recognition that other people have thoughts, feelings that determine their behaviors
    - 3 years old: people have different beliefs and behave according to them
    - After 3 years old: behavior is governed by beliefs, even if they are false

Mental State Examples

Mental states are states of the mind, such as :

- beliefs and desires : believing that it will rain, having a desire for dark chocolate
- knowledge and thoughts : knowing that 1+1=2, thinking that 3>2.
- mental images : imagining being in heaven
- emotions and moods : hoping that one will pass the exam, fearing failure, feeling peaceful, being irritable, being long-winded
- perceptions and sensations : seeing a cat, feeling pain, hearing voices, having hunger pangs, being thirsty and tired

http://philosophy.hku.hk/courses/cogsci/intentionality.php

First-Order & Second-Order False Beliefs

- Baron-Cohen describes first-order and second-order false beliefs, as well as tasks to test these beliefs

- First-order false beliefs means
  - "Different people can have different thoughts about the same situation"
  - Inferring another person's mental state:
    - Example: "Little Red Riding Hood *thinks* that's her grandmother in the bed"
  - Corresponds to a 4-year old mental age level
  - Earliest mental age in autism is 5.5 years, typically 9 years

- Second-order false beliefs means
  - Considering embedded mental states – John thinks that Mary thinks…
  - Corresponds to a 6-year old mental age level

  Baron-Cohen, S. (2001). Theory of mind in normal development and autism. *Prisme,* 34, 175-183.

Theory of Mind First-Order Skills: Typical Development (p. 1)
(Baron-Cohen, 2001)

- First-order skills present in typically developing children:
  - First-order false belief – understand different people may think different things (4 yrs.)
  - Shift perspective to identify what another may think
  - Seeing leads to knowing principle (3 yrs.)
  - Recognize mental state words – think, know, dream, pretend (4 yrs.)
  - Include mental state words in their spontaneous speech such as when describing a story or action
  - Demonstrate imaginative and pretend play
  - Understand complex causes of emotion – 3 types: situation, desire, belief (4-6 yrs.)

Theory of Mind First-Order Skills:
Typical Development (p. 2)
(Baron-Cohen, 2001)

- First-order skills present in typically developing children:
  - Follow gaze-direction to understand that someone is thinking, and what someone wants or is referring to (mentalistic interpretation of the eyes), (4 yrs.)
  - Understand the mental state: intention
  - Understand and practice deception, understand when you are being deceived
  - Understand metaphor, sarcasm, jokes, and irony – figurative speech and language (starts as early as 3 yrs.)
  - Understand context, speaker-listener mental states and relationship, and pragmatics
  - Apply imagination in contexts other than play – imagine an unreal or impossible object

Theory of Mind Skills: ASD

(Baron-Cohen, 2001)

- When preparing to teach Theory of Mind skills consider the following:

- Precursor skills include
    - Listening to others
    - Perception
    - Imitation
    - Making acquaintance

- First emerging theory of mind skills:
    - Understand difference between fantasy, reality, other's intentions and emotions
    - Understand false-belief

Theory of Mind

(Fisher & Happe, 2005)
(Baron-Cohen, Tager-Flusberg, & Cohen, 2000)
(Charlop-Christy & Daneshvar, 2003)

- Examples of the utilization of theory of mind include:
  - Telling white lies
  - Taking things literally
  - Responding to indirect hints
  - Recognizing surprise
  - Recognizing embarrassment

- Children with autism have shown to have difficulty engaging in theory of mind

Theory of Mind
(Gevers, et al., 2006)

☐ Gevers, Clifford, Mager, and Boer (2006) referred to various issues that may arise as a result of an inability to understand theory of mind:

☐ Inability to engage in social interaction

☐ Inability to engage in conversation with others

☐ Unable to recognize and understand irony, humor

Theory of Mind
(Begeer, et al., 2011)

- Begeer, et al. (2011) examined a training to increase theory of mind in elementary-aged children

- Consisted of 53 training sessions that increased in difficulty

- Sessions:
  - identification of the precursors to understanding theory of mind – listening to others, perception and imitation, making acquaintance
  - Differences between fantasy, reality, other's intentions, and emotions
  - Elementary theory of mind skills – first order mental state reasoning: deceit, deception, deceived others, imagination, humor
  - Second order mental state reasoning – identification of other's mental states

Theory of Mind

(Begeer, et al., 2011)

 Results:

 Theory of mind training was more effective in producing a conceptual understanding than it was in producing an applied understanding.

 Participants showed an increased understanding of complex emotions and the ability to understand and reason about beliefs and false beliefs.

 Training did not produce an increased understanding in second order reasoning, understanding emotions and humor, nor the precursors to understanding theory of mind

 Per parent's report, the participants did not demonstrate an increase in appropriate social skills

Theory of Mind

(Gevers, et al., 2006)
(Muris, et al., 1999)

- Research examined the impact of a social cognition training to teach theory of mind and social skills to elementary-aged children diagnosed with PDD-NOS

- The Vineland Adaptive Behavior Scales (VABS) (Sparrow, et al., 1984) and the ToM (theory of mind) test (Muris, et al., 1999) were used to measure theory of mind and social skill abilities

- 3 measurement scales included:
  1. Precursors to theory of mind – recognition of emotions, perception/imitation, pretense, distinction physical-mental
  2. First manifestations of theory of mind – understanding false belief, first-order belief
  3. Advanced concepts of theory of mind – humor/irony, second order belief

Theory of Mind

(Gevers, et al., 2006)

- Intervention:

    - Social cognition training for participants
        - Included training participants in theory of mind
        - Groups of up to six participants participated in training sessions that were available for 21 weeks for one hour each

    - Socialization training for parents
        - Consisted of five monthly sessions covering the development of theory of mind and ways to increase social cognition in children

Theory of Mind
(Gevers, et al., 2006)

- Results:

    - TOM scores increased in all but one subtest, emotion recognition – authors mentioned that lack of progress may have been the result of high scores in this area on pre-tests

    - Statistical analysis of the VABS pre- and post-treatment found that parents reported an increase in functioning level for a variety of social skills

Training Theory of Mind and Executive Function
(Fisher & Happe, 2005)

☐ Fisher and Happe (2005) found that the intervention to train theory of mind was more effective than the intervention to train executive function

☐ Training theory of mind increased the ability of children with ASD to pass theory of mind tasks

☐ Training executive functioning did not increase executive function performance in children with ASD

☐ Training executive functioning did, however, increase the ability of children with ASD to engage in theory of mind

Executive Functioning

(Fisher & Happe, 2005)

◻ Definition: the ability to perform higher level cognition

◻ Examples of executive functioning include:
- ◻ Set shifting
- ◻ Planning ahead
- ◻ Following verbal instructions
- ◻ Coordination of sequences
- ◻ Control of sequences
- ◻ Inhibition
- ◻ Multi-tasking

◻ The ability to engage in executive functioning impacts the ability to engage in appropriate social skills

◻ Children with autism often lack executive functioning skills

Training Theory of Mind and Executive Function
(Fisher & Happe, 2005)

- Fisher and Happe (2005) examined training theory of mind and executive function in children with autism

- Interventions included:

- Theory of mind training – "thoughts as pictures" strategy.
  - Focus: beliefs and thoughts that were portrayed as "photos in the head"

- Executive function – "brain as machine" strategy
  - Focus: brain provides many different tools for many different activities

Social Cognition & Social Thinking

(Crooke, Hendrix, & Rachman 2008)

 Social skills training has begun to focus on social cognition and social thinking

 Social cognition:

  The ability to acquire social knowledge and the processing of external social knowledge

  The ability to understand and acknowledge social forces

  Allows for the ability to communicate verbally and nonverbally with others with the use of social knowledge

  Social knowledge – understanding that other's have their own beliefs, feelings, etc. – allows for the ability to understand other's perspectives

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Social Cognition & Social Thinking
(Crooke, Hendrix, & Rachman 2008)

- Crooke, et al describes this as, "the complicated process whereby individuals Acquire, understand and use social knowledge to quickly respond to verbal and nonverbal social information" (p 582).

- Social thinking:
    - Related to social cognition
    - Teaches "why" we socialize
    - Training in executive functioning

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Social Thinking Approach

(Crooke, Hendrix, & Rachman 2008)
(Winner, 2002)

- Training to promote social thinking differs from previously researched social skills training because:
  - Training does not provide reinforcing consequences following the desired behavior
  - Training does not focus on decreasing undesirable behaviors

  - What does "social thinking" training look like?
    - Identification of others thoughts
    - Promotes the understanding that people have thoughts that are different from one's own perspective
    - Training to regulate others' thoughts through one's own behavior

Social Thinking
(Crooke, Hendrix, & Rachman 2008)
(Winner, 2002)

- Social thinking training includes the following components:

  - Making difficult concepts more clear and concrete
  - Generalizing social skills to novel settings
  - Increasing awareness of self and peers
  - Using visuals to support communication

- The goal of social thinking: To teach the underlying cognitive processes that may result in the outward expression of appropriate social behaviors

Social Thinking Behaviors and Tasks

- Social thinking approach with Asperger syndrome and High Functioning autism
- Behaviors measured:
    - Expected verbal behavior
        - Subcategories included
    - Unexpected verbal behavior
    - Expected nonverbal behavior
    - Unexpected nonverbal behavior
    - Listening and thinking with eyes
    - Initiations
- Social cognitive tasks include but are not limited to:
    - Interpreting verbal actions/intentions
    - Interpreting nonverbal actions/intentions
    - Understanding social reciprocity
    - Adjusting verbal behavior according to social cues
    - Adjusting nonverbal behavior according to social cues

Social Thinking

(Crooke, Hendrix, & Rachman 2008)

- Crooke, Hendrix, and Rachman (2008) examined the impact of the social thinking paradigm in children with Asperger's Syndrome and high functioning autism

- Lessons were provided to participants to increase social thinking

- The lessons included:
    - Gathering: group members spoke with each other for a brief period of time
    - Group lesson: social skills training on social cognitive strategies
    - Practice/unstructured time: feedback was provided to participants; group members had the opportunity to talk with each other

Social Thinking
(Crooke, Hendrix, & Rachman 2008)

- Variables examined were measured in semi-structured and unstructured environments and included:

    - Expected verbal behaviors – verbal responses, initiation of social exchange
    - Expected nonverbal behaviors – listening with eyes (attending to speaker)
    - Unexpected-verbal behaviors – verbal comments considered rude, off-topic, offensive, or inappropriate
    - Unexpected-nonverbal behaviors – inappropriate or distracting nonverbal behavior

Social Thinking
(Crooke, Hendrix, & Rachman 2008)

- Crooke, Hendrix, and Rachman (2008) found that following training, subjects increased expected behaviors and decreased unexpected behaviors

- Points to consider:
  - Intervention may not be suitable for all individuals with ASD
  - Skill-based approaches may be required for individuals with greater deficits

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Training Perspective
(Charlop-Christy & Daneshvar, 2003)

- Perspective-taking is associated with theory of mind – allows individuals to identify with those thoughts and feelings of others to understand their behaviors

- Perspective-taking develops for typically developing children at 4 years of age

- As in theory of mind, perspective-taking is often slow to develop or severely limited in children with autism

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Training Perspective

(Charlop-Christy & Daneshvar, 2003)

- Previous research shown the effectiveness of using a video model to teach behaviors to children with autism

- Charlop-Christy & Daneshvar (2003) examined using a video model for children with autism in order to teach perspective-taking

- Intervention:
    - A video model was used showing adults correctly responding to tasks in order to train correct responses to 1st order perspective taking tasks
    - After model was shown to the child, instructor and child reviewed the responses
    - Child was then tested on the task

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Training Perspective
(Charlop-Christy & Daneshvar, 2003)

- Results:

    - Children were taught perspective-taking
    - Because intervention utilized various exemplars, generalization was found to occur for each child
    - Video modeling produced fast acquisition of perspective-taking skills

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Teaching Symbolic Play

- Symbolic play occurs when children use objects during play, giving them multiple meanings
  - Creative play that results in children having the understanding that an object with one purpose can be creatively utilized for another purpose

- Examples of symbolic play:
  - Using a flashlight as a microphone
  - A banana is a telephone
  - Using a box as a house

- Typically developing children develop symbolic play around 19 months of age

- Children with autism often lack the ability to engage in symbolic play

Teaching Symbolic Play
(Stahmer, 1995)

- One way to teach symbolic play is to utilize pivotal response training

- Research examined the use of pivotal response training to teach symbolic play to children with autism

- What is pivotal response training (PRT)?
    - Training and development targeting specific behaviors that lead to the development of other behaviors, resulting in the development of increased generalization and spontaneous behaviors

Teaching Symbolic Play
(Stahmer, 1995)

- Procedure:
  - Free play assessment

  - Symbolic play training
    - Using PRT, children were required to engage in symbolic play in order to get toys
    - The following criteria was necessary:
      - Toys were preferred items to the child and were often rotated
      - Experimenter played with the toys used, modeling desired play behavior
      - Approximations to the desired behavior and/or the desired behavior was reinforced
      - Both functional and symbolic play was taught
      - Social interaction skills were targeted
      - Play behaviors increased in complexity during sessions

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Teaching Symbolic Play

(Stahmer, 1995)

- Procedure (con't):
  - Language training
    - Language training began after symbolic play training
    - Sessions were similar to symbolic play training
    - Area of focus was language, not play behaviors

- Results:
  - Following symbolic play training, symbolic play behavior, complex play, and interaction skills improved
  - Results showed that teaching symbolic play can increase symbolic play behavior to levels of matched typical peers
  - Language training did not produce an increase in symbolic play
  - Initiation and responding to peer play did not increase

Teaching Complex Social Sequences
(Nikopoulos & Keenan, 2007)

- What are considered complex social sequences?
  - Interactions that result in a variety of social behaviors

- Children with autism lack the ability to engage in social behaviors, such as initiating social interactions and responding to attempts to engage in interaction from others

- Nikopoulos and Keenan (2007) studied the effect that viewing video models had on developing a sequence of social behavior, the initiation of social interactions, reciprocal play, and generalization and maintenance of learned behaviors

Teaching Complex Social Sequences

(Nikopoulos & Keenan, 2007)

- The video showed a model and an experimenter engaging in different interaction conditions
    - Several activities included within models: playing with a ball, moving a table, sitting on rags

- The interactions gradually increased the amount of activities the child was required to perform

- Results: The video models were effective in increasing the amount of social behaviors in children with autism – behavior changed quickly for several children

Teaching Social-Emotional Skills
(Elksnin & Elksnin, 2006)

 What are social-emotional skills?
- Skills that are necessary to engage in appropriate social interactions
- Can be verbal, nonverbal, cognitive, physiological

 Elksnin and Elksnin (2006) identified categories of social-emotional skills:
- Interpersonal behaviors
- Peer-related social skills
- Teacher-pleasing social skills
- Self-related behaviors
- Communication skills

- The authors suggest comparing social-emotional skills to literacy and reading – both involve decoding, scanning, punctuating, etc.

Teaching Social-Emotional Skills

(Elksnin & Elksnin, 2006)
(Cohen, 2001)

- Social-emotional skills are often taught within the elementary curricula of typical children

- Curricula focuses on the following topics:
    - Communication with others
    - Regulation of emotion
    - Awareness of others
    - Awareness of self
    - Decision-making abilities
    - Problem solving
    - Among others...

- For children with autism and developmental disabilities, there must be a greater focus placed on each category

The Idea of "Systemizing"
(Baron-Cohen, 2008)

□ Systemizing:

  □ A theory stating that children with autism tend to show interest in things that are predictable, systematic, and rule-based

□ Children and individuals with autism may have difficulty engaging in social interaction because of the variability – each interaction is unpredictable and different

□ "Systemizing" may be utilized within interventions to teach social interaction, specifically emotion recognition

Teaching Emotion Recognition

(Golen, et al., 2010)

- Children with autism experience a variety of social deficits, including the inability to recognize emotion in others

    - Theory: Lacking the ability to recognize emotion may be a result of individuals with autism not engaging in eye contact with others

- Using a "systemizing" concept that utilizes the interests that individuals with autism have in predictable systems, Golan, et al. (2010) studied emotion recognition and contextual understanding following a training of *The Transporters*, an animated children's series

Teaching Emotion Recognition
(Golen, et al., 2010)

- Intervention:

  - DVD was viewed by participants 3 times a day for 4 weeks
  - The DVD utilized the concept of systemizing and incorporated vehicle characters whose motion was rule-based and predictable
  - The characters had faces of people showing a variety of emotions
  - The participants viewed the DVD along with the support of his or her parents

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Teaching Emotion Recognition

(Golen, et al., 2010)

 Results:

- The use of animated vehicles to teach emotion improved participant's ability to comprehend emotion, as well as their ability to recognize emotions

- Because participants were able to demonstrate correct matching responses for each combination tested, generalization was shown to occur

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Social Skills Training
(Laushey, et al., 2009)

☐ Children with autism have been shown to require and benefit from the use of visual supports in order to process information

☐ Research examined the use of visual supports to increase social skills for the following behaviors:

   ☐ Appropriately responding to peers
   ☐ Appropriately initiating interactions
   ☐ Understanding and responding to facial expressions

Social Skills Training

(Laushey, et al., 2009)

☐   Visual support used: concept mastery routine (CMR)

☐   CMR was a visual diagram of social skills that was used as an environmental and instructional prompt used to identify the following:

☐   Concept/skill name

☐   Definition of the skill

☐   Skill's characteristics

☐   Examples/non-examples of the skill/concept

Social Skills Training
(Laushey, et al., 2009)

☐ Procedure:

☐ The instructor assisted the children in making a diagram following the introduction of a social skill

☐ The diagram consisted of all components of the CMR

☐ The instructor required active engagement of each participant

☐ Once the diagram was created, the participants were required to review and practice the concept until criterion was reached

☐ Generalization sessions were completed as well
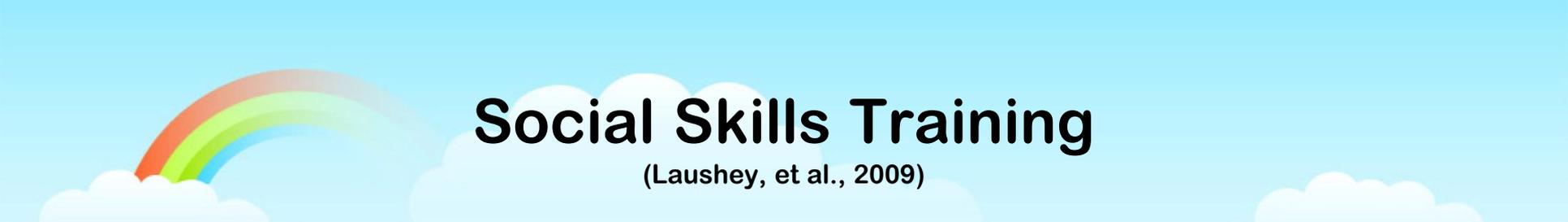
Social Skills Training

(Laushey, et al., 2009)

- Results:
  - CMR intervention produced an increase in each social skill examined for all of the participants
  - Participants generalized learned skills to additional environments
  - As expressed by surveyed peers, it was found that the participants increased their social status – their peers favored them more following the intervention

- Social Validity:
  - Per questionnaire results, teachers rated the use of CMR positively
  - Teachers rated the intervention acceptable for teaching social skills and a convenient teaching strategy

Teaching Social Skills

(Owens, et al., 2008)

- Individuals with autism tend to not initiate and engage in interaction with others. As a result, they are provided with fewer opportunities to practice social interaction skills

- There is a need to teach social skills to individuals with autism, as they are unlikely to naturally learn skills that are necessary to engage in appropriate social interaction with others

- Owens, et al. (2008) compared LEGO therapy (LeGoff, 2004) to the Social Use of Language Programme (SULP) in order to determine which was more effective at teaching social skills to children with Asperger's and High Functioning Autism

Teaching Social Skills
(Owens, et al., 2008)

- LEGO therapy procedure:

  - Children worked in groups of three
  - Each participant had a different responsibility to fulfill within the group: "engineer," "supplier," and "builder"
  - Participants switched roles during therapy
  - Rules were also presented that participants were required to follow during LEGO therapy
  - There were several skill levels that a participant could achieve: "LEGO Helpers," "LEGO Builders," and "LEGO Creators"

Teaching Social Skills

(Owens, et al., 2008)

- The Social Use of Language Programme (SULP) procedure:

    - Stories, activities, and games
    - Comprehension was assessed after reading the story
    - Participants required to critique the social skills of adults during role play, then practice social skills
    - Each session focused on a specific social skill
    - Participants were required to master one skill before moving to a different one

Teaching Social Skills

(Owens, et al., 2008)

- Measures included:
    - Vineland Adaptive Behavior Scale
    - Gilliam Autism Rating Scale Social Interaction Subscale
    - Parent Satisfaction and child enjoyment
    - Social behaviors: the frequency of initiation of interaction, duration of social interactions with peers were measured

- Results:
    - LEGO therapy group showed greater decrease in social difficulty than the SULP group
    - LEGO group increased the duration of time engaged in social interactions
    - The SULP group showed an increase in communication and socialization skills
    - Both interventions resulted in a decrease in maladaptive behavior

Teaching Responding and Initiating

(Licciardello, Harchik, & Luiselli, 2008)

☐ Licciardello, Harchik, and Luiselli (2008) pointed out that learning to initiate social interactions is a crucial component in the ability to fully engage in a social interaction

☐ The authors examined a social skills intervention that aimed to target responses and initiations of students with autism

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Teaching Responding and Initiating

(Licciardello, Harchik, & Luiselli, 2008)

- 3 teaching procedures were implemented:
  1. preteaching
  2. prompting
  3. praise/reward
- Each teaching procedure utilized: instructions, demonstration, and role play
- Participants were provided with lessons prior to the study, a short review session was implemented prior to scheduled play time

- Social initiation and social response within a scheduled play period were examined

- The intervention resulted in an increase in social skills, including responses and initiations, for each participant

Social-Behavioral Learning Strategy
(Bock, 2007)

- Research examined the impact of SODA on the replacement behaviors of 4 elementary-aged children with Asperger's

- SODA:
  - (S)top
  - (O)bserve ⟶ Questions, statements to help process info
  - (D)eliberate

  - (A)ct ⟶ (A) children create list of ways to act in specific situations

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SODA Story

Intervention:

- Each participant read a SODA story immediately prior to target times: social studies, recess, and lunch

1. Within the story, a specific social problem was addressed
2. Question and answer statements were included within the story.
3. Scripts were developed in order to teach the participants the answers associated with each question.
4. Questions were also posed to help the child think of other ways to respond to situations.
5. The participants were also asked about the thoughts and feelings of others throughout the story

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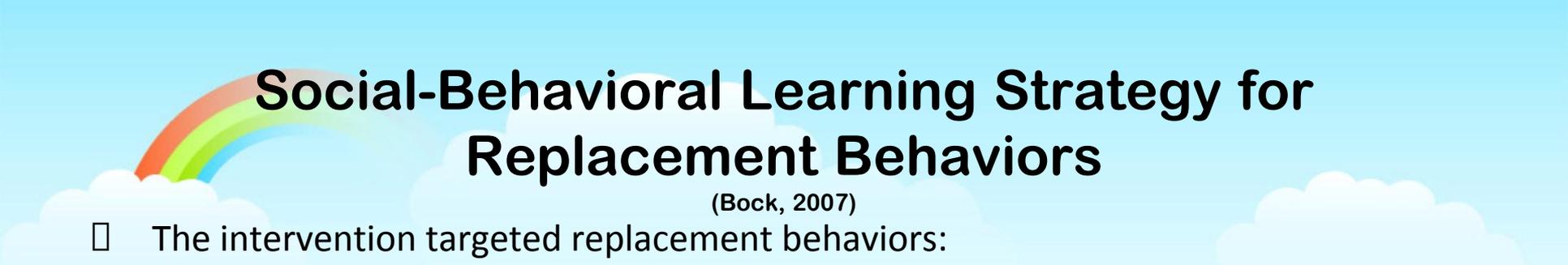
Social-Behavioral Learning Strategy for Replacement Behaviors
(Bock, 2007)

 The intervention targeted replacement behaviors:

   Participation in cooperative activities

   Playing an organized sport game

   Socializing with peers during lunch
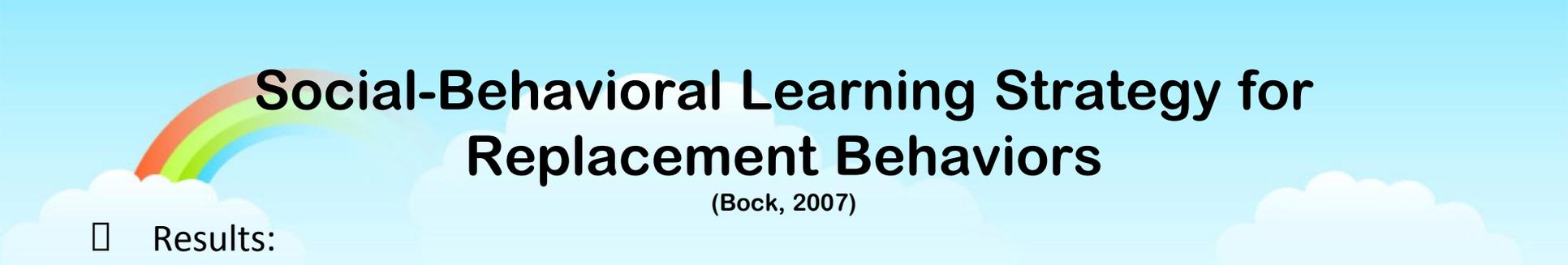
Social-Behavioral Learning Strategy for Replacement Behaviors

(Bock, 2007)

- Results:

  - Bock (2007) showed that each participant demonstrated an increase in replacement behaviors following the SODA intervention

  - Participants maintained replacement behaviors after intervention was discontinued

  - One year following intervention, each participant was able to recall the components of the SODA intervention, as well as memory of procedural knowledge

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Social Skills List - 1

- Learn the meaning of words – referential intention
- Initiate pretend play
- Understand the pretense of others
- Use eye gaze a a cue to what someone is attending to
- Orient and follow eye gaze
- Learn items can have different representations
- Understand items can have a dual identity
  - Distinguish between appearance and reality

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Social Skills List - 2

- Demonstrate affect sharing
- Demonstrate and understand empathy
- Engage in perspective taking
- Understand mental states
- Predict actions based upon understanding mental states
- Explain actions based upon mental state
- Understand another's intentions
- Extract mental states from observation, and from text

Social Skills List - 3

- Infer what another is thinking or wants
- Demonstrate symbolic play skills
- Understand how mental state can be the cause of other's behavior
- Have awareness of and expression of feelings
- Make eye contact
- Recognize nonverbal communication
- Understand and engage in politeness
- Introduce yourself to others

Social Skills List - 4

- Understand the external world can be different than what you think
- Start a conversation
- Maintain a conversation
- End a conversation
- Make small talk
- Negotiate with others
- Respond to teasing and bullying
- Demonstrate age-appropriate hygiene and understand why

Social Skills List - 5

- Demonstrate appropriate eating skills and etiquette
- Cooperative behaviors
- Reciprocity
- And More……

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Outcomes

Upon completion of *Elementary School Social Skills: Predictors of future success (Part 2 of 4)*, you may now:

1. Identify the social skills that elementary-aged children with autism may lack.
2. Describe when to begin teaching social skills and why each skill is necessary.
3. List several evidenced-based strategies to teach social skills within an applied setting.

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