Welcome to Special Learning's Webcast Training Series

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Special Learning

Topic: Toddler to Preschool Social Skills
(Part 1 of 4 series)

Speaker: Michele LaMarche, BCBA

Special Learning

Professional Training Series

Toddler to Preschool Social Skills(Part 1 of 4 series)

Presented by: Michele LaMarche, BCBA

Step by Step

Special Learning

Speaker Bios

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.

Objectives

- Upon completion of ***Toddler and Preschool Social Skills: Predictors of future success***, participants will:

1. Identify important social skills to assess for and treated with this age group
2. Understand strategies and specific tasks that may be implemented to increase social competence
3. Increase understanding of executive function definition and tasks related to building executive function skills

Begin Code: ml23012s

Social Skills

- The following are areas of focus when speaking about social skills:

- Joint attention
- Symbolic Play
- Socially engaged imitation
- Affect sharing
- Socially synchronous engagement
- Rule-guided acts
- Working memory
- Social communication

Joint Attention

- What is joint attention?
  - Behavior between 2 people that occurs during communication
  - Usually develops between 8 to 15 months old
  - Children with autism typically do not engage in social behaviors, specifically joint attention – additional training must occur

Joint Attention

- Joint attention interventions have included:
  - Peer tutoring
  - Parent-training
  - Scripting
  - Physical prompting
  - Etc.
- Consequences for interventions vary:
  - Attention
  - Social communication
- Interventions to increase joint attention in individuals with autism include:
  - Responding to bids made by others
  - Initiating bids to others

Joint Attention

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  - Responding to bids made by others
  - Initiating bids to others
  - Etc.
- Consequences for interventions include:
  - Attention
  - Social communication

Joint Attention

- Studies that have focused on increasing joint attention have also shown to increase the communication skills of children with autism

- Children who lack joint attention skills have shown to have fewer language skills compared to children who engage in joint attention
  - Engaging in joint attention is the action of individuals attending to the same object at the same time
  - Can be verbal or nonverbal communication regarding the object both are attending to

Joint Attention

- It was found that the most simplistic interventions produced greater increases in responding to bids for joint attention:

- Interventions included components such as:

  - Systematic prompting
  - Prompt fading techniques
  - Reinforcement
  - Imitation

Joint Attention

- Research has shown that initiating bids for joint attention generally resulted in the child receiving the motivating tangible item
  - Child may be requesting for the item instead of obtaining the attention from another person

- Teaching individuals to respond to bids for joint attention has not been shown to increase initiating bids of joint attention
  - Considered separate skills?

Joint Attention

- Examples of skill:
  - Showing a toy to someone else
  - Looking together at something interesting out of a window
  - Reading together and sharing book pictures
  - A child pointing at an object and looking t get the parent's attention as well
  - A child coming to get someone to show him or her a drawing the child made

Joint Attention

- Schietecatte, Roeyers, and Warreyn (2012) looked at impairments with joint attention:
- This study examined whether preschoolers with autism oriented toward a social or non-social stimulus, how long the children were able to attend to an object, whether the children were able to understand intent of another, and the children's joint attention skills.
- The study was conducted to see the relationship between the cognitive processes of social orientation, attention, and understanding of intent and initiation and response to joint attention.
- The authors found that joint attention skills were also related to mental age and language abilities
- The authors also found support that understanding another's intent was correlated with responding to joint attention initiations.

Joint Attention

- Impairments (con't):
- The authors found a small correlation between social preference and initiation of joint attention. This adds to the literature that suggests that initiating joint attention is related to social motivation.
- This study found no link between ability to attend to items for a long period of time and joint attention skills.

Joint Attention

- Lawton and Kasari (2012) looked at a teacher initiated intervention.
- This study looked ta the JASP/ER intervention strategy for teaching joint attention.
- JASP/ER is a validated intervention that consists of the following:
  - Setting up a motivating environment
  - The teacher performs a play action immediately after the child
  - The teacher prompts the child to play with toys that he or she shows interest in.
  - the teacher and child create repeatable play routines that have specific roles for each person
  - altering the play routine a little at a time
  - giving the child time to communicate
  - the teacher talks with the child about the toys

Joint Attention

- JASP/ER continued:
  - creating opportunities for developmentally appropriate joint attention skills during the play routines
  - the teacher models these skills
  - the teacher stays at eye level of the child to encourage eye contact
- The authors reported positive outcomes and more learning of joint attention and joint engagement skills using these techniques.

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

Symbolic Play

- It is difficult for children with autism to identify with other individuals, specifically peers, regarding other's attitudes and perspectives – it is thought that children who lack this ability also demonstrate less creative, symbolic play

- Research has compared the play patterns of children with and without autism in order to determine the type of creative symbolic play both groups engage in – spontaneous play and modelled play were examined

Symbolic Play

- The following were rated during symbolic play:
  - Attribution of symbolic meaning to play objects – imagining, giving objects alternative uses
  - Potential for flexible use of objects – ability to use objects in multiple ways
  - Self-awareness – awareness the child possesses when engaged in creativity
  - Investment in symbolic meanings – how much the child cared about the new creative use of the object
  - Creativity – the amount of new creative ideas introduced in play
  - Fun – amount of fun the child appeared to be having during play

- 2 conditions, both identifying spontaneous and modelled play, were examined
  - Doll condition
  - School condition

Symbolic Play

- Results:
  - Because participants in both groups were matched on verbal ability using an assessment tool, it was found that children with autism engaged in pretend play
  - Compared to their matched peers, however, children with autism demonstrated a lower ability to engage in pretend, symbolic play
  - Differences were seen in the spontaneous condition and the modelled condition between the 2 groups

Symbolic Play

- Stanley & Konstanareas (2007) sought to examine the relationship of symbolic play to symptomatology, nonverbal cognitive ability, expressive and receptive language, and social development in children with Autism Spectrum Disorder (ASD).
- Methods:
  - A within group design was employed to determine which features of children with ASD are linked to competence in symbolic play
  - Stanley and Konstantareas hypothesis: more advanced symbolic play skills would be related to lower autistic symptomatology, higher nonverbal cognitive ability, and better developed social skills.
  - Data were collected between 1982 and 1992 as part of the assessment procedure.
  - Participants' research files were systematically reviewed and data were extracted from assessment reports and case notes, in addition to original research protocols

Symbolic Play

- Results:
  - The results indicated that combined chronological age, symptom severity, nonverbal mental age, expressive language, receptive language and social development predicted 56% of the variance in symbolic play.
  - Nonverbal cognitive ability was a significant unique predictor of symbolic play, even after controlling for all other variables
  - Social development did not significantly predict unique variance in symbolic play
  - Symptom severity was related to symbolic play when controlling for age and any other single developmental domain; however, this relationship disappeared when controlling for more than one developmental domain
  - Children with greater cognitive impairment showed lower symbolic play skills
  - The very strong relationship between cognitive ability and symbolic play is consistent with clinical knowledge, suggesting that either play leads to improved cognitive functioning, that specific cognitive developments are a prerequisite to symbolic play, or that both are true.
  - Language and it's relevance to symbolic play: Only expressive language, not receptive (showing low relevance), was uniquely related to play age.
  - When the entire population was sampled, social development was not uniquely related to symbolic play, but further exploration indicated that nonverbal cognitive ability appeared to moderate the relationship between social development and play.

Symbolic Play

- Conclusions:
  - The authors state that it appears the development of symbolic play in children with ASD is not tied to one area of development but is rather linked to a number of other areas of functioning.
  - The findings in this study provide additional support for the inclusion of symbolic play measures as diagnostic tolls for ASD and can be used as an informative portion of the diagnostic process.

Joint Attention & Symbolic Play

- Studies have focused on interventions to increase joint attention and symbolic play, simultaneously

Joint Attention & Symbolic Play

- Research examined an intervention for both joint attention and symbolic play in comparison to a control group for young children with autism
- Intervention:
  - Joint attention – focused on imitation of play routines
  - Symbolic play – focused on symbolic play routines

  - For both joint attention and symbolic play, the instructors shaped the child's joint attention and symbolic play goals established prior to the study
  - Prompting and reinforcement was provided within discrete trial training beginning at the table, which was adult-driven, followed by moving to the floor using a more natural environment, which was child-led
  - Within the natural environment, the instructor developed and expanded play routines using the child's previous interests

Joint Attention & Symbolic Play

- Training joint attention was measured using:
  - Early social-communication scales
  - Joint attention within caregiver-child interaction

- Training symbolic play was measured using:
  - Structured play assessment
  - Play within caregiver-child interaction

- Results:
  - Compared to the control group, both intervention groups increased joint engagement, joint attention, and symbolic play
  - Generalization to caregiver-child interaction from structured training sessions occurred

Joint Attention & Symbolic Play

- Research examined 2 treatment interventions comparing joint attention and symbolic play using the amount of days to mastery in children with autism

- 2 Interventions:
  - Both interventions were implemented sequentially every day
  - Naturalistic 1
    - Considered a “primer” intervention
    - Instructor-initiated
    - Implemented to get the child ready for the targeted goal in the second intervention
    - Instructor provided prompting and reinforcement at the table in a structured environment

Joint Attention & Symbolic Play

- Naturalistic 2
  - Followed Naturalistic 1 intervention
  - Child-initiated focused on joint attention skills
  - Instructor imitated child
  - Participants were given the opportunity to respond to novel and familiar toys
  - If no response was given, instructor provided prompting to engage with activity
  - Children were provided the opportunity to generalize skills taught in naturalistic 1

Joint Attention & Symbolic Play

- Results:
  - Acquisition rate for learning a new skill was faster in Naturalistic 1 – fewer days to master play skills than joint attention skills
  - It was found that participants with higher language age and higher mental age mastered target skills faster than participants with lower language and mental age
  - Using Naturalistic 1 as a training tool prior to Naturalistic 2 increased generalization of skills
  - It was shown that participants had an easier time learning play skills compared to joint attention skills

Joint Attention & Symbolic Play

- Kasari, Freeman, and Paparella (2006) looked at the interactions between joint attention and symbolic play.
- Joint attention and symbolic play skills are deficits in children with autism and are also predictive of later success in learning language and social success.
- The children in the study were trained in joint attention and play skills in the following way:
  - The children were trained for 30 minutes per day for 5-6 weeks. The sessions were 1:1 supervision.
  - The sessions consisted of 5-8 minutes of discrete trials and shaping followed by natural environment teaching
- This study suggested that children with autism can be taught both joint attention and play skills using this format.

Joint Attention & Symbolic Play

- **Children with autism receiving targeted interventions on joint attention and play**
- This study is a 5 year follow-up study on children who were given an intervention that targeted joint attention and symbolic play.
- The authors were interested in the development of language and the cognitive development of participants.
- The authors found the following results at 5 years later:

  - 5 of the 40 participants were enrolled in a general education classroom with no special education services
  - 17 participants were enrolled in a general education classroom with some special education services
  - 18 participants were in a special education classroom
  - 80% of participants had functional spoken language. The main predictor of this ability was the development of play skills at age 3 or 4.
  - The participants who had higher cognitive functioning showed more or learned more flexibility in play at a younger age.

Joint Attention & Symbolic Play

- Results, cont.

  - Predictors of having a larger spoken vocabulary were: early intervention, learning to initiate joint attention, having more play skills, and receiving instruction in joint attention and symbolic play.

- Based on these results, the authors recommend beginning treatment before age 5.

Socially Engaged Imitation

- Socially engaged imitation refers to the act of imitating behaviors while engaged with another person
  - This engagement can be measured with the use of eye contact from one person to another

- The skill increases:
  - Reciprocal play
  - Reciprocal communication and engagement
  - Initiation of communication
  - Initiation of play and interaction

Affect Sharing

- Affect sharing – sharing and experiencing the emotions, feelings, thoughts of others
  - Children with autism typically experience difficulty in their ability of being cognisant of the emotions of others
- The importance of affect sharing:
  - Increases interaction
  - Increases social awareness
  - Increases symbolic play

Affect Sharing

- What is affect sharing?
  - Sharing emotions between 2 people
  - One of the core deficits in children with autism
  - Should be developed by age 2
  - This can be tested by seeing if the child imitates peers and/or adults doing funny or silly things and laughing together
  - This is an important skill because it allows one to engage others in social situations and share emotions with friends and family members
  - This skill is related to theory of mind

Affect Sharing

- Some examples of affect sharing include:
  - Sharing a joke together or a humorous story
  - Feeling sad when someone tells about a sad event that happened to him or her
  - Crying together over a sad movie
  - Being surprised or excited together over an unexpected event
- Methods used to teach the skill include:
  - Social stories
  - Peer modelling
  - Specific direct instruction targeting the skill

Affect Sharing

- Landa, et.al. (2011) looked at an intervention that specifically targeted socially synchronous engagement with toddlers with autism. This study targeted affect sharing as one of the skills to be taught. The curriculum used in this study used high levels of imitation.

- This study suggested that initiation of joint attention and shared positive affect were often present at the same time. These skills are also a factor in the development of expressive language and increased nonverbal cognitive functioning.
- This study also suggested that, with a developmentally based curriculum and specific response expectations and strategies to teach these skills, young children with autism can make significant progress in a short period of time.

Increasing socially synchronous engagement

- Socially synchronous engagement refers to:
  - joint attention
  - socially engaged imitation
  - affect sharing

Increasing socially synchronous engagement

- Research compared 2 interventions and their impact on the following in toddlers diagnosed with ASD:
  - joint attention
  - socially engaged imitation
  - affect sharing

- 2 interventions included:
  - Interpersonal Synchrony
  - Non-Interpersonal Synchrony

Increasing socially synchronous engagement

- Both the Interpersonal Synchrony and Non-Interpersonal Synchrony groups included the following:
  - Assessment, Evaluation, and Programming System for Infants and Children (AEPS) – developmental curriculum based on specific participant's needs and profiles
  - Parent-education classes
  - Home-based parent training sessions

Increasing socially synchronous engagement

- Both interventions utilized the same curriculum, with the addition of interpersonal synchrony to one group.

- Interpersonal synchrony included:

  - Discrete training to teach social behaviors – prompting and reinforcement added
  - Greater opportunity to practice joint attention skills
  - Increased opportunity to engage in imitation during social interaction
  - Increased opportunity to share positive affect

Increasing socially synchronous engagement

- Results:
  - Increased socially engaged imitation
  - Imitated acts using eye contact increased
  - Increased initiation of joint attention
  - Increased shared positive affect
- Results were shown to generalize and were maintained over time

Determinants of Engagement

(Ruble & Robson, 2007)

- Children who show engagement in educational programs have a greater likelihood of academic success

- Engagement is determined by both individual and environmental factors

- Environmental factors include:
  - Teaching strategies
  - Classroom environments, including teachers
  - Social environments

Determinants of Engagement

- Ruble & Robson (2007) looked at a population of children with autism and Down syndrome, and examined goal-directed behaviors during structured and unstructured class time, including:
  - Compliance – child engages in appropriate behaviors in class
  - Congruence – activity is consistent with goals of class and teacher

- Results:
  - Both populations engaged in an equal amount of goal-directed behaviors
  - At least half of the goal-directed behaviors for both groups were congruent, with a greater amount showing compliance
  - It was shown that environmental and individual factors impact engagement

Rule-Guided Acts

- Rule-guided acts:
  - Behavior controlled by both spoken and unspoken rules
  - A component of complex verbal repertoires and social interaction
  - Controls inhibition, sustained attention, self-control, appropriate social behaviors, interaction

- What do rule-guided acts look like:
  - Verbally stated antecedent and behaviors in order to train
  - Individuals do not need to access consequences in order to result in a behavior change
  - The consequence of the behavior may be described

Rule-Guided Acts

- Rule-guided acts can be trained using:
  - Reinforcement
  - Prompting strategies
  - Multiple exemplars
  - Observational learning
  - Modeling

Rule-Guided Acts

- A study focused on training simple rules using an intervention consisting of the rule combined with a picture to increase rule following behavior
- In order to increase rule following behavior, reinforcers were presented to the children during training
- Prompt fading procedures were utilized
- Researchers found that using basic ABA principles increased the ability of children to follow rules. Also, all children acquired the ability to generalize their learning in order to follow novel rules

Working Memory

- The storage and processing of information that allows individuals to perform complex tasks
- During a task, information is stored and utilized in order to complete the task
- Working memory has been related to:
  - Language development
  - Communication
  - Comprehension
  - Learning abilities
- Working memory has shown to increase academic, behavioral, and cognitive abilities later in life

Working Memory

- Deficits in working memory have been related to:
  - Poor communication, language development
  - Decreased comprehension abilities
  - Poor task performance
  - Cognitive inflexibility
  - Inability to engage in abstract thought processes
  - Inability to focus and sustain attention

- Children with autism may experience deficits in working memory, disabling them from performing complex cognitive and social skills

Working Memory

Children diagnosed with autism exhibit several core deficits. One of the core diagnostic features is the delay or lack of spoken language. Some individuals may never actually develop functional language and remain nonverbal; others will eventually learn how to verbalize and use language functionally.

Researchers have suggested that deficits in verbal working memory and complex information processing may serve as part of the explanation of the disorder.

They have stated that deficits in this skill area are linked to differences among individuals' language skill acquisition.

Working Memory

- What is working memory?
  - It involves both the storage and processing of information which is what makes it different from short -term memory
  - Defining feature is its capacity to temporarily store and manipulate levels of linguistic material.
  - It is influenced by a limited capacity that is linked to attention or to the central executive (the regulatory mechanism).
  - Deficits in this skill for children with autism may be associated with deficits in language learning and competence.

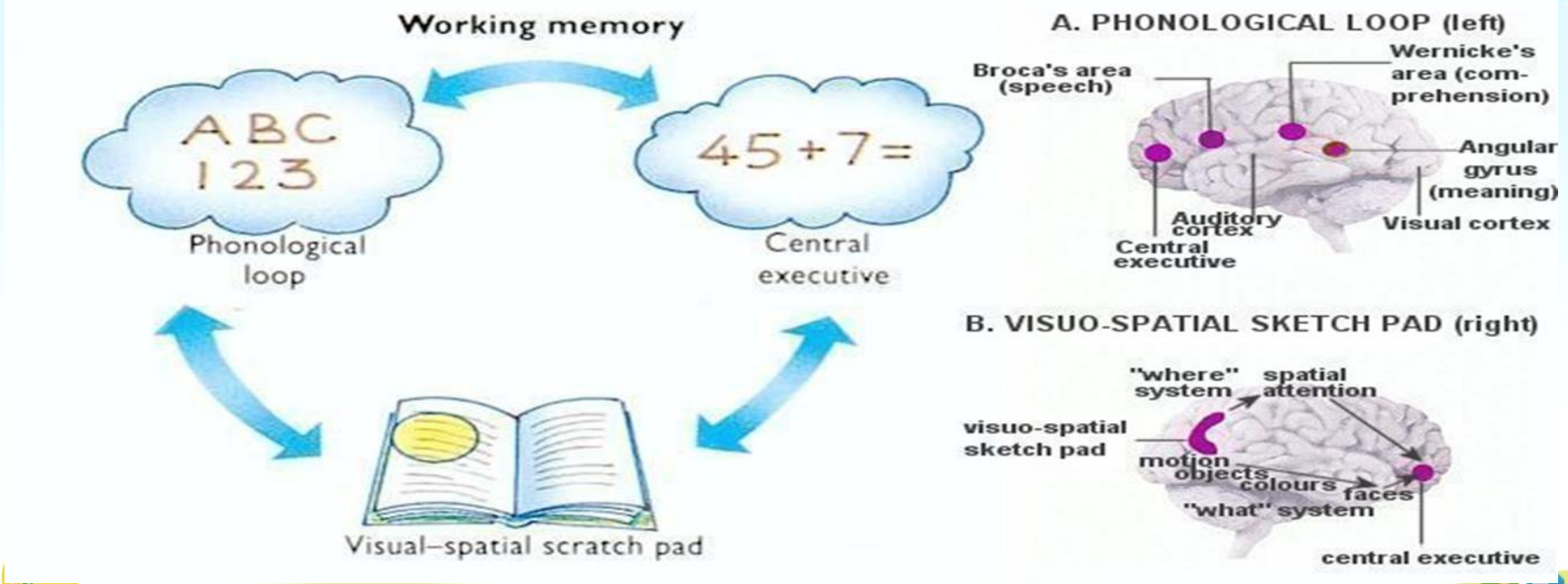
Working Memory

- Examples of the deficit of working memory…
  - Poor performance on a task of nonword repetition tasks vs. word likeness tasks
  - Difficulty recalling specific organized word strings or grammar sequences

Again, deficits in working memory would be associated with learning language.

Diagram of Working Memory

(retrieved from cidpusa.org)



Working Memory

- There are several theories of working memory that explain differences across memory tasks and language ability for individuals with autism.
- Some of the models include:
  - Capacity theory: there is a limited number of processing resources available in the working memory for the demands of the task and therefore; decreased comprehension and poor task performance.
  - Phonological working memory theory: there is difficulty in the temporary storage of language information therefore; resulting in poor working memory.
  - Connectionist theory: language is not transferred to a separate storage area for accessing function and meaning.

Working Memory

- Gabig (2008) looked at verbal working memory and story-retelling in school children with autism. Gabig hypothesized that the working memory of children with autism is inferior to their typically developing peers.
  - Children with developmental disabilities may have limited storage capacity in verbal working memory which may account for the delays or underdevelopment of language skills.
- This study analysed working memory for 15 children with autism and a typically developing group of children. Parents of the children with autism had to fill out a questionnaire to screen their children had ASD. The same-age peers were used for 2 reasons: (1) to serve as a language-aged-matched control group (2) access to the curriculum with regards to inclusion

Working Memory

- Results:
  - Children with autism scored significantly below their typical peers in all working memory tasks.
  - Children with autism scored progressively worse as the tasks got more difficult
  - Children with autism scored the best on nonword repetition tasks
    - Possible explanation is deficits in the phonological storage capacity
  - As far as story re-telling, children with autism showed significant impairments in their ability to recall and retell stories
    - This may be related to theory of mind deficits seen in people with autism.

Impulsivity and severity of ASD symptoms on social skills in toddlers

- Matson, et.al. (2010) looked at symptoms of impulsivity/inattention and autism and their impact on social skill ability of toddlers diagnosed with autism or PDD-NOS.
- The authors found that having moderate to severe symptoms of both impulsivity/inattention and autism correlated with less social skill development.
- The authors recommend that programs for toddlers with autism work on attention skills to increase the chance for social skill development as part of their early intervention efforts.

The Social Communication Assessment for Toddlers with Autism (SCATA)

(Drew, et.al., 2006)

- What does this tool look at?
  - Measures verbal and non-verbal communication
  - Includes early and atypical communication in children with ASD
  - Each act is scored according to its form, function, role, and complexity
- Purpose of the study
  - Describe the SCATA administration and scoring
  - Examine the pattern of developmental change in two samples of children with PDD-NOS
  - Examine the aspects of early non-verbal communication which are most strongly associated with later language outcomes

The Social Communication Assessment for Toddlers with Autism (SCATA)

(Drew, et.al., 2006)

- Methods:
  - 2 samples for children (ages 21-25 months)with ASDs (differing severities)were assessed using conventional methods (ADI-R, MacArthur Communication Development Inventory, etc).
  - Both groups were reassessed in approximately 22 months following the initial assessment
  - The SCATA was administered to all children who participated to determine if specific non-verbal abilities were predictive of later language abilities

The Social Communication Assessment for Toddlers with Autism (SCATA)

(Drew, et.al., 2006)

Results of the study:

- Frequency of non-verbal communication acts did not change between the two groups
- Form, complexity, function and role (the child took) did change with time
- Frequency and function in toddlerhood were positively associated with later language ability
- Social acts, comments, and initiations were greater predictors than requests and responses
- A significant association of non-verbal ability and language was found only with receptive language in Group 1
- This association was found in receptive and expressive language in Group 2

The Social Communication Assessment for Toddlers with Autism (SCATA)

(Drew, et.al., 2006)

RESULTS FOR BOTH GROUPS

- Frequency of social acts & comments was associated with later language.
- Requests were not associated with later language.
- Frequency of responsive acts was moderately associated with to later language ability.
- The function of the communication act and the child's role was very important.

Results, continued:

- The study shows a specific, predictive association between the frequency of social communicative acts and initiations of interactions and later language.
- The finding is consistent with past studies that correlated joint attention behaviors and later language.

Executive Function Deficits in Preschool Children with ADHD and DBD

- Schoemaker, et. al. (2012) looked at executive functioning deficits in children with ADHD and Disruptive Behavior Disorder (DBD).
- Methods:
  - Participants were 202 children aged 3.5-5.5 years with ADHD (61), DBD (33), ADHD + DBD (52) and typically developing (TD) children (56)
  - Children were evaluated in a single, morning session
  - First, two measures of intellectual functioning were administered, followed by Executive Functioning tasks.
- Results:
  - Preschool children with ADHD were unable to perform well on tasks that required inhibition
  - Children with a co-morbid DBD diagnosis coupled with ADHD also performed poorly on inhibition tasks
  - When compared with typically developing children, children with DBD performed significantly worse on inhibition related tasks.
  - After controlling for DBD symptoms in co-morbidly diagnosed children, it was suggested that the inhibition related deficits were a symptom of ADHD.
  - These children also showed working memory deficits

Social Skills and problem behaviours of children with different cognitive styles who attend preschool education

- Secer, et.al. (2010) explored the interaction of cognitive style, social skills, and problem behavior in preschool children.
- Methods:
  - The authors used the Preschool and Kindergarten Behaviour Scale (PKBS), 2003, which evaluates social skills and problem behaviors.
  - **Social skills domain:**

    Social cooperation

    Social interaction

    Social independence
  - **Problem behaviors domain:**

    Being self-centered/explosiveness

    Attention problems/hyperactivity

    Antisocial behavior/aggressiveness

    Social withdrawal

    Anxiety/somatic problems

Social Skills and problem behaviours of children with different cognitive styles who attend preschool education

- The authors also used The Kansas Reflection-Impulsivity Scale for Preschoolers (KRISP), Form A (1971) to assess the children's cognitive styles
- Used to determine reflective-impulsive cognitive styles of children. Children can show higher scores in the following:

  Impulsive – tendency to give quick answers, spending little time analyzing data or motives, have an increased chance of making mistakes

  Reflective – careful, spending time in analysis of data, make fewer mistakes.
- Results:
  - No significant difference in "social independence"
  - Significant difference in "social interaction" and "social cooperation" □ reflective children fare better in these areas than impulsive children.
  - No significant difference in anxiety/somatic problems
  - Significant differences in self-centered/explosive, attention problems/overactive, antisocial/aggressive, and social withdrawal.
  - Impulsive children scored higher on all of these subdomains.

Social Skills and problem behaviours of children with different cognitive styles who attend preschool education

- Conclusions and recommendations:
  - One factor in social skills and behavior problems is reflective/impulsive cognitive style.
  - Reflective children showed more social cooperation and interaction
  - Impulsive children showed more attention problems, hyperactivity, antisocialism, and aggressiveness.
  - Guidance and counseling should be used to improve social skills
  - Guidance and counseling should collaborate with family and teachers to solve behavior problems
  - Preschools should employ experts for guidance and counseling.
- Recommendations for working with children with autism:
  - Experts to assist those with social deficits as a result of ASD should be employed to make the most different based on research-proven methods, i.e. BCBAs and others trained in ABA methodology.
  - Collaboration with family and professionals is critical to assist with students reaching their best outcomes.

Outcomes

- Now that you've completed the presentation on ***Toddler and Preschool Social Skills: Predictors of future success***, you can now:

1. Identify important social skills to assess for and treated with this age group
2. Understand strategies and specific tasks that may be implemented to increase social competence
3. Increase understanding of executive function definition and tasks related to building executive function skills

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