Enhancing Pretend Play Skills in Preschoolers With Autism Spectrum Disorder

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CASE STUDIES
by ASHA Professional Development

Speaker Disclosure

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- Nonfinancial
  - Lead author of the Advancing Social-Communication and Play Intervention manual/materials
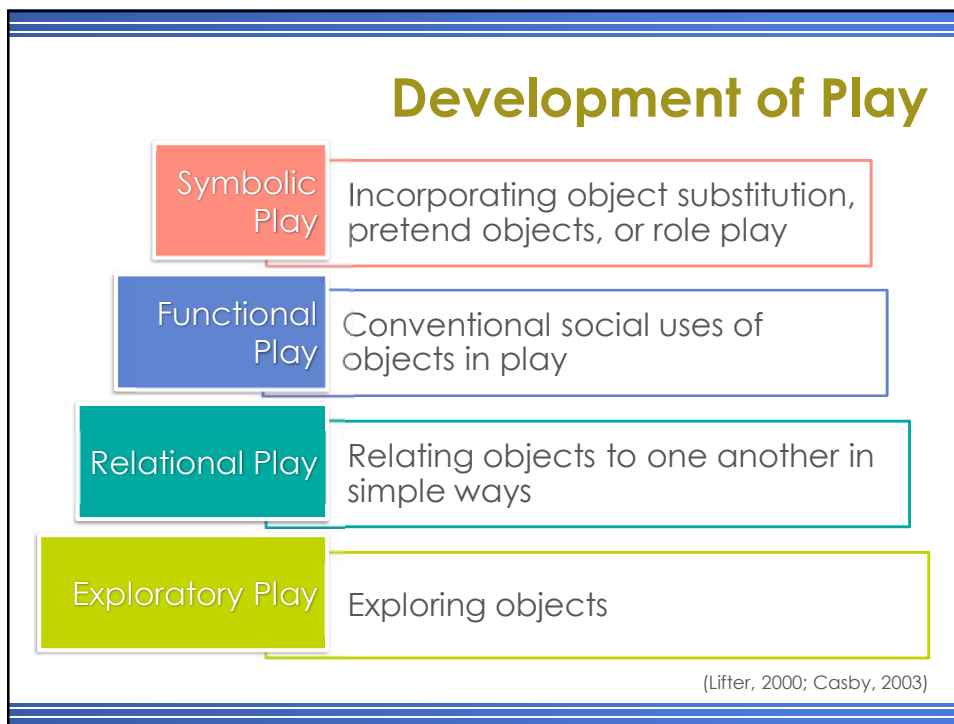
Why Pretend Play Is Important

Object Play

"…consists of spontaneous, naturally occurring activities with objects that engage attention and interest"

(Lifter, Mason, & Barton, 2011)

Development of Play

Symbolic Play	Incorporating object substitution, pretend objects, or role play
Functional Play	Conventional social uses of objects in play
Relational Play	Relating objects to one another in simple ways
Exploratory Play	Exploring objects

(Lifter, 2000; Casby, 2003)

Why is pretend play important for children with ASD?

Correlated concurrently with language development, imitation, cognitive and social deficits

(Ingersoll & Meyer, 2011; Manning & Wainwright, 2010; Thiemann-Bourque, Brady, & Fleming, 2012; Stone & Yoder, 2001)

Correlated longitudinally with language gains

(Stone & Yoder, 2001; Sigman & Ruskin, 1999; Smith, Mirenda, & Zaidman-Zait, 2007)

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Symbolic play OR joint attention interventions → with more intentional comm. and better language 1 year later vs. control

(Kasari, Freeman, & Paparella, 2006; Kasari et al., 2008)

Why is pretend play important for children with ASD?

Preschool language skills have long been recognized as good predictors for long-term outcomes in individuals with ASD

(Billstedt, Gillberg, & Gillberg, 2005; DeMyer et al., 1973; Venter, Lord, & Schopler, 1992)

? But how could pretend play contribute to better language?

Possible Processes Linking Pretend Play to Language Development in ASD

Some **"interaction" variables** correlated with children's pretend play include:

Caregiver responsiveness (Campbell et al., 2016)	Caregiver cognitive stimulation (Campbell et al., 2016)	Caregiver-child engagement (Campbell et al., 2016; Hobson et al., 2013, 2015)

Possible Processes Linking Pretend Play to Language Development in ASD

Transactional effects between child's pretend play and caregiver behaviors

"Bi-directional feedback loop" (Campbell et al., 2016; Lieberman & Yoder, 2012)	Pretend play = good context for scaffolding social skills (Hobson et al., 2015)

❚❚ Pause…

📄 **Write down** a few sentences that you could use to explain to a child's parent why you are recommending pretend play goals as part of the treatment plan for a preschooler with ASD

Pretend Play Assessment & Goal Identification

Play Hierarchy (truncated)

(Watson et al., 2011)
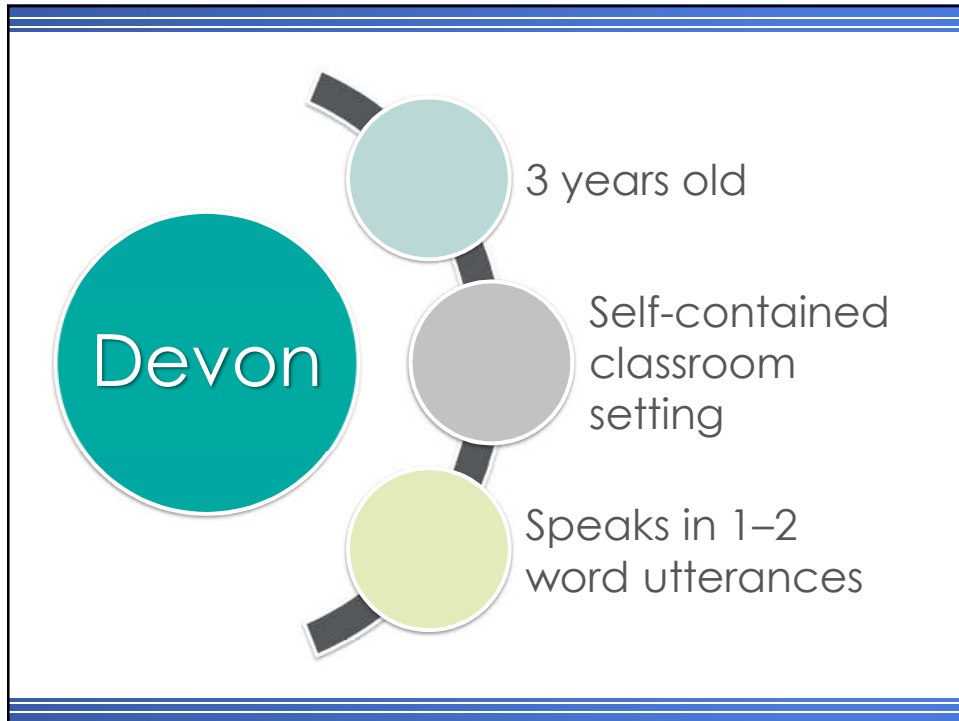
	CATEGORIES			
	Exploratory *Age of Emergence: 2-10 months*	**Relational** *Age of Emergence: 10-18 months*	**Functional** *Age of Emergence: 12-18 months*	**Symbolic** *Age of Emergence: 18-30 months*
SKILL LEVELS		R3. Child puts several toys together in specific ways	F1. Child plays with toys in functional or simple pretend ways	
			F2. Child plays with toys in simple pretend ways directed to self	
			F3. Child includes a doll/action figure in simple pretend play with toys	
			F4. Child includes other people in simple pretend play with toys	S1. Child makes doll/figure move or do things as if it were alive
			F5. Child uses the same action in simple pretend play with two different people or dolls/figures	S2. Child does 2 different pretend actions, one right after another, with the same toy
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				S5. Child uses pretend qualities in play
				S6. Child uses pretend objects in play
SKILL LEVELS				S7. Child takes on a pretend role in play that other people direct
				S8. Child suggests pretend role in play to self or other people
	© University of North Carolina at Chapel Hill, 2011			S9. Child expands pretend play with other people into (a) new roles, (b) new theme, and/or (c) fantasy roles

Mastery:
The Rule of 3

1
2
3
three

We assume a child has mastered a level in the ASAP hierarchies if the child demonstrates **three different, unprompted examples of the behavior** during the school day
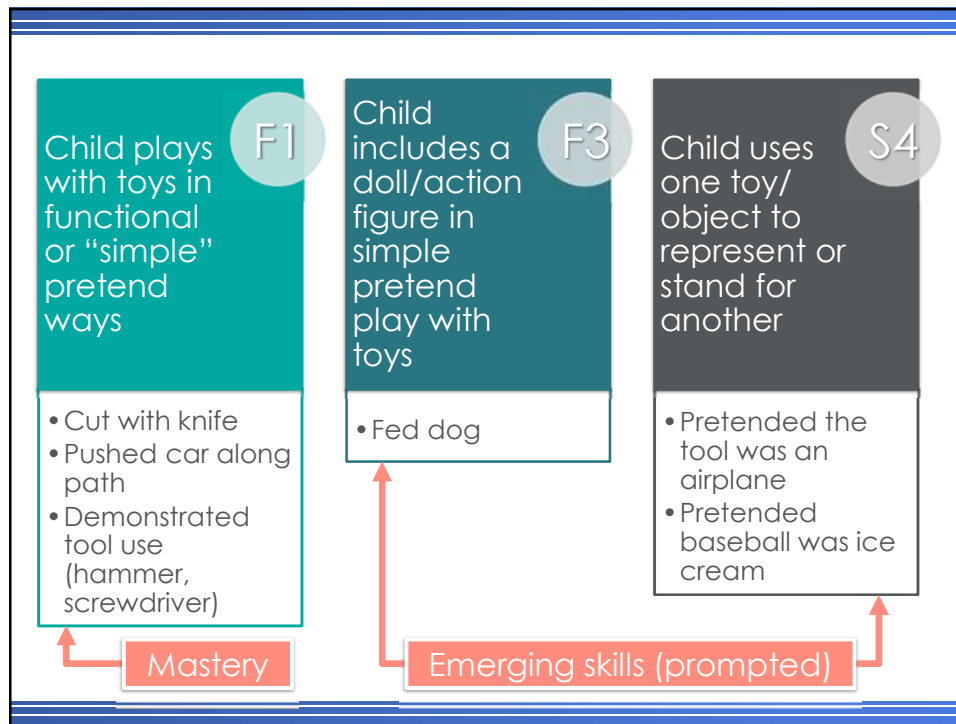
Devon

- 3 years old
- Self-contained classroom setting
- Speaks in 1–2 word utterances

How Does Devon Play?

How Does Devon Play?

How Does Devon Play in a Different Context?

F1 — Child plays with toys in functional or "simple" pretend ways
- Cut with knife
- Pushed car along path
- Demonstrated tool use (hammer, screwdriver)

F3 — Child includes a doll/action figure in simple pretend play with toys
- Fed dog

S4 — Child uses one toy/object to represent or stand for another
- Pretended the tool was an airplane
- Pretended baseball was ice cream

Mastery

Emerging skills (prompted)

Skill Levels across Four Categories of Play   (Watson et al., 2011)

	Exploratory *Age of Emergence: 2-10 months*	Relational *Age of Emergence: 10-18 months*	Functional *Age of Emergence: 12-18 months*	Symbolic *Age of Emergence: 18-30 months*
SKILL LEVELS	E1. Child picks up and looks at a toy			
	E2. Child plays with toys using both hands together (may include banging, shaking, rubbing, squeezing, mouthing, licking, smelling)			
	E3. Child plays with one toy in three or more different ways	R1. Child takes pieces of toys apart		
		R2. Child puts toys together in simple ways		
		R3. Child puts several toys together in specific ways	F1. Child plays with toys in functional or simple pretend ways	
			F2. Child plays with toys in simple pretend ways directed to self	
			F3. Child includes a doll/action figure in simple pretend play with toys	
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				S5. Child uses pretend qualities in play
	© University of North Carolina at Chapel Hill, 2011			S6. Child uses pretend objects in play

CATEGORIES

Pause…

? Which play goal or goals would you choose for Devon?

Play Hierarchy (truncated) (Watson et al., 2011)

CATEGORIES			
Exploratory Age of Emergence: 2-10 months	**Relational** Age of Emergence: 10-18 mon	**Functional** Age of Emergence: 12-18 months	**Symbolic** Age of Emergence: 18-30 months
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Mastered ➜ (F1)
Emerging ➜ (F3)
Emerging ➜ (S4)

SKILL LEVELS

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Supporting Pretend Play Development in Children With ASD

Intervention Intensity

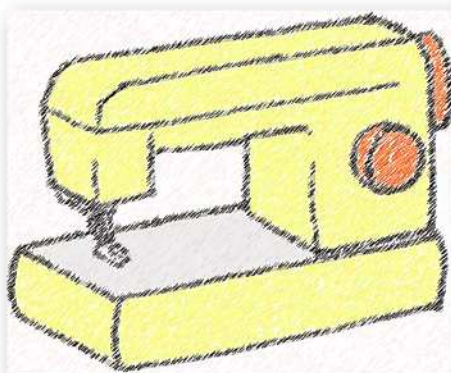Kasari et al. studies

15 hours of direct one-to-one intervention

10 hours of parent coaching

24 hours of parent coaching

Strongest evidence for impact on children's later language

Intervention Intensity

15 hours of direct one-to-one intervention

One-to-one for 40 min/week across school year

At least three classroom group activities per day, each with at least three instructional opportunities
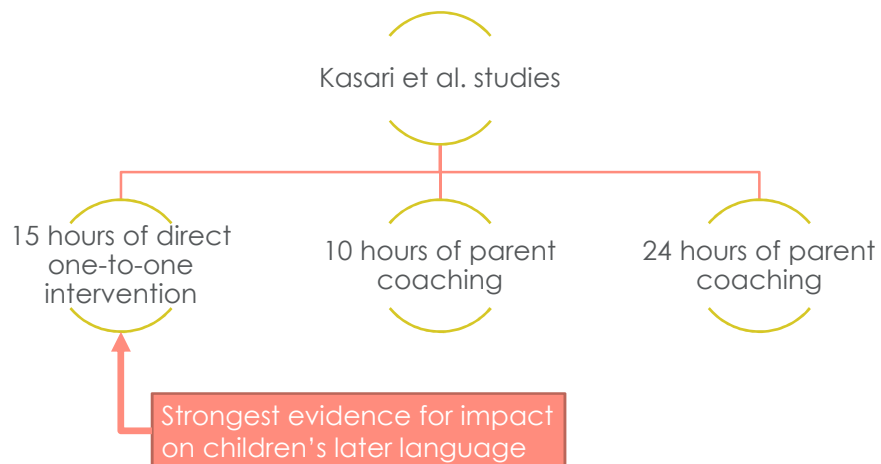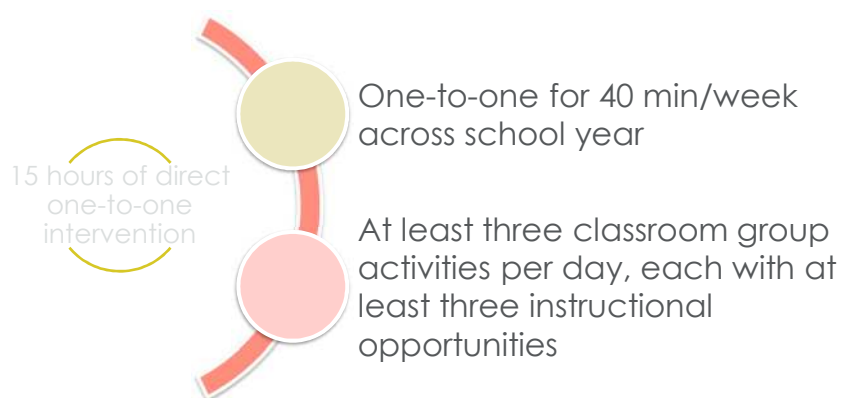
SEWing It All Up

(Watson et al., 2011)

SEW

Devon's Play Goal

Setting it up

Grooming activity (one-to-one)

Child includes a doll/action figure in simple pretend play with toys — **F3**

Objective	Child will include a doll/action figure in simple pretend play with toys
Materials	Doll/action figure, grooming supplies such as combs, brushes, toy razor, toothbrush, etc.

SEW

Devon's Play Goal

Engaging the child

Grooming activity (one-to-one)

Child includes a doll/action figure in simple pretend play with toys — **F3**

Arrangement	Have child in close proximity to teacher and materials
Activity	Tell the child that the doll needs to get ready for work/school
	See if the child will brush/comb the doll's hair, pretend to shave it, brush its teeth, etc.
	Demonstrate the actions or prompt if the child doesn't direct actions toward the doll

SEW

Wrap-up

Demonstrated mastery

Three different, unprompted examples of the behavior during the session or school day

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SEW

Wrap-up

Demonstrated progress

If no progress in ~2 weeks, review intervention activities – is the child interested and engaged?

If no, return to hierarchy and try different activities or strategies	Back up a step
	Go across the row to a different goal on the same row
	Go to a higher-level goal if you have seen evidence it is emerging

Pause…

? If Devon had mastered the F3 play goal, where would you go next?

? If Devon had been working on the F3 play goal for 2 weeks and shown no progress, where would you go next?

Play Hierarchy (truncated)

(Watson et al., 2011)

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Mastered
No progress
Emerging

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(Watson et al., 2011)

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Mastered → *Emerging*

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No progress → *Emerging*

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Play Intervention: One-to-One

Play Intervention: Small Group

Pause…

Design another activity

– Either for one-to-one intervention or a small group that would provide opportunities to address Devon's F3 play goal

Empirically Supported Strategies

(Jung & Sainato, 2013)

Use materials and activities that are of high interest to child	Use natural reinforcers	"Mirrored pacing" – imitation of child's appropriate and functional play, timed to occur when child is focused on the play act, & within child's line of view	Naturalistic teaching – imitation of actions on objects
(Lydon, Healy, & Leader, 2011; Porter, 2012; Stahmer, 1995; Wolfberg et al., 2015)	(Lydon, Healy, & Leader, 2011; Stahmer, 1995)	(Gulsrud et al., 2016)	(Ingersoll & Schreibman, 2006)

Empirically Supported Strategies

(Jung & Sainato, 2013)

Follow-in directives – more likely than follow-in comments to be followed by child engaging in functional play

(Bottema-Beutel et al., under review)

Scaffolding by demonstrating and prompting

(Lang et al., 2009)

Video modeling, including point-of-view video modeling

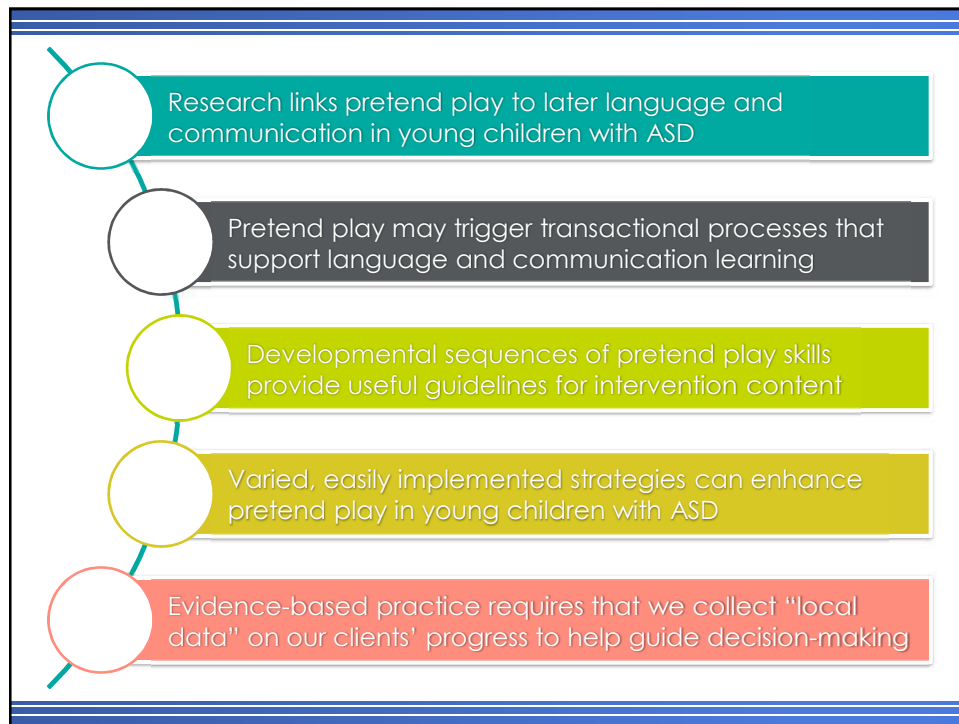(Lydon, Healy, & Leader, 2011; Sani-Bozkurt & Ozen, 2015)

Pause…

? Review your activity

– Did you incorporate any of these evidence-based strategies?

– Which of these strategies could you use?

- Research links pretend play to later language and communication in young children with ASD
- Pretend play may trigger transactional processes that support language and communication learning
- Developmental sequences of pretend play skills provide useful guidelines for intervention content
- Varied, easily implemented strategies can enhance pretend play in young children with ASD
- Evidence-based practice requires that we collect "local data" on our clients' progress to help guide decision-making

Have fun playing!

ASHA STRATEGIC OBJECTIVES

① ② **3** ④ ⑤ ⑥ ⑦ ⑧

OBJECTIVE #3: Enhance the generation, publication, knowledge translation, and implementation of clinical research.

OUTCOME: ASHA has enhanced the generation, publication, knowledge translation, and implementation of clinical research.

More information at www.asha.org/About/Strategic-Pathway/