A Multi-Case Study of Caregiver eCoaching

to Promote Pretend Play Behaviors in Preschool Children

BY

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THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Special Education
in the Graduate College of the University of Illinois at Chicago, 2021

Chicago, Illinois

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I dedicate this work to my Mom and Dad. Your unconditional love and support have provided the foundation from which I have built every one of my aspirations. Thank you for instilling in me a value for education and exploration of the world around me.

ACKNOWLEDGEMENTS

I want to begin by acknowledging my advisor and dissertation committee chair, Marie Tejero Hughes. Your mentorship has been instrumental in my guidance as a scholar and researcher. I will be forever grateful for the encouragement, support, and advice you have provided during my doctoral journey and beyond. I also wish to acknowledge my committee: Drs. Emily Gregori, Sunyoung Kim, Michelle Parker-Katz, and Kathleen Sheridan. I thank you for your encouragement, support, and time. I feel fortunate to have learned from your expertise.

I would also like to acknowledge my cohort and fellow doctoral scholars at the University of Illinois at Chicago. You have been a vital lifeline and vessel of support over the years. Thank you for being there for the highs and lows. The journey may have been long and winding, but I am grateful to have found so many lifelong friends along the way. Acknowledgments also extend to my colleagues, Courtney, Veronica, and Sarah, who aided in my dissertation data collection. Thank you for your time and dedication during this research.

I must also acknowledge my family who have been my unfailing cheerleaders across my lifetime, particularly this past year. Thank you to my mom, Debbie, who was always willing to lend an ear during my frequent "brain break" calls home. Thank you to my statistician of a dad, Steve, who volleyed with me in research diatribes and shared his passion for data. My trifecta of family support would not be complete without my sister, Lisa. Thank you, Lisa, for always knowing how to make me laugh and remind me not to take life too seriously. Finally, I would like to acknowledge my niece, Amelia, and nephew, Eric, who continuously inspire my love of play-based learning. I am grateful to have an army of grandparents, uncles, aunts, and cousins who have provided endless encouragement.

ACKNOWLEDGEMENTS (continued)

I would also like to acknowledge my friends, near and far, who have provided their steady support during my doctoral journey and my dissertation writing. That includes the many friends who graciously volunteered their children to pilot observation tools. I appreciate the many check-ins and words of encouragement provided by friends along the way. I feel particularly lucky to be surrounded by an army of strong women who have uplifted and inspired me. Thank you to all my friends and family who celebrated the small and large successes with me along the way.

Finally, I would like to acknowledge the four mothers and children who welcomed me into their homes. I appreciate your willingness to share and provide a glimpse into play with your child. Without you, none of this would be possible. I am forever grateful to you.

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LIST OF ABBREVIATIONS

AAA	Assigning Absent Attributes
ABA	Applied Behavior Analysis
ASD	Autism Spectrum Disorder
CEC	Council for Exceptional Children
COVID-19	Coronavirus
DD	Developmental Delay
DEC	Division for Early Childhood
DPICS	Dyadic Parent-child Interactions
ECBI	Eyberg Child Behavior Inventory
ESSA	Every Student Succeeds Act
FFP	Functional Play with Pretense
IAO	Imagining Absent Objects
IDEA	Individuals with Disabilities Education Acy
IEP	Individual Education Plan
IOA	Imagining Absent Attributes
IRB	Institutional Review Board
NAEYC	National Association for the Education of Young Children
NCQTL	National Center on Quality Teaching and Learning
OS	Object Substitution
OT	Occupational Therapy
PIECES	Play in Early Childhood Evaluation System

LIST OF ABBREVIATIONS (continued)

PL	Professional Learning
POS	Play Observation Scale
POS-A	Play Observation Scale-Adapted
PPVT	Peabody Picture Vocabulary Test
PRT	Pivotal Response Training
RCT	Randomized Control Trial
RIT	Reciprocal Imitation Training
SCR	Single Case Research
SLD	Speech-language Delay
TBI	Traumatic Brain Injury
TCK	Thinking/Constructing Knowledge
TCP	Task-completion/Performance
TEMA	Test of Early Mathematics Ability
ToM	Theory of Mind
UNHR	United Nations on Human Rights
ZPD	Zone of Proximal Development

SUMMARY

The value of play as a means for learning critical cognitive, social, and self-regulation skills, which themselves promote future academic progress in early childhood, makes play a crucial milestone in young children. A unique component of early childhood education involves understanding how caregivers and educators promote academic and social outcomes for children (Rush & Shelden, 2020), particularly for children with disabilities (DEC, 2014). While research has shown active engagement of families in children's daily routines contributes to positive outcomes for children (Mahoney, 2009), we are still in the process of figuring out what active engagement may look like for caregivers of young children. One type of intervention that specifically taps into the concept of active engagement is coaching.

The purpose of this study was to examine how eCoaching could support family-centered practices as it relates to the facilitation of pretend play, in caregivers of preschool children. Supports provided through eCoaching focused on play as an essential mediator in cognitive, social, and language development (Bergen, 2002; Vygotsky, 1930–1935/1978). Four mother-child dyads of preschool children, with and without an Individual Education Plan (IEP), participated in the eCoaching intervention. The intervention was designed for child-specific goals related to cognitive and social learning while also enhancing pretend play behaviors. Six intervention sessions consisted of virtual observations and debrief sessions. Throughout eCoaching, debriefs focused on developing facilitative play practices (Trawick-Smith, 2012) related to the pretend play taxonomy (Barton & Wolery, 2008). This multiple case study design utilized interviews, coaching logs, coaching debrief sessions, observations of child pretend play, and caregiver observation data. Each mother and child dyad were analyzed first as a unique case

followed by a cross-variable analysis to draw conclusions across cases and the variable of children with and without a disability (Yin, 2017).

During the implementation of eCoaching, four primary findings emerged related to the behaviors of mother-child dyads: (a) mothers developed a deeper knowledge of pretend play, which they used to increase their self-efficacy, (b) mothers built their pretend play understanding through observing their child's needs during play in connection to discussing potential learning goals to support targeted areas of interest, (c) mothers increased their ability to responsively attend to the play needs of their child through 'good-fit' interactions, and (d) interactions between mothers and children increased with play behaviors aligning to the dimensions of pretend play and were unique to a child's needs and interests. When looking across dyads of mothers engaging a child with or without an IEP, variances in eCoaching outcomes were unique and individualized to each dyad.

Virtual family-centered supports have become more accepted in the early childhood community over time. The following study adds to the literature on virtual family-based supports, emphasizing play as a medium for learning. Mothers in this study found eCoaching to be easy to engage in and beneficial. The outcomes of an in-depth analysis of eCoaching provide implications for future research and practice in terms of play-based virtual coaching practices.

I: Introduction

The value of play as a means for learning critical cognitive, social, and self-regulation skills, which themselves promote future academic progress in early childhood, makes play a crucial milestone in young children. Play is also a child's preferred method for engaging and exploring the world around them. Many argue that humans at every age engage in play related to their developmental age, motivations, and interest (Hirsh-Pasek, et al., 2009). It is through play that children learn. In 2008, a panel of early childhood scholars reviewed research on young children and asserted that "learning takes place best when children are engaged and enjoying themselves" (Hirsh-Pasek et al., 2009, p.3). For young children, this statement comprises play where they can explore content and generalize new learning in a way that is engaging to their needs. Through play, children come to understand the world around them and how to engage with others.

Defining Play

The task of defining play has been elusive over the years (Dockett et al., 2013; Sidhu et al., 2020), with early childhood educators, researchers, and policymakers failing to arrive at a consensus on the definition of play. In general, play has been defined based on internal motivators (Wong & Kasari, 2012), observable behaviors (Rubin et al., 1983), and its situation in cultural context (Fisher et al., 2008; Roopnarine et al., 1994). Rubin et al. (1983) defined play as encompassing behaviors that are:

1. Intrinsically motivated.
2. Controlled by the individuals.
3. Concerned with the process rather than the product.
4. Nonliteral.

5. Free of outwardly imposed rules.
6. Illustrated by the active engagement of the individuals.

Intrinsic motivation, a hallmark of play, describes desires that come from within a child instead of activities that are motived by external reward (Göncü & Vadeboncoeur, 2017). Intrinsic motivation is a significant contributor to children's natural inclination towards play.

Play is represented in a continuum of cognitive and social behaviors. One cognitive category of play frequently seen in young children is pretend play. Pretend play has also been referred to as dramatic, pretense, or make-believe play. For this study, the term pretend play will be utilized. Nonliteral play behaviors define pretend play. Pretend play behaviors can vary across behavior or materials (Barton, 2016). DiCarlo and Reid (2004) elaborated on the definition of pretend play by incorporating the use of objects that correspond to toys used to enact real-life situations. For example, when a child picks up an empty cup and pretends to drink out of it or uses a register to pretend to be a cashier at a store, they engage in pretend play. Social interactions also involve pretend play. Social pretend play is prolonged exchanges with others around a nonliteral idea or the use of materials in a nonliteral style (Lieber, 1993). These social pretend play interactions are illustrated by interactions of collaboration, joint communication, enjoyment, and positive affect (Connolly et al., 1988). Play involving pretending is considered an advanced on the continuum of play behaviors in young children level of play in young children (Barton & Wolery, 2008; Smilansky, 1968) and, consequently, a focus in early childhood curricula and research.

The Influence of Play in Early Childhood

In 1989, the United Nations on Human Rights (UNHR) adopted the Convention on the Rights of the Child (CRC). Within Article 31, the document indicates that "Every child has the

right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts" (UNHR, 1989/1990). The declaration indicated recognition of play at the world stage and a movement towards putting the importance of play center stage in children's development through age eighteen. In 2007, the American Academy of Pediatrics issued a report echoing this research and stressing the importance of play in children's healthy development. Among the benefits mentioned were imagination, cognitive, emotional strength, healthy brain development, confidence, resilience, and conflict resolution skills (Ginsburg, 2007). The Academy doubled down on their call for play in a 2018 report with an eye towards developing 21st-century learning skills. Highlighted in this report is developing skills such as problem-solving, collaboration, and creativity in connection to play. The Academy saw these executive functioning skills as critical to adult success, and ones that playful learning in early childhood could support (Yogman et al., 2018). These statements continue to situate play as an essential element of early childhood.

Benefits of Play

The benefits of play extend into the neurosciences as well. Neuroscientific studies have indicated playful activities attribute to synapse growth in the part of the brain responsible for higher mental functioning (Shonkoff, 2003). The rapid growth of brain development in young children (Rushton et al., 2010) ultimately makes exploration, discovery, and play in early childhood highly relevant.

A connection to play and growth in children's social competence (Nicolopoulou et al., 2015), self-regulation skills (Elias & Berk, 2002, Taylor & Boyer, 2020), language and communication (Kızıldere et al., 2020; Mills et al., 2014), vocabulary acquisition (Van Oers & Duijkers, 2013; Hutagalung et al., 2020), mathematical understanding and special relationships

(Fisher et al., 2013; Levine et al., 2012), and emergent literacy skills (Nicolopoulou et al., 2015) has been demonstrated. The correlation between play and the development of social-emotional skills among children has been demonstrated (Nolan & Paatsch, 2018; Pyle & DeLuca, 2017). Additionally, communication skills, routine conversations, and oral vocabulary associated with play are extensively developed in early play interactions and experiences (Taylor & Boyer, 2020). These studies highlight the benefits of play across learning domains.

Play has been a fixture of learning for centuries. Over the year's educators, researchers, and policymakers have agreed upon play's importance in early childhood. The increased value of play in early childhood pedagogy over the years and the movement towards the inclusion of students with disabilities in early childhood settings have opened the conversation, ensuring the values of learning through play are accessible to all students. The delays in children's social understanding, specific skill impairments, and communication resulting from a disability often require intentional or systematic support (Thiemann-Bourque et al., 2012). With play's developmental importance on social, emotional, and cognitive understanding, it is no wonder the conversation has evolved to supporting play in children with various needs or those not meeting set developmental play milestones.

In all these areas, theorists like Vygotsky (1930–1935/1978) saw autonomous play imperative for early development. Nowhere did Vygotsky (1930–1935/1978) see these developmental areas as more influential than in pretend play opportunities. Behaviors associated with pretend play have specifically been linked to self-regulation (Elias & Berk, 2002) as children take on new roles and rules to fit into the context of an intended pretend play scenarios. Interactions in social pretend play allow children to talk to their peers, share materials and

viewpoints, engage in social problem-solving, and regulate emotional responses in context (Barton, 2016).

Role of Collaborative Family Partnerships in Early Childhood Play

As the primary source of influence in young children's lives, families impact many aspects of a young child's development (Knoche et al., 2012), including within the context of play. The cultural influences of the family system influence how and what children choose to engage with in play (Göncü & Vadeboncoeur, 2017). Cultures have variations in how play is defined (Rentzou et al. 2019) and what values are placed on play in young children's development (Roopnarine & Davidson, 2015). It is impossible to examine play without also considering the social and cultural influence of a child's family. The importance of families in early childhood learning are captured in the idea of family-centered practices. Espe-Sherwindt (2008, p. 37) define family-centered practices as practices that involve:

> adherence to principles and values that include treating families and family members with dignity and respect, information sharing so families can make informed decisions acknowledging and building on family member strengths, active family member participation in early childhood intervention, and the provision or mobilization of supports in response to specific family concerns and priorities. (p. 37)

Research shows that caregivers' active engagement within daily routines enhances children's outcomes and early childhood learning domains (Mahoney, 2009). The engagement of caregivers extends towards the promotion of play in the home that is aligned with individual family values and interest.

Family-centered practices can be seen in medical, social, and educational work with children. The benefits of family-centered practices allow for the recognition of child's needs,

interest, learning opportunities, and preferred activities of the child while capitalizing on caregiver's skills and interest to influence support and increase caregiver self-efficacy (Knoche et al., 2015). Friend and Cook (1990) define this level of collaboration as one that relies on participants being co-equals as parties engage in shared decision-making towards a common goal. The emphasis in the provided definition situates families as co-collaborators in the education of their child.

The concept of family-centered practices has an enhanced presence in early childhood education and education for children with disabilities. The National Association for the Education of Young Children (NAEYC) has made collaborative relationships with families a central component of their professional standards and competencies for early childhood educators (NAEYC, 2009). When looking towards child development and learning in context, standard 1c pushes educators to understand how a child's development and learning occurs across multiple contexts, including the family. In standard 2 (Family-Teacher Partnerships and Community Connections) educators are encouraged to work in partnerships with the families of the children they educate and seek to use their knowledge of diverse family characteristics to create "respectful, responsive, reciprocal relationships" with families while supporting children's development and learning (p. 9). Through national organizations like NAEYC, early childhood educators are pushed to consider family-centered practices as part of their instructional framework.

While NAEYC highlights the importance of family-centered partnerships for all students, the concept is further considered when working with young children with a disability. The inclusion of family involvement within the Individuals with Disabilities Education Act (IDEA; 2004) as a foundational principle exemplifies the valuable role of caregivers supporting children

with a disability. More recently, the Every Student Succeeds Act (ESSA; P.L. 114-95) emphasizes family collaboration centered around shared decision-making regarding high-quality and equitable educational practices. The Council for Exceptional Children's (CEC) Division for Early Childhood (DEC) specifically incorporate family-centered practices, in addition to collaboration, within their recommended practice for early interventionist and educators (DEC, 2014). DEC takes the idea of family support a step further in its advocacy for capacity building in families that support children with a disability. These practices are intended to afford families the opportunity to "strengthen existing parenting knowledge and skills" to enhance caregivers' self-efficacy and practices (p.10). The influence of families is imperative in support of young children with a disability. As Turnbull et al. (2011) highlight, families frequently feel like passive recipients of services instead of critical stakeholders. Through DEC, educators are encouraged to actively engage families as partners in the education of their child with a disability. One way of forming these partnerships is through caregiver coaching.

Caregiver Coaching as a Means of Intervention

Per adult learning theory, adults' benefit when new learning is followed by embedded coaching (Knowles et al., 2015; Merriam, 2001). Coaching has been defined as a relationship of collaboration where the coach and coachee participate in a systematic process that involves (a) setting goals, (b) developing solutions intended to facilitative goal attainment, (c) self-directed learning, and (d) personal growth (Grant, 2013; Rush & Shelden, 2020). Coaching encompasses the process of utilizing existing skills as a means for developing new skills while simultaneously enhancing an individual's problem-solving ability to apply towards future goals (Bloom et al., 2005; Ward et al., 2020). As a means for the promotion of increasing the coachee's implementation of a new skill, coaching has demonstrated effectiveness in the domain of

education and other various professional disciplines (medical, social services, manufacturing, business, etc.). Specifically, the coaching of caregivers has increased both caregiver and child outcomes (Fettig & Barton, 2014; Miller-Kuhaneck & Watling, 2018; Ogourtsova et al., 2019) as well as increased implementation fidelity of specific interventions (Kemp & Turnbull, 2014). The purpose of caregiver coaching is to increase an individual's competency and confidence to support the learning and development of their child (Rush & Shelden, 2020). In the promotion of an equal partnership among families, coaching situates the caregiver coachee as an integral component of influence in the learning process. This is opposed to a top-down model where the caregiver is a passive recipiency of knowledge and learning.

Statement of Problem

As early childhood learning is rooted in developmental-based supports, play should also be viewed through this lens. Both children with and without disabilities exhibit unique preferences and needs in their development of play skills. Additionally, a focus on family-centered practices requires examining supports offered outside the school or childcare setting. A focus on the family allows social and cultural considerations to be accounted for in the engagement of family-school partnerships. For this reason, building family-centered practices that consider the importance of play is imperative in the learning and social development of young children.

While NAYEC, IDEA, ESSA, and DEC all advocate for promoting family-centered practices, Dunst and Trivette's (2005) findings indicate that family-centered practices are problematic in preschool aged children (3-4 years) as educators are often serving multiple families. This is opposed to early interventionists of children (0-2 years) who typically engage in home-based interventions. Coaching, and particularly internet-based eCoaching, is a way to

reach multiple caregivers as providers tend to be restricted in how many children they can support due to time required for travel between households (Kelso et al., 2009; Meadan & Daczewitz, 2015). Consequently, there is a need to examine how eCoaching can support family-centered practices related to the facilitation of pretend play within play in caregivers of preschool children both with and without disabilities.

Research Questions

1. How does eCoaching influence the understanding and knowledge of pretend play of caregivers of preschool children (3-5 years) with and without identified disabilities?
2. How does eCoaching develop caregivers of preschool children (3-5 years) with and without identified disabilities facilitation of pretend play behaviors?
3. Does the quality and type of pretend play behaviors change for preschool children (3-5 years) with and without identified disabilities whose caregivers receive eCoaching?

II: Literature Review

Play has gained value in early childhood pedagogy through theory and research over the years. The movement towards the inclusion of students with disabilities and family-center practices has opened the conversation to ensuring the promotion of playful learning in children with varying developmental needs across all settings. The value of family-centered practices has further pushed educators to consider how to ensure learning outcomes, such as play, outside the classroom. Family-centered practices have evolved in early childhood through coaching models and, with the rise of technology supports, virtual coaching. In the following chapter, the theoretical foundation for play and its promotion through various early childhood organizations are discussed. A review of early childhood play and coaching intervention literature will be examined, including implications for continued research in early childhood play and family-centered practices in the form of coaching.

Theoretical Frameworks for Learning and Development

Play is an essential mediator in cognitive, social, and language development (Bergen, 2002; Vygotsky, 1930–1935/1978). The development of these skills ultimately occurs through a social constructivism perspective of learning. Additionally, as children's earliest interactions occur in the home, play can also be viewed through a socio-cultural perspective to account for family and cultural influences on learning.

Social Constructivism

Social constructivism stems from the work of Vygotsky and suggests that learning is a social process. A Vygotskian perspective attests that play is a means of cognitive development (Saracho & Spodek, 1995). While Russian psychologist Lev Vygotsky (1896 – 1934) did not explicitly speak to play outside of the realm of pretense play in his theory of social development,

his ideas have provided a foundation for early childhood curricula. He (1930–1935/1978) believed that a child's interaction with others shapes cognitive development and language. In the home setting, this could be through family members, caregivers, siblings, or peers. Vygotsky saw these people around a child as having a central role in their learning and how a child sees the world. These levels of understanding are described in two unique planes: social and internal. The social plane is where initial development takes place as a child observes, listens, and begins to intimate what they see. Within the social plane, caregivers are seen as more knowledgeable and often steer, make connections, and challenge the child in their learning. The subsequent internal plane occurs as the child becomes more competent and the internalization of new learning occurs. It is through these two planes that cognitive, social, and language development occur.

The pathway to higher mental functioning within the social and internal planes is highlighted in what Vygotsky saw as a child's Zone of Proximal Development (ZPD). The lower level of a child's ZPD represents what a child can perform independently. In contrast, performance at a higher level of ZPD requires assistance to complete a task. Pushing a learner from a lower to higher zone involves support in the form of scaffolding on the part of an expert learner. In the home environment, this expert is often the child's parent or caregivers. It is through the distinctions within the ZPD that children rely on caregivers to gradually release responsibility to spur independence. This process requires a clear identification of what a child can do independently or with help to provide targeted scaffolded supports that meet the learner at their developmental level.

To assist in constructing cognitive and social knowledge concerning the ZPD, Bruner (1966) identified three principles that must hold true in social constructivism:

1. Teaching must be concerned with the experiences that the targeted learner is willing and ready to engage in, often referred to as 'readiness'.
2. The structure of teaching must be one that can be easily grasped by the learner, meaning a focus on an individual child's unique ZPD.
3. Teaching should allow for elaboration or attention to gaps in knowledge as opposed to directly giving information.

Through attention to these three areas, scaffolded support and new learning can be provided to children. As a common avenue for learning in young children, play is often an ideal component for learning as it focuses on an activity that provides intrinsic motivation and allows opportunities for scaffolding.

Nowhere did Vygotsky see social and cognitive development as more influential than in pretense or imaginary play. Pretend play behaviors associated with play include symbolic play, role-play, and persistence through imagination and adherence to social rules (Loizou, 2017). The utilization of internal representations and adherence to rules during pretend play increases a child's self-regulation abilities (Savina, 2014). As Vygotskian tradition sees it, when children assume pretend roles or use object substitutions in play, they are engaging in behaviors that allow for an increased understanding of social norms and the regulation of expression per those perceived norms (Elias & Berk, 2002). For example, when a child pretends to be a doctor during a make-believe scenario, they adhere to preconceived rules associated with that role, which inform their actions. They are also practicing behaviors that allow them to see the world through a perspective other than their own. For these reasons, Vygotsky saw make-believe play behaviors as operating in the ZPD for preschool children by allowing them to operate a "head taller" than themselves (Gredler & Shields, 2008).

Sociocultural Theory

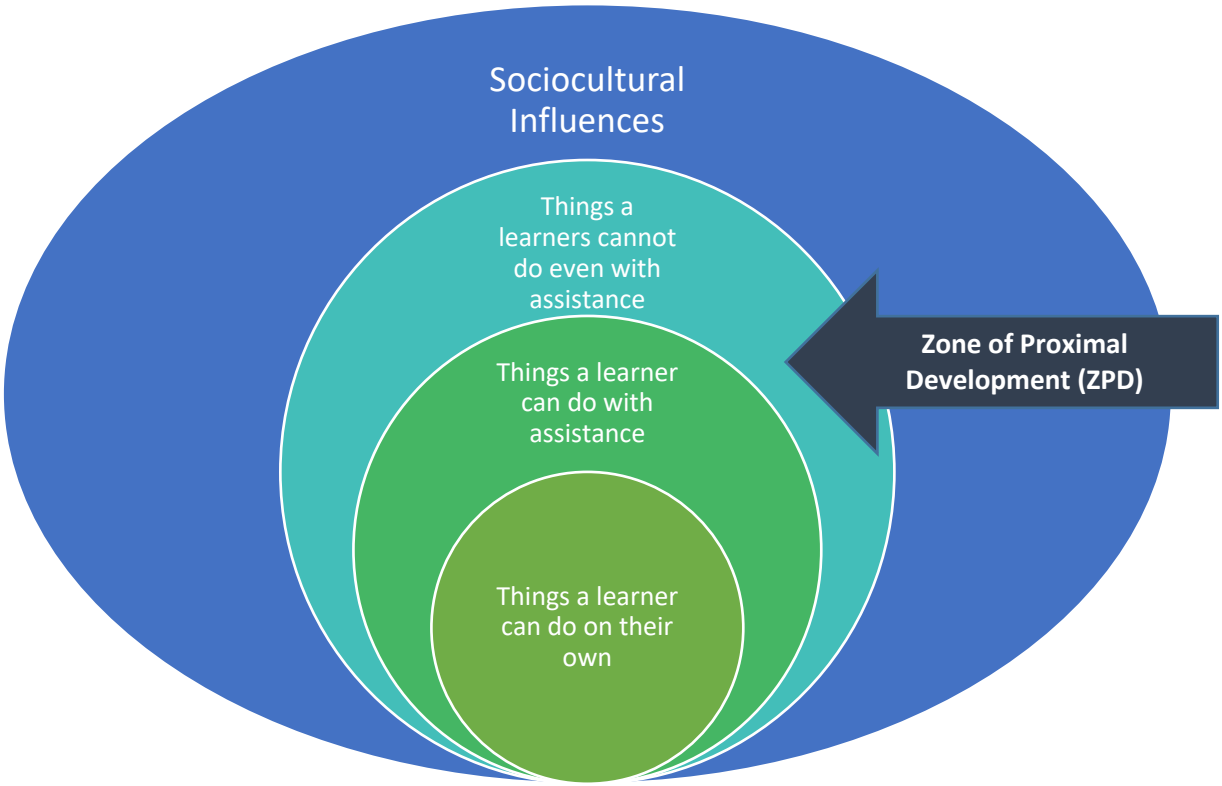
Stemming from Vygotskian work, sociocultural theory suggests that learning is a largely social process framed within the constructs of a child's cultural identity. The sociocultural theory emphasizes that cognitive and social development are influenced by the culture in which children live and the cultural interactions they participate in and observe (Göncü & Gauvain, 2012; Rogoff & Angelillo, 2002). Crotty (1998) explains all humans are "born into a world of meaning," and it is through this cultural context that they depend on to direct their behavior and organize experiences (p. 54). A child's development is consequently mediated through the historical and cultural context in which their play occurs. For this reason, Göncü and Vandeboncoeur (2017) argue that cultural differences place value on activities and how children participate in those activities. This ultimately plays a role in how children imagine and participate in pretend play across various cultures. These variances transcend through motivations and engagement within pretend play.

Cultural perspectives on the value of play or roles will ultimately impact a child's development through play in unique ways to their family, community, and culture (Gaskins et al., 2007). Göncü and Vandeboncoeur (2017) identify three essential elements that connect the sociocultural perspective and pretend play. First valued activities vary across cultures, and these are often set, implicitly or explicitly, in cultural values. These values dictate who, how, and when children participate in play. Second, culturally specific ways of participating in play activities mediate learning and development in children. Children learn from norms and expectations set by cultural influences, and these expectations influence current and future behaviors. Lastly, cultures serve as opportunities for gathering and making meaning over time. A child may learn something in the moment, but this meaning evolves in relation to others. For young children,

their development within a social-cultural context includes caregivers, siblings, and peers, which contribute to what is being interpreted through play (Göncü & Gaskin, 2011). Elkonin (2005) also argued that even the design of toys or toys presented to children by adults values their community's skills and a child's perceived future contribution to society. Consequently, when looking at a child's play at home and school, attention to the sociocultural influences that implicitly and explicitly surround it within a social environment is imperative (see Figure 1). These cultural influences play a part in both child and caregiver's beliefs, interest, and perceptions of play.

Figure 1

Social Constructivism and Sociocultural Theory



Theoretical Perspectives on Play Development

The influence social constructivism and sociocultural theory in relation to playful learning have expanded in the past century. It is through these theories that the characteristics of cognitive and pretend play are described.

Smilansky Stages of Play

Similar to the development of any cognitive skill, such as reading or mathematics, play exists on a continuum (Lifter et al., 2011a). Sara Smilansky (1922 – 2006) expanded on existing literature to develop five stages of play she saw as representing this cognitive development and progressing in cognitive complexity (Smilansky, 1968). Stages included (a) functional play, (b) exploratory play, (c) constructive play, (d) symbolic or dramatic, and (e) games-with-rules. *Functional play* involves simple repetitive movements that advance to exploratory play where children engage in examining the physical properties of objects. In *exploratory play* a child seeks to obtain auditory and visual information from an object, whereas in functional play the intent is to experience sensory stimulation through simple, repetitive muscular movements (Rubin, 2001). The difference in function and exploratory activities involves intent. *Constructive play* involves using objects to create something through the manipulation of objects (e.g., building with blocks, painting with watercolors). Rubin (2001) also included reading in this category of play as he argued children were using language to construct the meaning of a text being read by or to them. The category of *symbolic or dramatic play* encompasses any element of pretend play with the intent to dramatize situations, bring the inanimate to life, or engage with absent objects. The most advanced form of cognitive play, *games-with-rules*, requires children to accept prearranged rules and play within the boundary of those rules in competition with themselves or others (Rubin, 2001).

Expanding on the category of dramatic play, or pretend, Smilansky saw this type of play as distinct and different from symbolic or solitary dramatic play in terms of play complexity. Smilansky attributed six characteristics to pretend play:

1. Make-believe using objects.
2. Make-believe through the assumption of roles.
3. Make-believing about a situation, action, or the continuation of play in the face of challenges.
4. The use of language in the context of play as it relates to communication.
5. Utilization of social interactions during play.

The characteristics of language, communication, and social interaction distinguish sociodramatic play as one of higher cognitive complexity right behind the games-with-rules stage of play.

Taxonomy of Pretend Play

Due to the complexity that Smilansky (1968) introduced in terms of pretend play, Barton and Wolery (2008) conducted an in-depth review of existing literature (1988-2006) related to pretend play interventions, specifically those attending to children with autism (ASD). The rationale for focusing on ASD connects to the contributions of Theory of Mind (ToM), or the understanding that others do not know the same thoughts and feelings as yourself. ToM has shed light on why students with ASD struggle to interpret behaviors, motives, and emotions in others (Baron-Cohen et al., 1985; Rutherford & Rodgers, 2003). Like those seen in ToM, interpretations are especially important in sociodramatic play interactions and explain why students with ASD display fewer overall or vastly different dramatic play behaviors than that of their peers (Lifter et al., 2011b). However, the principles of ToM and executive functioning are applicable to preschool age children with and without disabilities (Meins et al., 2013) making the

literature review autism specific interventions applicable to multiple children who many exhibit similar behaviors.

Addressing discrepancies in defining and measuring pretend play was the intention behind the Barton & Wolery (2008) literature review (Barton, 2016). Their review has evolved into an understanding of pretend play nuances outside ASD. Barton and Wolery (2008) outlined a taxonomy of detailed subcategories of pretend play through their investigation. Like Smilansky's stages of play, the Barton & Wolery (2008) taxonomy progressed in complexity and deduced four categories of pretend play, including (a) functional play with pretense, (b) substitution, (c) sequences, and (d) vocalizations. The taxonomy's intention was a focus on objects and self, as opposed to others, and removed pretend play from all other types of play (Barton, 2016). The resulting taxonomy provides a framework for observing, measuring, and supporting pretend play to all children, not just those with ASD.

The most basic form of pretend play is represented in *functional play with pretense* (FPP) (Barton & Wolery, 2008). Behaviors in this category involve pretend behaviors such as petting a dog stuffed animal or pretending to stir a pot of soup. The difference between functional pretend, and functional play is intent (Williams et al., 2001). In functional pretend play, a child's actions or vocalizations demonstrate actions aligned with an imaginary situation or role-play. For example, a child repetitively moving a train back and forth on the carpet to experience the friction the movement creates is different from a more linear motion of a train moving on a train track.

The second category in Barton and Wolery's (2008) taxonomy is *substitution* which involves further subcategories related to (a) *object substitution*, (b) *imagining absent objects*, and (c) *assigning absent attributes*. *Object substitutions* (OS) involve the "use of one object as if it

were a different object" (Barton & Wolery, 2008, p.113). *Object substitutions* may occur when a child pretends a block is a car, plate, or telephone. *Imagining absent objects* (IAO) involve children performing actions as if the actual object were present. These actions are seen when a child is role-playing as a fireperson and pretending to put out a fire with a non-existent hose. Finally, *assigning absent attributes* (AAA) occurs when feelings or emotions are given to oneself, others, or inanimate objects. This may be demonstrated in a child who proclaims that their baby doll is "happy" or "sleepy."

The third category of the taxonomy includes functional play and the same subcategories mentioned above with the addition of play that involves sequences. *Sequences* of functional pretend play occur when a series of at least two functional pretense play actions occur related to the same theme or routine (Barton & Wolery, 2008). A series of at least two substitution behaviors, object, imagining absent objects, and assigning absent attributes in association with the same theme make up sequences of substitution. The difference between the two identified categories of sequences involves the use of substitution behaviors as a part of the sequence. A sequence could involve baking a cake or capturing a robber. Both scenarios would involve a series of multiple pretense behaviors. In terms of complexity, sequenced pretend play is considered more complex than singular pretend play behaviors.

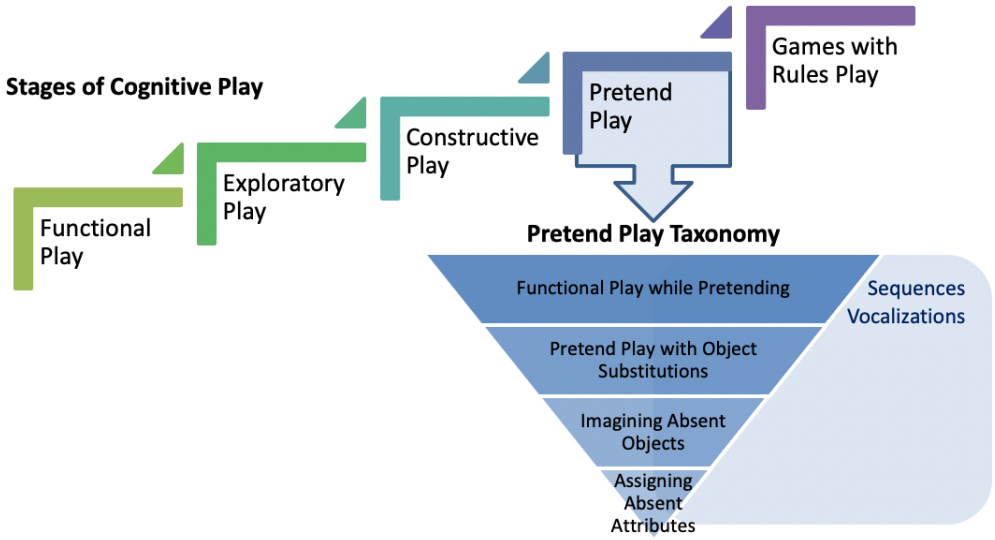
The final component in Barton and Wolery's (2008) taxonomy final is *vocalization* in the form of confirmations or scripts. Confirmatory vocalizations could identify specific roles being acted on, the assignment of attributes, planning, or confirming pretend play behaviors. For example, when a child proclaims, "I am the mama, and you are the baby," they are engaging in a confirmatory vocalization that intends to specify roles in their pretend play. Another form of vocalization occurs through taught scripts related to targeted behavior. Script training often

occurs through a medium like a video modeling. During video modeling, a child could observe pretend play that adheres to a script before being provided the opportunity to enact that scenario using prompted or unprompted cue. For example, in MacDonald et al. (2005), a child observed a house play scenario with various vocalizations such as "time to eat."

The Barton and Wolery (2008) taxonomy provide a framework that accounts for the levels of complexity associated with pretend play (see Figure 2). It is through the taxonomy levels that pretend play interventions are rooted. Like Smilansky's (1968) stages of cognitive play, the pretend play taxonomy allows the facilitation of pretend play development with an eye towards the ZPD and the sociocultural lens it exist within.

Figure 2

Stages of Play and the Pretend Play Taxonomy



Note. Cognitive stages of play are based on Smilansky's (1968). The pretend play taxonomy is based on Barton and Wolery (2008). Sequences and vocalizations can occur within all levels of the pretend play taxonomy.

Teaching Play to Young Children

The situation of play within early learning experiences promotion of cognitive and social development has led researchers to argue for interventions that allow for the facilitation of play skills (Trawick-Smith, 2012). While most intervention studies have focused on children with ASD, the myriad of developmental behaviors required for cognitive and social play behaviors open the possibility for children with a variety of developmental needs to benefit from play interventions.

Early childhood learning and curricula' reliance on play can inevitably pose a barrier to learning for children who cannot independently engage in developmentally appropriate play skills. If access to academic and social learning is mediated through play, students experiencing delays in play skills are at-risk educational experiences in these development areas. Nowhere seen more than with children with or at-risk of a disability. Theorists work regarding developmental stages and characteristics of play has brought attention to the differences in students' play behaviors (Lifter et al., 2011b). More intentional or systematic instruction by adults is often beneficial to children with or at-risk of a disability due to delays in play behaviors (Thiemann-Bourque et al., 2012). While children with disabilities' difficulties in play may be as individualized as the children themselves (Passmore & Hughes, 2020), most delays seen in young children are attributed to social understanding deficits or specific skill impairments.

Social Understanding

Children with disabilities play is often characterized by decreased engagement in diverse play behaviors (Barton, 2016). Additionally, Ungerer and Sigman (1984) identified children with ASD as having delays in play skills related to symbolic and functional play behaviors. Whereas Ungerer and Sigman (1984) found these behaviors to persist even with adult support, a later

study done by Lewis and Boucher (1988) found that students with ASD, when matched with peers on language-age, were able to display similar performance in areas of play when provided adult prompting and modeling. These findings have been replicated and demonstrate that students with disabilities, specifically ASD, may not engage in spontaneous play behaviors without interventions and support (Lifter et al., 2011b). Today, a lack of social understanding is considered a reason why children with disabilities struggle with spontaneous play behaviors (Trawick-Smith, 2012). The collective body of research around play behaviors in students with disabilities demonstrated that even when provided opportunities to play and developmentally appropriate materials, many children will require additional supports (Barton, 2016). If pretend play behaviors have been attributed to higher levels of cognitive, communication, and social functioning (Vig, 2007), a decrease in this type of behavior is undesirable and calls for intervention.

Specific Skill Impairments

Some children with disabilities may display delays that effect their engagement in successful play behaviors. Inherent mobility problems and visual impairments associated with various disabilities may make it challenging for these students to participate in specific forms of play (e.g., toy investigations, hide-and-seek) (Barton & Wolery, 2010). The American Psychiatric Association (2013) outlined that children with disabilities, ranging across all disability categories, may demonstrate social interaction difficulties, communication challenges, deficits in understanding relationships, a restrictive range of interest, and limited receptive and expressive communication skills. Trawick-Smith (2012) poses the question: “Which comes first, play ability (which promotes cognitive development) or cognitive development (which promotes play)?” (p. 261). The question could similarly be posed to the idea of language development. Do

students with fewer communication skills engage in less complicated play, or does less spontaneous complex play result in decreased communication skills? From either vantage point, play deficits have been identified in students with disabilities resulting in a lack of complexity in play behaviors, social interactions, and pretense play behaviors (Barton, 2015).

Interventions for Pretend Play

Since play is correlated to progress in various developmental domains and skills (e.g., communication, social, motor), play requires the adaptation of previously utilized intervention structures to support an effort to increase play complexity and duration in students with disabilities (Barton, 2016). Interventions for young children featuring pretend play behaviors have been targeted in various intervention structures, including prompting, modeling, script-training, and applied behavior analysis techniques. Details of these intervention techniques are outlined with some interventions utilizing multiple strategies to target pretend play behaviors.

Prompting Interventions

Several interventions (see Table 1) have demonstrated effectiveness in prompting areas of structured play (Doctoroff, 1997), spontaneous play (Lifter et al., 2005, Lifter et al., 1993), role play (Gmitrova, 2013; Kim et al., 1989), pretend object play (Colozzi et al., 2008), and play schemes (Kim et al., 1989). Saral and Ulke-Kurkcuoglu (2020) demonstrated that least-to-most promoting increased students with ASD novel behaviors (FPP, OS, AAA), sequences and vocalizations during pretend play. In a similar study, researcher selected play materials to be used in the least-to-most promoting intervention and demonstrated mild to moderate development of appropriate functional play (Pullum et al., 2020) or object substitutions (Lee et al., 2020b). In one of these studies of pre-selected pretend play activities for instruction only some children maintained behaviors (Pullum et al., 2020) highlighting a variance in outcomes for

child selected activities. Least-to-most prompting used by Lifter et al. (2005) involved following the child's lead in a home-based setting to provide support with a least invasive prompt (e.g., gesture, verbal) and progress to more supportive promoting if needed (e.g., physical). In another Lifter et al. (1993) study, utilizing the least-to-most promoting procedure with a determined developmentally appropriate rated activity demonstrated a greater likelihood of generalization when compared to prompting an age-appropriate activity. These five studies illustrate the success of least-to-most prompting and attention to the selection of play activities that align with a child's developmental needs, relating to Vygotsky's description of the ZPD.

Prompting procedures in play research are most effective when a naturalistic approach is utilized (Barton, 2016). A naturalistic approach in play prompting requires the adult to follow a child's lead to model or prompt a developmentally appropriate play skill associated with a child's interest (Kasari et al., 2006). In this sense, least-to-most prompting procedures are seen as a successful model of intervention related to play, due to its ability to build off a children's play interest (Barton & Wolery, 2008). Doctoroff (1997) involved the use of peers to promote promoting and group-oriented reinforcement resulting in children's increased participation in social pretend play activities. In a more one-off procedure, Zercher et al., (2001) trained older peers to serve as coaches for two young children with developmental disabilities. The intervention resulted in increased attention, symbolic play, and peer-directed language in the two participants. Participants were also able to maintain these behaviors after the peer-coaching conditions was removed.

A more systematic and reinforcement-based prompting procedures utilized in pretend play literature is that of pivotal response training. Pivotal response training (PRT) is an intervention approach that uses structured direct teaching methods with adult promoting and

reinforcement in a naturalistic setting that follows a child's lead and motivations (Barton, 2016; Koegel & Koegel, 2019). PRT procedures have been used to teach play behaviors to students with ASD by Stahmer (1995) and Thorp et al. (1995) to promote symbolic play, social interaction behavior, and communication vocabulary skills.

Overall, multiple types of prompting and modeling interventions are translatable in targeting play. Prompting interventions were shown to be effective in both children with and without disabilities. Strategies highlighted in these studies include least-to most prompting, peer prompting, and pivotal response training. Many prompting interventions were also used in conjunction with various intervention strategies (e.g., script training).

Table 1

Pretend Play Prompting Interventions

Authors/ Year	Participants	Design	Intervention	Target Behavior	Findings
Colozzi et al. (2008)	Children (3-4 y.) with DD (*n* = 4)	SCR – multiple probe design	Simultaneous prompting in one-on-one and small group setting	FPP	All children displayed acquisition, maintenance, and some generalization of the target skills. Instructive feedback in both instruction formats (one-on-one & small group) showed minimal differences in outcomes.
Doctoroff (1997)	Triads of children without disabilities (4-5 y.) with one of the children (5y.) identified with social isolation (*n* = 9)	SCR – multiple baseline with probe	Social pretend play script training. The intervention utilized peer prompting, group-oriented reinforcement contingency, and visual feedback related to roles of pretend play.	FFP Voc.	The intervention package's implementation was linked with considerable increases in participation in social pretend play. Peers providing the support required minimal prompting during implementation. Social play objectives were met but failed to be maintained following the withdrawal of the intervention.
Kim et al. (1989)	Children (2-3y.) with a cognitive disability (*n* = 8)	Quasi-experi-mental	Pretend play intervention using prompting and modeling	FFP OS IAO AAA Seq. Voc.	Children in the experimental group demonstrated qualitative and quantitative changes to their pretend play behaviors (quality and quantity) in targeted areas.
Lee et al. (2020b)	Children (4-5y.) with a mild intellectual disability (*n* = 3)	SCR-multi-probe	Hierarchal assistive prompting	FFP OS	Children increased symbolic play and objects substitutions within pretend play in taught activities. Generalization occurred in untaught activities.

Lifter et al. (1993)	Children (4y.) with ASD (*n* = 3)	SCR – Multiple Treatment	Least-to-most prompting and reinforcement during targeted activities	FFP	When implementing least-to-most prompting and reinforcement, children were less likely to generalize age-appropriate activities to other toys than to developmentally appropriate chosen activities.
Lifter et al. (2005)	Children (4-6y.) with DD (*n* = 3)	SCR-multiple baseline	Play intervention sessions (narration, positive reinforcement, modeling, least-to-most prompting hierarch	FFP	Children reached attainment in 40 play activities deemed emerging (85%, range 75-100%) and 16 play activities considered non-emerging (81%, range 50-100%).
Pullum et al. (2020)	Children (3-4y.) with DD and ASD (*n* = 5)	SCR-multiple baseline	Least-to-most promoting using play box materials	FFP	Children demonstrated mild (*n* =1) to moderate (*n* = 2) gains in appropriate play behaviors (FFP). Behaviors were not maintained following the removal of the intervention.
Saral & Ulke-Kurk-cuoglu (2020)	Children (5-6y.) with ASD (*n* = 3)	SCR-multiple probe	Least-to-most prompting with contingency	FFP OS AAA Seq. Voc.	Children increased their diversity of pretend play behaviors (FFP, OS, AAA), sequences, and vocalizations. All children maintained these behaviors 1, 2, and 4 weeks following the intervention. Teachers and mothers reported the generalization of these skills across settings.
Stahmer (1995)	Children (4-7y.) with ASD (*n* = 7)	SCR – multiple baseline	Pivotal Response Training (PRT)	FFP OS IAO AAA Seq.	After PRT training, all children were successful in performing complex, and creative pretend play actions. Levels in children with ASD matched their language-matched peers following the intervention. Most children generalized learning to new toys, environments, and peers. Following three months, children continued to engage in pretend play behavior.

Thorp et al. (1995)	Children (5, 8, & 9y.) with ASD (*n* = 3)	SCR-multiple baseline probe	Pivotal Response Training (PRT)	FPP OS IAO Seq.	Children increased their social pretend play, improving language and social skills. Newly acquired behaviors were generalized across toys and settings. Generalizations were minimal in terms of play partners.
Zercher et al. (2001)	Children (5-11y.) with DD (*n* = 2) and without a disability (*n* = 3)	SCR-multiple baseline	Peer coaching	FFP OS Joint Attention	Peer coaching for children without disabilities resulted in increased joint attention, symbolic play, and language directed towards peers in play group. Children maintained behaviors once peer-coaching was removed.

Note. SCR = single case research; DD = developmental disability; FPP = functional pretense play; OS = object substitution; IAO = imagining absent objects, AAA = assigning absent attributes, Seq. = sequences; Voc. = Vocalizations.

Adult and Peer Modeling Interventions

Multiple studies have demonstrated the use of adult modeling (see Table 1 & 2) to increase young children's manipulations of objects or functional play (Gmitrova, 2013; Taylor & Iacono, 2003), the performance of roles (Gimitrova, 2013; Kim et al., 1989), imitation of schemes (Ingersoll & Schreibman, 2006; Kim et al., 1989), object substitution (Lee et al., 2020a), and spontaneous and prompted pretend play (Lifter et al., 2005). While these interventions relied on modeling, three interventions also utilized a prompting component (Gmitrova, 2013; Kim et al., 1989; Lifter, 2005) in conjunction with modeling. For this reason, it is uncertain which procedure was responsible for increases in behavior or if promoting and modeling procedures work in tandem. Gmitrova (2013) differentiated between manipulation of things, role play, and verbal communication during pretend play. Finding more growth in role-play following teacher led modeling of predetermined scenario. Two adult modeling interventions also addressed a language component as part of their intervention. These two studies focused on children's spontaneous communication during pretend play (Ingersoll & Schreibman, 2006; Taylor & Iacono, 2003). Additionally, Ingersoll and Schreibman (2006) included instances where imitation language occurred and demonstrated children with autism's ability to generalize skills, including social communication and joint attention, to other pretend play environments.

Modeling has also been used with young children through videos of peers to promote behaviors associated with pretend play (see Table 2). Video modeling is entrenched in the philosophies of observational learning (Bandura, 1977). In video modeling, a video recording captures a model of the correct demonstration of behavior. The target child then observes this video and is provided the opportunity to imitate the modeled behavior (Barton, 2016). Three

pretend play interventions utilized the structure of video modeling to increase a child's frequency of scripted verbalizations and play actions (MacDonald et al., 2005; Reagon et al., 2006) and targeted pretend play skills (Sani-Bozkurt & Ozen, 2015). MacDonald and colleagues' (2015) use of a play script through video modeling demonstrated children's ability to maintain sequences of scripted verbalizations and play actions during follow-up probes. Sani-Bozkurt and Ozen (2015) also compared peers and adults' use in their presentation of videos. They found no significant difference in either presentation of modeling, and participants could generalize targeted skills to various environments, people, and materials. The Reagon et al. (2006) case study of one 4-year-old child with ASD video also used peer modeling. The child with ASD and his sibling watched a brief video with four scripted pretend play scenarios. In subsequent playing, the target child was responsive to all four scenarios by demonstrating scripted actions and statements during play sessions. These behaviors were maintained in two follow-up visits. Additionally, the child's mother indicated satisfaction with the intervention, and the child's older sibling stated that the intervention helped him learn ways to play with his brother better.

More general modeling procedures were typically utilized in students without disabilities or disabilities other than autism apart from Lee and colleagues (2020a). These include a teacher model of a pretend play scenario or targeted pretend play skills (e.g., assigning absent attributes, object substitution). Except for Gmitrova (2013), all video modeling interventions intended to promote pretend play was conducted with ASD students. Video modeling is considered a more intensive intervention in comparison to general modeling procedures. Video modeling also allows for repeated exposure and modeling of multiple exemplars, which may be more effective than in-person modeling (Barton, 2016). The specific needs and interests of children with ASD may lend themselves better to a video modeling intervention, resulting in the discrepancy in

participants for these types of interventions. However, individual student interest in video, multiple examples, and the removal of external distractions may make video modeling an ideal population for video modeling.

Table 2

Pretend Play Modeling Interventions

Authors/ Year	Participants	Design	Intervention	Target Behavior	Findings
Gmitrova (2013)	Children (5-6y., *n* = 168) and their teachers (*n* = 92)	RCT	Teacher facilitation and modeling of pretend play (day 1-3). Teacher in management role of the following days	FPP OS IOA AAA	A statistically significant occurrence of children's play was marked by cognitively complex indicators in the experimental group. Children's play was particularly distinct from the control group in the category indicators of 'role.'
Ingersoll and Schreib-man (2006)	Children (2-3y.) with ASD (*n* = 5)	SCR – multiple baseline	Naturalistic behavioral technique (modeling, linguistic mapping, etc.).	FPP OS IOA AAA	Children increased their imitation skills and generalized those skills to pretend play environments. Children also demonstrated an increase in social-communicative behaviors, pretend play, and joint attention.
Lee et al. (2020a)	Children with ASD (3-7y.) (*n* = 3)	SCR – multi-probe	Modeling, verbal, and physical instruction of 3-4 targeted pretend play activities	OS	All children reached and maintained the target for behaviors of object substitution. Generalizations to free play within intervention taught activities and occurred in one child for untaught activities.
MacDonald et al. (2005)	Children (4 & 7 y.) with ASD (*n* = 2)	SCR – multiple probe	Play script and video modeling	FPP AAA	Children acquired associated sequences and vocalizations related to the play script intervention. During follow-up probes, children were able to maintain their performance.
Reagon et al. (2006)	Child with ASD (*n* = 1)	Case Study	Video modeling and peer prompting	FPP OS IOA Seq./ Ver.	The child was responsive to all 4 pretend play scenarios. Skills continued in the follow-up session, as well as the generalization of skills.

Sani-Bozkurt & Ozen (2015)	Children (5-6 y.) with ASD (*n* = 3)	SCR – Alterna-ting treatment	Peer and adult video modeling	FPP Seq.	The participants achieved the performance of the skills. Participants were able to generalize to different environments, different people, and materials. There was no significant difference in terms of efficiency across the two interventions used.

Note. SCR = single case research; RCT = randomized control trial; FPP = functional pretense play; OS = object substitution; IAO = imagining absent objects, AAA = assigning absent attributes, Seq. = sequences; Voc. = Vocalizations.

Script Training Interventions

Scripts are another way that pretend play behaviors have been taught to children with or at risk of a disability due to a developmental delay (see Table 3). Goldstein and Cisar (1992) used script training in triads of children with and without a disability. All children were taught a script related to complex symbolic play, and peers of the children with ASD were taught promoting procedures to support their peers during the intervention. All children increased their independent social pretend play behaviors and the ability to generalize across peers. Nevile and Bachor (2002) used script training and systematic modeling to promote symbolic play in 5 male children with autism. While four of the five children produced gains in mean performance over baseline in both play contexts, their behaviors failed to return to baseline following during the withdrawal condition, limiting the results' interpretation (Barton, 2016). In a case study of five children, Sherratt (2002) demonstrated children's ability to use symbolic actions within play (e.g., object substitution, attribution) during a 3-phase intervention of scripts and a gradual release framework.

In a larger randomized control trial (n = 110) of three groups of preschool children, those taught play scripts throughout 5-weeks demonstrated improvements in fantasy orientation, imaginative play, and pretending based in reality as opposed to children in the non-imaginary group or games and songs group (Thibodeau et al., 2016). The play scripts group also showed improvement to their executive functioning skills compared to their peers capitalizing on another benefit of pretend play skills. While these four interventions focused exclusively on play scripts and script training, other previously mentioned interventions also incorporated elements of scripts (Doctoroff, 1997; Taylor and Iacono, 2003; MacDonald et al., 2005). Once again, most of

these interventions relied on students with more severe disabilities. Still, the work of Thibodeau et al. (2016) highlighted value in play scripts for children without disabilities as well.

Table 3

Pretend Play Script Training Interventions

Authors/ Year	Participants	Design	Intervention	Target Behavior	Findings
Goldstein & Cisar (1992)	Preschool age (3-5y.) children (*n* = 3). One child with ASD	SCR – Multiple Baseline	Script training in triads of children	FPP Voc.	The frequency of all children's social behavior and independent social pretend play behaviors increased. Two children were also able to generalize this behavior.
Nevile & Bachor (2002)	Children (3-5 y.) with ASD (*n* = 5)	SCR – ABA design	Script-based symbolic play intervention	FPP OS Seq.	Four of the five participants grew their mean performance above baseline levels in both play contexts and phase. Maintenance 2-months after the intervention also occurred.
Sherratt (2002)	Children (4 – 5y.) with ASD (*n* = 5)	Case Study	Three phase intervention with gradual release of play scripts	OS IOA AAA	All the children were able to use some symbolic acts within play.
Taylor & Iacono (2003)	Child (3y.) with mild intellectual disability and severe communication impairment	SCR-multiple baseline	Scripting pretend play activities while modeling vocabulary through a speech and the augmentative and alternative communication (AAC) modality of sign language.	FPP OS IOA AAA	Children demonstrated increases in pretend play and changes in functional play related to frequency. These changes showed some levels of variability across phases. A multimodal AAC approach utilizing modeling exhibited more communication improvements for children than when an exclusively sign language approach was used.

Thibodeau et al. (2016)	Children (3-5 y.) above 20th percentile for PPVT (*n* = 110)	RCT	Fantasy play scripts, executive functioning games/songs, and control conditions (5-weeks)	FPP OS IOA AAA	Children who participated in fantastical pretend-play intervention showed improvements in executive functioning, whereas children in the other two conditions did not.

Note. SCR = single case research; RCT = randomized control trial; PPVT = Peabody Picture Vocabulary Test; FPP = functional pretense play; OS = object substitution; IAO = imagining absent objects, AAA = assigning absent attributes, Seq. = sequences; Voc. = vocalizations.

Applied Behavior Analysis and Combination Approaches

Applied behavior analysis (ABA) involves a range of practices and procedures established through research literature and capitalizes on the science of human behavior (Trump et al., 2018). Standard practice and procedures include skills training, descriptive praise statements, direct instruction, opportunities to respond, self-monitoring, and task analysis. Similar techniques have been used to teach behaviors associated with pretend play (see Table 4).

Kasari et al. (2006) sought to improve preschool children's joint attention and symbolic play through several ABA techniques (e.g., discrete trial training, prompt hierarchy). Children in the intervention group significantly improved their use of joint attention. The children demonstrated a more diverse set of symbolic play behaviors within their interactions than the control group. In addition to least-to-most promoting, Lifter et al., (2005) utilized a combination of narration, positive reinforcement, and modeling to increase children's acquisition of 40 emerging play activities (e.g., sequences, social pretend play) in spontaneous play. Similarly, Doctoroff (1997) added a combination of group-oriented reinforcement contingency and visual feedback to their social pretend play script training. Studies utilizing ABA techniques demonstrate that the research-based procedures associated with ABA can be translated to interventions targeting behaviors related to pretend play and used in combination with other successful interventions.

Table 4

Pretend Play Applied Behavior Analysis (ABA) and Combined Interventions

Authors/ Year	Participants	Design	Intervention	Target Behavior	Findings
Kasari et al. (2006)	Children (3-4y.) with ASD and mothers (*n* = 65)	RCT	Joint attention and pretend play intervention using applied-behavior analysis techniques	FPP OS IOA AAA Seq.	When compared to the control group, children in the joint attention intervention initiated significantly more expression and responsive behaviors resulting in joint attention. Children in the pretend play group demonstrated more types of symbolic play in interactions.
Lifter et al. (2005)	Children (4-6y.) with developmental disability (*n* = 3)	SCR-multiple baseline	Play intervention sessions (narration, positive reinforcemet, modeling, least-to-most prompting hierarchy)	FPP Seq.	Children reached attainment in 40 play activities deemed emerging (85%, range 75-100%) and 16 play activities considered non-emerging (81%, range 50-100%).

Note. SCR = single case research; RCT = randomized control trial FPP = functional pretense play; OS = object substitution; IAO = imagining absent objects, AAA = assigning absent attributes, Seq. = sequences.

Summary of Play Intervention Literature

Overall, the literature indicates that interventions can be enacted to promote various pretend play behaviors across the pretend play taxonomy for preschool children with and without disabilities. Most interventions focus on play took place in a school or clinic setting. Many interventions also increased skills related to communication (Gmitrova, 2013; Kasari et al., 2006;

Goldstein & Cisar, 1992; Taylor & Iacono, 2003; Zercher et al., 2001), vocabulary (Colozzi et al., 2008; Stahmer, 1995; Thibodeau et al., 2016; Thorp et al., 1995), executive functioning (Thibodeau et al., 2016), and social pretend play (Goldstein & Cisar, 1992; Kim et al., 1989; Nevile & Bachor, 2002) expanding the benefits of interventions beyond pretend play. In terms of smaller-scale studies (e.g., single case, case study, quasi-experimental), the majority of disabilities children were identified with included ASD (n = 33) or developmental disabilities (n = 18). A total of eight children without disabilities were represented in this collection of smaller studies. One larger study of dyads of children with ASD and their mothers (Kasari et al., 2006) included 65 participants, and two other randomized-control trials (RCT) (Gmitrova, 2013; Thibodeau et al., 2016) contained children with unknown disability characteristics. Additionally, multiple interventions utilized a combination of instructional approaches (e.g., modeling, script-training). While instructional strategies overlap may confound variables for these studies, the use of multiple strategies indicates instructional practices in a natural setting. The finding of these studies has laid the groundwork for evidence-based pretend play facilitation instructional strategies and interventions. Ultimately, research evidence, professional expertise, child interest, and family preferences should all be considered when selecting an intervention (Barton, 2016).

Adult Facilitation of Play

Trawick-Smith (2012) describes three approaches to play interactions, specifically for teacher-child classroom interactions: trust-in-play, facilitate-play, and an enhance-learning-outcomes-through-play approach. From the perspective of *trust-in-play*, it is believed that adult involvement can do little to improve upon the developmental outcomes that will inherently occur when children engage in play. The trust-in-play approach assumes that all children engage in useful forms of play activity; however, as Lifter et al. (2011b) points out, many young children

with disabilities have delays in their play behaviors, making it difficult to engage in spontaneous play. Additionally, research over time has shown that adult interactions during play are beneficial (Howes & Ritchie, 2002).

Play enhancements to cognitive and social development gave rise to the *facilitate-play approach*. Nowhere is this seen more than in efforts to support children in pretend play and its related behaviors (Trawick-Smith, 2012). While multiple research studies have demonstrated positive effects in adult facilitated play, Sutton-Smith (1993) also warns that over facilitation of play can often occur between adults and children. The third approach desires to enhance learning-outcomes through play to strike a balance between the trust-in-play and facilitate play approaches. Within this approach, adult interactions seek to intentionally support one or several goals for a child's learning (Trawick-Smith, 2012). Trawick-Smith argues that this approach has increasingly become more academic-focused such that the "intrinsic motivation" of play itself is compromised. For this reason, Trawick-Smith developed the *integrated, responsive model of play intervention* that borrows from the effective elements of all three previously discussed. Trawick-Smith's (2012) *integrated, responsive model of play intervention* is supported by four assumptions regarding play:

1. Autonomous play is beneficial.
2. Not all children can play without difficulties.
3. Supporting play does not preclude academic learning.
4. Adult interaction in play can promote development and learning if it is responsive to children's needs.

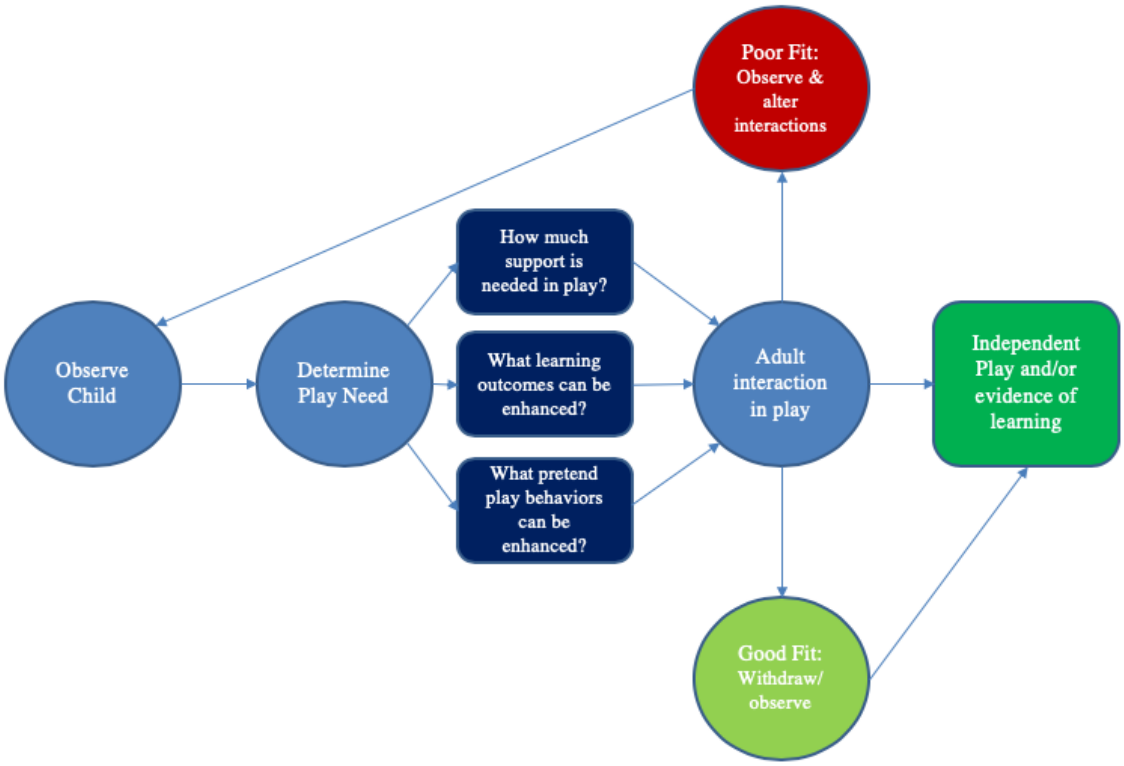
The play intervention (see Figure 3) allows adults to account for children's various developmental needs that may present during play, including pretend play. The facilitator's

movement through the model always begins with the observation of the target child. Through this observation, adults should determine:

1. How the child's play could be supported?
2. What learning outcomes could be enhanced through the child's play behaviors?
3. What pretend play behaviors can be enhanced?

Figure 3

Integrated, Responsive Model of Play Intervention



Note. Adapted from Trawick-Smith (2012) to incorporate pretend play

The facilitating adults can then choose to intervene in the child's play through support such as modeling or prompting. Upon intervening, the determination should be made if the interaction was a 'good-fit' or 'bad-fit' at meeting the child's needs. A 'good-fit' interaction will allow the adult to withdraw from play and continue to observe the child's independent play.

Should the interaction be a ‘bad-fit,’ the adult will continue to make observations and consequently alter their response to support the child more appropriately. While the integrated, responsive play intervention model was originally created with the intended audience of educators, there is no reason why caregivers of children cannot utilize the same structure as they work to support their child during play.

Three studies have investigated Trawick-Smith’s (2012) proposed model (see Table 5). In the Trawick-Smith and Dziurgot (2010) study, teachers’ and assistants’ interaction with 23 3- and 4-year-old-children were observed. Researchers found preliminary support for the facilitation of ‘good-fit’ interactions leading to more autonomous play as well as educators’ natural inclinations to support children’s play when needed. In Trawick-Smith and Breen (2010), 42 preschool-age interactions with adults were examined concerning oral language behaviors. ‘Good-fit’ interactions and open-ended questioning are significantly related to vocabulary growth using the Peabody Picture Vocabulary Test (PPVT-4; Dunn & Dunn, 2007) as a pre- and post-test measure as an increased frequency of language expansions during play. Finally, Trawick-Smith et al., (2016) investigated the model’s use within math-play interactions. Unlike growth seen in child vocabulary, overall post-test scores demonstrated a correlation to pre-test scores on the Test of Early Mathematics Ability (TEMA-3; Ginsburg & Baroody, 2003) and not the frequency or duration of adult-child interactions because of the model. While these findings were preliminary and not inclusive of children with disabilities, they highlight a model of intervention that is representative of practices educators are already naturally doing. The question remains if caregivers can learn and utilize similar behaviors to support targeted play areas aligned with pretend play.

Table 5

Studies on the Integrated, Responsive Model of Play Intervention

Authors/ Year	Participants	Focus of Measures	Content	Findings
Trawick-Smith & Breen (2010)	42 preschool aged children	Frequency of adult-child interactions that were determined to be 'good-fit', interventions promoting oral language PPVT-4	Autonomous play and oral language in 3- and 4-year-old children	'Good-fit' interactions and open-ended questions were significantly related to vocabulary growth on the post-test. The frequency of 'good-fit' language expansions was not significantly related to language outcomes.
Trawick-Smith & Dziurgot (2010)	8 adults (2 teachers, 4 assistants, and 2 student assistants)	Frequencies of each level of initial child play need, type of teacher guidance, and successive child play	Autonomous play in 3- and 4-year-old children	Independent play was positively and significantly linked to 'good-fit' child-adult interactions. All adults were likely to respond to children's play with 'good-fit' guidance.
Trawick-Smith et al. (2016)	47 preschool children	Coding of distinct math-play interactions and goodness of fit based on child behavior TEMA-3	Academic outcomes in mathematics	Pre-test scores were the significant contributor to post-test growth. Teacher interactions attributed to 23% additional inconsistency in post-test scores most closely connected to interactions of 'good-fit' that utilized open-ended questions. The frequency or duration of adult interactions was not related to math learning in children.

Note. PPVT-4 = The Peabody Picture Vocabulary Test; TEMA-3 = Test of Early Mathematics Ability, 3rd Edition.

Coaching as a Means of Learning

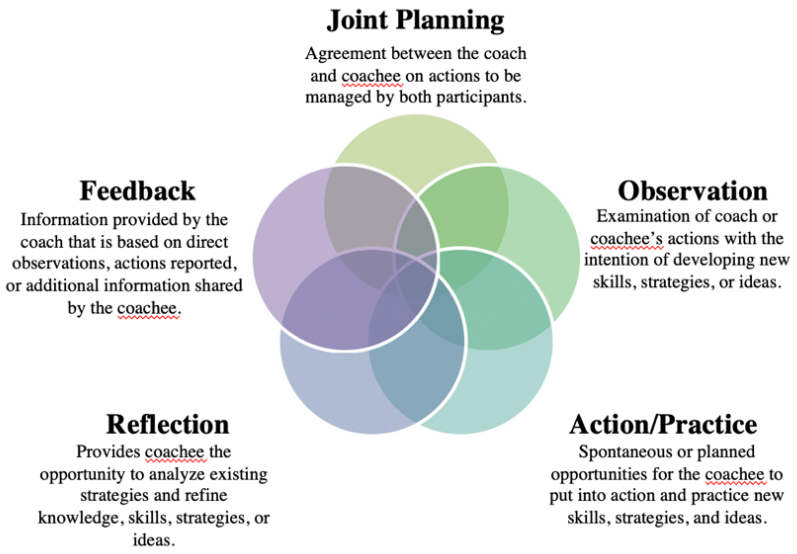
While research has demonstrated intervention and adult facilitation strategies for supporting children during play, the next step is to deliver this information in the form of professional learning. One common way new knowledge and skills are delivered to stakeholders is through coaching (Desimone and Pak, 2006). The collaborative relationship of coaching is a systematic process that involves a coach and coachee (a) setting goals, (b) developing solutions designed at facilitative goal attainment, (c) self-directed learning, and (d) personal growth (Grant, 2013; Rush & Shelden, 2020).

As a means towards adult professional learning, coaching has been used in various fields, from education to business (Bloom et al., 2005; Fixsen et al., 2005). Coaching is rooted in several interrelated adult-learning principles of learning (Fox et al, 2011; National Center on Quality Teaching and Learning [NCQTL], 2020; Rush & Shelden, 2020). Artman-Meeker et al. (2015) specifically highlight the use of "planning, observation, action (e.g., modeling, role-play, assistance), reflection, and feedback." (p. 184). (Rush and Shelden (2020) synthesized components across coaching studies (n = 37) to identify joint planning, observation, action/practice, reflection, and feedback, as effective elements of early childhood coaching (see Figure 4). Together these components represent actions that should be integrated across all coaching interactions. In literature review of teachers of children birth to 7 years in age, Artman-Meeker et al. (2015) found the components mentioned above represented across 49 studies with 87.7% of studies relying on performance feedback as an integral coaching strategy. Ackland (1991) elaborated on coaching concepts related to feedback by identifying three ways coaches provided support across 29 studies of coaching between expert teachers and another per teacher. Ackland noted coaches provided feedback through coach gathered data to share, coach and

coachee data analysis, or specific ideas, resources, or learning shared by coach. For coaching to be effective, Ackland (1991) found that coaching was non-evaluative and consisted of observation followed by feedback.

Figure 4

Components of Effective Coaching



Note. Definitions for 5 components adapted from Rush and Shelden (2020)

Coaching hinges on an understanding of the topic and the focus of development on the part of the coach and coachee. In a synthesis of 1,054 coaching studies across various professional domains (e.g., child welfare, mental health, social services, teaching), coaching was found to be a useful practice in supporting the implementation of interventions and newly learned skills (Fixsen et al., 2005). Fixsen et al. (2005) emphasize the idea that selected evidence-based practices must be integral to a coachee's work and exist under well-defined parameters. When it comes to coaching in the realm of education, it is also important to consider the outcome of a child's or student's learning. Showers et al. (1987) demonstrated effects in

training and coaching interventions in increasing teacher's knowledge, demonstration, and use of skills in the classroom.

Furthermore, coaching operates through the lens of adult learning principles. Adult learning principles include ideas related to adults' needs to be autonomous and self-directed, for intrinsic and extrinsic motivation, and to acknowledge a foundation in their own knowledge and life experiences (Collins, 2004). In a Trivette et al. (2009) review of coaching programs across teachers and a variety of professionals (n = 79), adult learning methods were associated with positive coachee outcomes. These outcomes were maximized in scenarios where the coachee had higher levels of active involvement as opposed to being a passive recipient of the intended learning.

To address what research has deemed important components to successful coaching, Knight et al. (2015) created an instructional coaching cycle consisting of three components: identification, learning, and improvement. Throughout these three-cycle components, the principles of adult learning and effective coaching are present. Within the *identity* component, a coach engages in observing a coachee's practice to "paint a clear picture of reality" in terms of coachee practice (p. 12). Following an observation, a coach and coachee collaboratively set goals and select a defined strategy to meet the intended goal. The selected goal considers a coachee's motivations and input. Progressing into the component of *learning*, learning leans on the coach's ability to choose from various strategies (e.g., role-playing, modeling) to support the coachee. During this time, the coach provides feedback and works with the coachee to make modifications to take advantage of their strengths. Finally, within the *improvement* stage, the coach monitors a coachee's implementations by collecting data-based evidence. Following this final component,

the coach and coachee move circularly back to the identification components to modify the goal or set a new goal.

The ultimate purpose of a coach is to create a supportive environment that promotes improvement to current knowledge and practices, the cultivation of new skills, encouragement of continuous self-assessment, and independent learning on the part of the coachee (Rush & Shelden, 2020). See Table 6 to synthesize coaching literature reviews involving adults from various backgrounds (literature involving parents and caregivers in terms of coaching is discussed later). While educator coaching is a focus of many literature reviews, other domains that utilize coaching as a means for professional learning are also discussed. However, ultimately missing from the educator coaching literature on the effectiveness of coaching is child-based outcomes resulting from coaching. When implementing a coaching framework in education, outcomes related to child and student learning are equally important in evaluating coaching. Future studies would benefit from child-based outcomes, something more represented in family-based coaching literature, to truly evaluate the efficacy of coach-based interventions at large.

Table 6

Coaching Literature Reviews

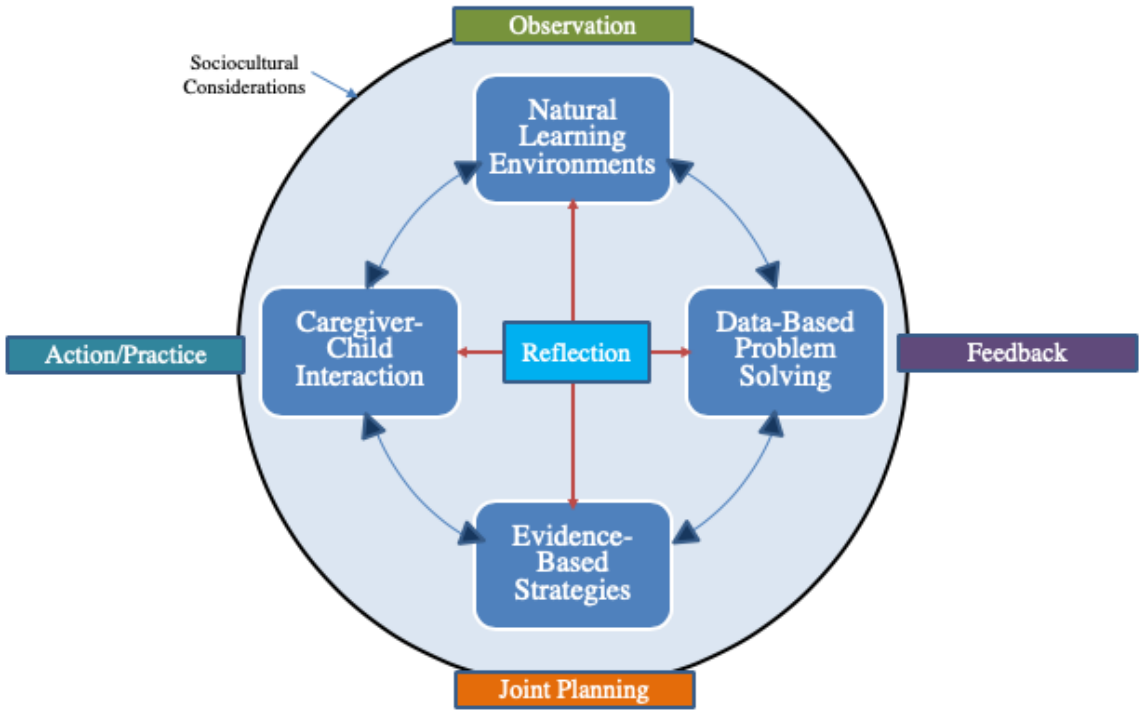
Author/ Year	Years Reviewed	Participants	Number of Articles	Focus of Measures	Findings
Ackland (1991)	1982-1989	Teachers	29	Characteristics of effective peer and expert coaching	Peer-coaching characteristics included coaching to non-evaluative, included observation followed by feedback, and improved instructional techniques. Feedback was also provided in 3 ways: coach gathered data to share, co-analysis of data, or specific idea shared by coach.
Artman-Meeker et al. (2015)	1982-2014	Teachers of children birth – 7 years old	49	Coaching components and overall implementation	Most studies emphasized one of five adult learning principles (e.g., action planning, focused observation, reflection, partnerships, feedback). Collaborative partnerships showed minimal representation.
Fixsen et al. (2005)	1970-2004	All adults from various domains (e.g., agriculture, business)	1,054	Implementation characteristics	Coaching is a useful practice to support the implementation of a well-defined intervention and newly learned skills.
Showers et al. (1987)	1979-1989	Teacher being provided staff development	Unknown	Effects of teacher implementation in the classroom	Effects of training and coaching increased teachers' knowledge, demonstration of skill, and use of skill in the classroom. Learning was not impacted by where, when, or who was providing the support. A basic level of knowledge was required before teachers "bought in" to a technique.
Trivette et al. (2009)	1975 - 2007	Undergraduates, preservice teachers, various professionals (e.g., physicians)	79	Adult learning methods contribution to learner outcomes	Each of the four adult learning methods was associated with a positive posttest outcome. Outcomes were maximized concerning the greater extent the learner was actively involved in their learning experience.

Coaching Families

Coaching of caregivers, parents, and families in early intervention are defined in multiple ways. A generally accepted definition is a process that encompasses a diverse set of adult learning strategies aimed at promoting caregivers' abilities to support their child's learning and development within contexts of everyday activities, routines, and settings (Rush & Shelden, 2020). The aim of a family-centered philosophy in early childhood education allows caregivers to demonstrate their competence and confidence in (a) recognizing their own child's developmental needs and interest; (b) recognizing relevant learning outcomes in everyday activities, and (c) using or developing their skills, interest, and abilities to support and implement their own child's growth while leaning on their family's values and beliefs (Knoche et al., 2012). Sheridan et al. (2007) argues the key to this level of family-centered practices in early childhood relies on a systematic approach illustrated in the parent-professional partnership model (see Figure 5). The model includes interrelated components that focus on parent-child interactions, (2) support and availability of learning opportunities in children's natural learning environments, (3) use of structured data-based problem-solving approaches to guide collaboration, and (4) incorporation of evidence-based strategies. While the collaboration model exists separate from coaching components and frameworks discussed earlier, the essence of the two in terms of evidence- and data-based strategies overlap while also accounting for the natural learning environment and child interactions outside the classroom and in the home setting.

Figure 5

Parent-Professional Partnership Model Within Coaching



Note. Adapted from Sheridan et al., (2007)

While coaching practices occur across early childhood settings (e.g., childcare, early intervention, preschool), supporting caregivers of children with disabilities to implement interventions aligns with a family-centered approach and recommended practices (DEC, 2014; Sandall et al., 2005). In a literature review of coaching done with parents of children (birth to 3) receiving early intervention services, the results of coaching indicated more significant parent outcomes in implementation fidelity and positive gains associated with their child's development. Additionally, many parents indicated tertiary outcomes in relation to enhancing responsiveness to their child, reducing parental stress, improved working relationships with service providers, and increased parent confidence (Kemp & Turnbull, 2014). Decreased stress

for parents and improved performance outcomes for children was also found in a literature review of occupational therapy-based coaching for children with or at-risk of ASD (Miller-Kahaneck & Watling, 2018). The findings of Miller-Kahaneck and Watling (2018) were also unique in that all four studies included were completed in a relatively short period (3-18 hours).

While early intervention providers often work in a home-based setting to support students with disabilities, coaching interventions were found to be successful with older children beyond three years old. In a literature review of coaching around functional assessment-based parent interventions in children, eight years old and younger, participating children's challenging behaviors were reduced while appropriate behaviors increased within a variety of settings. Ogourtsova et al., (2019) also found increased self-efficacy and decreased stress because of health-based professional coaching for children (1-16 years old) with ASD, cerebral palsy, and other developmental disabilities. The Ogourtsova (2019) review also differentiated between child-targeted, parent-targeted, and mixed coaching approaches that utilized the components of teaming (coach and parent), focus, and outcomes in their review.

Ogourtosova et al., (2019) was also the only literature review were included study outcomes encompassing play and pretend play behaviors. However, one study implemented an in-person play-based intervention with families. In Dempsey et al. (2010), parents were trained in four specific play strategies (modeling, prompting, add-ons, and reinforcement) to increase children's complex play behaviors. Professional learning began with a group session where parents provided direct instruction and time to role-play and ask questions. Following the session, the parents met weekly (6-week-period) with a researcher to observe 15-minutes of play and provide feedback or modeling if needed. Following the six weeks, children were evaluated on Kelly-Vance and Ryalls' (2008) Play in Early Childhood Evaluation System (PIECES) pre-

and post-assessment. Children in the session group (*n* = 5) demonstrated higher growth levels on the PIECES assessment compared to the control group (*n* = 4). Additionally, every child in the session group demonstrated higher pretend play levels, whereas only one child in the comparison group grew in this area. While growth in play-based outcome measures may be attributed to increased frequency and duration of parent-child play, Dempsey et al. (2010) points out that growth was still accounted for in a parent-child dyad with lower frequency and duration of play.

In a literature review of early childhood coaching of caregivers, Ward and colleagues (2019) examined the components of coaching interventions as it related to children with disabilities other than ASD. They found that while coaching is accepted by early intervention providers, studies lack adherence to the principles of coaching laid out by Rush and Shelden (2020) (e.g., joint planning, reflection, feedback). Studies also lacked the use of outcome measures for caregivers and children involved in the intervention. The Ward et al. (2019) systematic literature review highlights the need for fidelity and targeted outcomes measure in the literature of family-based coaching of children with special needs. For a full overview of all family-based coaching, literature reviews see Table 7.

Table 7

Coaching Families Literature Reviews

Author/ Year	Years Reviewed	Participants	Number of Articles	Findings
Kemp & Turnbull (2014)	2011-2013	Early intervention (Part C) parents	8	Parent outcomes indicated greater implementation fidelity and positive gains in child development. Some parents also showed tertiary outcomes of enhanced responsiveness to their child, attribution of child success, reduction of parental stress, improved working relationships with providers, increased parent confidence, competence, and engagement during early intervention visits.
Miller-Kuhaneck & Watling (2018)	2007-2015	OT based on parent-child interactions, play, or family routines for children with or at-risk of ASD	4	All studies reported positive outcomes for both parents (decreased stress) and children (performance on specific behaviors) in a relatively short period (3 – 18 hours).
Ogourtsova et al. (2019)	1985 - 2018	Parents of children (1y and 6mo-16 y) with ASD, cerebral palsy, or other developmental disabilities	28	Three health coaching approaches were identified (i.e., child-targeted, parent-targeted, and a mixed approach). Child-targeted was most common in literature. Targeted approaches increased student outcomes (i.e., joint-attention, symbolic play, engagement, and regulation). Parents also demonstrated increased self-efficacy and decreased stress following child-targeted and parent-targeted approach.
Ward et al. (2019)	1983-2016	Coaching (using adult learning principles) of caregivers of children (0-5y.) with DD excluding ASD	18	While coaching in early intervention is well accepted, it lacks a common definition and adherence to "active ingredients" or evidence-based coaching principles (Rush & Shelden, 2020). Studies also lack outcome measures for caregivers and children.

Note. ASD = autism spectrum disorder; OT= occupational therapy; DD = developmental disorder.

Using Virtual or eCoaching with Caregivers

Coaching is one avenue for implementing family-centered practices, but for many preschool providers, this is not easy to achieve as they are often working with multiple families (Dunst & Trivette, 2005). While no virtual coaching interventions have targeted a specific pretend play focus, studies targeting various other early childhood learning outcomes have demonstrated success. A virtual coaching model relies on technology through resources (e.g., video, video conferencing, telephone) as a means of engaging in coaching cycles. A total of nine studies, including dyads of caregivers and young children, explored the impact of virtual coaching on various caregivers and child-based outcomes (see Table 8). All studies included both caregiver and child outcomes. The accessibility of technology has increased virtual coaching utilization, which is reflected in these studies published from 2009 and forward. Most interventions listed computers and cameras as tools for virtual coaching, but video conferencing, tablets, telephones and file-sharing was also utilized. In one study, Mast et al. (2014) used a "bug-in-ear" technique to deliver intervention-based feedback to the caregiver during coaching observations. Professional learning, followed by virtual coaching, was the primary procedure used with only one study investigating coaching as a sole means to child-based behavior outcomes.

A total of seven studies from Table 8 (Mast et al., 2014; McDuffie et al., 2013; McDuffie et al., 2016; Meadan et al., 2016; Sourander et al., 2016; Wade et al., 2009; Wainer & Ingersoll, 2015) included with professional learning before moving into a coaching model. Professional learning was provided in-person, through modules, websites, or one-on-one, before moving into a coaching procedure to support caregiver implementation of taught skills. Skills included

caregiver behaviors such as verbally responsive language, communication strategies, parenting strategies, and reciprocal imitation. Child outcome behaviors were typically directly related to caregiver implemented strategies. For example, children were evaluated on communication acts and skills, frequency of problem behaviors, and caregiver request compliance. Professional learning programs followed by coaching resulted in improvements on caregiver-based outcomes and child-based outcomes with one study, Mast et al., (2014), indicating play as a means for delivering coaching through a "bug-in-ear" approach and evaluating child-based outcomes. However, play behaviors were not directly associated with the Mast et al. (2014) investigation. In the Wainer and Ingersoll's (2015) study on reciprocal imitation training (RIT), participating caregivers saw the service delivery model as acceptable, usable, and useful. This collection of studies demonstrates initial promise for coaching to enhance early childhood professional learning for caregivers on a variety of topics.

Two studies compared both the distance and in-person service delivery related to caregiver implemented communication-based supports (Baharav & Reiser, 2010; McDuffie et al., 2013). McDuffie et al. (2013) included dyads of caregivers and children (2-6 years old) with ASD. For this study, professional learning sessions were held in-person, and coaching was delivered either face-to-face in the clinic (n = 4) or virtually at home (n = 4) through 12 weekly sessions. Outcomes were similar in both in-person and virtual coaching groups. Parents could increase their use of verbal responses, and frequency of caregiver prompted communication in children with ASD. Children also improved their ability to focus attention and respond to caregiver prompts. The utilization of virtual coaching supports a more cost-effective delivery model and eases travel burdens on caregivers. A similar finding was seen in a telehealth model

targeting children exclusively with ASD or developmental delays (*n* = 94). While caregiver coaching was not utilized in this study, children in 3 groups (at-home therapy, teleclinic, and telehome therapy) showed positive outcomes across groups to reduce problem behavior through functional communication training (Lindgren et al., 2016). While McDuffie et al. (2013) leveraged professional learning before coaching, the finding supports the potential for virtual coaching in the promotion of both child and caregiver-based outcomes.

While the provided studies do not exclusively rely on coaching in isolation, compounded with other literature on coaching as a means of intervention, it provides a promising outlook towards the future of virtual coaching. With the increased use of technology and virtual learning due to pandemic events beginning in 2020, a virtual model to coaching is a natural progression in the field of family-centered practices in early childhood education.

Summary of Coaching as a Means of Intervention

Research supporting the effectiveness of coaching as a means of intervention dates back more than four decades, with reviews focusing on a range of participants and outcomes. Even across participants and content domains, similar structures related to characteristics of effective coaching remain the same. These characteristics include observation, reflection, and feedback (Ackland, 1991, Arkman et al., 2005; Fixsen, 2005), and attention to adult learning principles (Trivette et al., 2009). These same characteristics are reflected in caregiver-based and technology-based coaching interventions discussed (see Table 7 and 8). In terms of coaching families, literature identified additional benefits in terms of decreased stress (Kemp & Turnbull, 2014; Miller-Kuhaneck & Watling, 2018; Ogourtsova, 2019) in addition to strategy or

intervention-based implementation. Overall, coaching has demonstrated a feasible intervention structure for adults looking to improve new or existing knowledge skills.

Gaps in Research

Literature indicated a vast number of intervention strategies that have demonstrated success in developing pretend play skills in young children. Yet no interventions have directly utilized caregivers, important influences on a child's play, in the delivery of these intervention strategies. Play, including pretend play, should be a central component of how educators engage with caregivers in family-centered practices. For this reason, the utilization of caregivers as intervention facilitators is the next logical step in address this gap in pretend play intervention literature. Literature around coaching as a successful model for promoting increased knowledge, skills, and utilization of relevant practices makes coaching a potentially ideal learning model for caregivers.

Furthermore, developments in virtual coaching techniques provide access to a medium of coaching that many educators and caregivers may find more accessible. The need for family-based collaboration and access to technology becomes more central to early childhood practice. Consequently, gaps in both pretend play and coaching literature have revealed a need for a better understanding of virtual, or eCoaching, practices among caregivers seeking to increase their facilitation of pretend play behaviors in young children. Additionally, the developmental advantages of pretend play behaviors in all children provide support for eCoaching around these areas, including children with and without disabilities.

Table 8

Virtual Coaching Interventions with Caregivers

Authors /Year	Participants	Design	Technology Components	Intervention	Target Behavior	Findings
Baharav & Reiser (2010)	Mother-child dyads (4-5y.) with ASD	SCR-AB Design	Laptop, webcam, Skype™	Delivery of speech-language therapy sessions with a coaching provided remotely during mother-child home-based session	Receptive, expressive, and social communication	Communication gains from traditional service delivery demonstrated maintenance and gains using tele-health coaching. Mothers found virtual coaching valuable and the technology easy to use.
Lindgren et al. (2016)	Children with ASD and DD (*n* =107)	RCT	Laptop, webcam, videoconfer-encing	Evidence-based ABA procedures through in-home therapy, clinic-based telehealth, and home-based telehealth.	Problem behavior on functional behavior assessment	Problem behavior was reduced in all three groups (>90%) after treatment. Parent rating of treatment acceptability was high in all three groups.
Mast et al. (2014)	Families of children (3-9y.) with abuse head trauma (*n* =7)	RCT	n/a	Caregiver skills program with weekly web-modules, teleconferencing with role play, and "bug-in-ear" feedback (9-sessions).	Caregiver-child interactions, Eyberg child behavior inventory, and child behavior checklist	Families in the intervention group showed more positive parenting behaviors and fewer undesirable behaviors. During play, children were more compliant with their caregiver's directives in the intervention group.

McDuffie et al. (2013)	Caregiver-child dyads (2-6 y.) with ASD (*n* = 8)	Quasi-experimental design – A-B replication	Desktop video-conferencing	On-site caregiver education lessons, face-to-face caregiver coaching, & distance caregiver coaching (12 sessions)	Communication prompts and acts	Caregivers increased their verbal responses that mirrored their child's interest and responded to their child's acts of communication. An increase in the frequency of prompted communication and application of a targeted strategy was seen during on-site and distance coaching sessions.
McDuffie et al. (2016)	Dyads of mothers and boys (2-6 y.) with fragile X syndrome (*n* = 6)	SCR-multiple baselines across participant	MacBook Laptop, QuickCam camera, built in camera, and Skype	Parent Lesson with SLP (90 min) followed by distance coaching (12 sessions)	Verbally responsive language	Mothers increased the use of utterances. Those utterances reflected their child's focus of attention while prompting child-based communication. Communication, prompted and spontaneous, demonstrated moderate increases in children. Mothers increased their use of strategies both during onsite and distance sessions.
Meadan et al. (2016)	Dyads of mothers and children (*n* = 3	SCR – Multiple-baseline design	iPad, Skype, File share (Box)	PL followed by Coaching Internet-based Parent-Implemented Communication Strategies (i-PiCS)	Mothers' quality and rate of strategy use and child communication skills	Mothers learned naturalistic teaching strategies targeting communication skills. These strategies were implemented with fidelity when provided with PL and internet coaching and paralleled positive changes in their children's communication skills.

Souran-der et al.(2016)	Parents and children (4 y.) (*n* = 464) with disruptive behaviors symptoms	RCT - stratified by sex, with 1:1 allocation comparing	Website and telephone	11-weekly-session internet-assisted PL program on positive parenting strategies that included weekly telephone coaching (45-minutes)	Child behavior checklist (CBCL/1.5-5) Parent anxiety, stress, and depression	At 12-month follow-up, improvement in the intervention group was significantly greater than the control group in the areas of a reduction of disruptive behaviors. Parents reported improvement in those areas of aggression, affective, anxiety, and sleep problems.
Wade et al. (2009)	Families of children (3-8 y.) with TBI (*n* = 9)	Quasi-experimen tal	Computer and web camera	Program consisting of 10 core and 4 supplemental sessions. Online sessions were followed by a video conference session and live coaching session	Dyadic Parent-child interactions (DPICS-III), child behavior, Eyberg Child Behavior Inventory (ECBI), and process measures on family experiences	A paired t-test indicated significant improvements in targeted family behaviors between baseline and session two and between sessions 2 and 4 were identified. These improvements were maintained, and families identified a reduction in problem behaviors (*n* = 5) during a follow-up assessment. Families' ratings of satisfaction and ease of use were high.
Wainer & Ingersoll (2015)	Dyads of parents and children (24-72 mo.) with ASD (*n* = 5)	SCR-multiple-baseline design across participant s	Computer, web-camera, and screen-recording software.	Self-directed telehealth and remote coaching sessions (30-min)	Program engagement, parent knowledge of RIT, fidelity of implementation, linguistic mapping	Parents improved their use of the intervention techniques and saw the intervention delivery method as acceptable, effective, and usable. Children also showed simultaneous increases in unprompted imitation skills.

Note. ASD = autism spectrum disorder; TBI = traumatic brain injury; SCR = single case research; RCT = randomized control trial; PL = professional learning; RIT = Reciprocal imitation training; n/a = not available.

III: Method

A unique component of early childhood education involves the understanding of how caregivers and educators engage to promote academic and social outcomes for children through supports and services (Rush & Shelden, 2020). The importance of family-centered early childhood practices is mirrored in programs such as Head Start and federal legislation for children with disabilities within the Individuals with Disabilities Act (IDEA). While research has shown active engagement of families contributes to positive outcomes for children the field is still lacking an understanding of what active engagement looks like for caregivers of young children. One type of intervention that specifically taps into the concept of active engagement in coaching. Coaching is a collaborative relationship where participants engage in a learning structure aimed at setting goals, developing solutions, self-directing learning, and personal development (Grant, 2013; Rush & Shelden, 2020). The purpose of this study was to examine how virtual eCoaching could support family-centered practices as it relates to the facilitation of pretend play, in caregivers of preschool children.

Study Design

Qualitative research seeks to develop a detailed understanding of an issue using multiple methods and perspectives in a natural setting (Creswell & Poth, 2018). Within the umbrella of qualitative research, the study of cases within real-life context and settings forms the basis for a case study design (Yin, 2012). A case study allows for the use of multiple sources of information (e.g., observations, interviews, documentation) in the description of individual cases and collective case themes. Specifically, the following study utilized a collective case study. Creswell and Poth (2018) describe a collective case study as one in which a singular focus is identified and illustrated through multiple case studies. The unit of analysis pertains to the “case”

which constitutes a bounded system. For the purpose of this study a "case" will represent the dyad of a mother and their child. Yin (2012) advocates that a design focused on the logic of repetition where similar procedures are provided across cases, such as coaching procedures, are ideal for a collective case study methodology. As this study utilized a procedure for coaching cycles and feedback, a collective analysis across dyads was pertinent. The selection of multiple cases allows for both within-case and cross-case analysis of coaching procedures. For these reasons, a collective case study design is an ideal medium for exploring eCoaching as it relates to the facilitation of pretend play behaviors.

For this study, mothers of preschool aged children participated in eCoaching aimed at increasing their knowledge and facilitation pretend play with their child in the home environment. Mothers' knowledge of developmentally appropriate pretend play behaviors was evaluated through a pre- and post- interview and through the qualitative coding of eCoaching debriefs and logs. The facilitation of pretend play behaviors was measured through virtual observations of home play practices and mothers' facilitation of those practices. The goal of eCoaching was to increase children's frequency of various behaviors on Barton and Wolery's (2008) taxonomy of pretense play. Barton and Wolery (2008) examined pretend play interventions across early childhood literature to determine four categories and subcategories of pretense play that progress in their level of developmental rigor. For example, on the lower end, *functional play with pretense* (FPP) is a nonliteral use miniature or actual objects (Barton & Wolery, 2008). Whereas *imagining absent objects* (IAO) requires children to perform actions with an object that is not actually present. The taxonomy also accounts for sequences, vocalizations, and scripts within play. The Barton and Wolery (2008) taxonomy was used as a base for setting and monitoring pretend play goals. Childrens' pretend play behaviors were

measured through data collected within recorded virtual observations or videos provided by mothers over the course of eCoaching. The eCoaching intervention was evaluated utilizing deductive analysis and a constant comparative method across mother and child dyads in terms of caregiver knowledge, facilitation, and focal child behaviors.

Recruitment Procedures

The recruitment and enrollment process began eight months into the 2019 Coronavirus (COVID-19) pandemic, which was declared in March 2020 by the World Health Organization (WHO, 2020). Following Institution Review Board (IRB) approval (see Appendix A), recruitment began by sending emails to early childhood providers within my professional network. Individuals in the researcher's professional network included early childhood educators, researchers, and caregivers connected to the early childhood community. A single round of 13 emails were sent seeking primary caregivers and children that meet the eligibility criteria.

Inclusion Criteria

All caregiver participants needed to be a primary caregiver of a preschool child who was 3, 4, or 5 years in age and not currently at the age required for kindergarten enrollment for their given state in the 2020-2021 school year. The child's age should have also made them eligible for enrollment in preschool. For example, a caregiver of a child five years old who did not meet the requirement for kindergarten enrollment for Fall 2020 would be eligible. A primary caregiver was identified as the individual who resides with, cares for, and interacts with the child. Caregivers and children's primary language in the home needed to be English. For caregivers of a child with a disability (n = 2), their child needed to hold a current diagnosis and Individual Education Plan (IEP) for a high-incidence disability (developmental delay, ASD, communication disorder, mild cognitive disability). For caregivers of children without a disability (n = 2),

children should not be in the process of disability determination or eligibility for an Individual Education Plan (IEP) at the time of enrollment. Both the caregiver and the child in the respective dyads were required to meet eligibility requirements and have access to internet and technology that allows video conferencing (web camera and microphone) and visual and audio video recording capability (e.g., smart phone, laptop, tablet). Individuals expressing an interest in the study were asked the following questions:

1. I identify as the primary caregiver for my child.
2. My child is 3 to 5 years old and does not qualify for kindergarten based on my state's requirements for the Fall 2020 school year.
3. The primary language spoken with my child at home is English.
4. I have access to internet at my home address.
5. I have access to technology that allows video conferencing (web camera and microphone).
6. I have access to a device that allows for visual and audio video recording capability (e.g., smart phone, laptop, tablet).
7. Yes or no: My child currently has an Individual Education Plan (IEP).

If an individual did not respond to eligibility questions within the recruitment email, they were sent a follow-up email with the full list of eligibility questions and a question regarding the Individual Education Plan (IEP) status of their child to respond to.

Enrollment

Four participants were enrolled in the study. The first two individuals within each group who met eligibility criteria and agreed to participate were enrolled in the study. An additional 18

eligible individuals (six having a child with IEP) responded during the study period and were put on a waitlist. Seven additional individuals contacted me but were not deemed eligible.

The caregivers meeting eligibility requirements (*n* = 4), moved forward to the consent and participation process where they were asked to provide a digitally signed copy of the consent form or return the consent form via mail (see Appendix B). A total of two participants (one father, one mother) did not respond to the request to enroll in the study after two weeks and with a reminder email being sent after seven days. These parents (one child with, one child without an IEP) were informed that they were removed as a potential participant. The researcher proceeded to contact to the first individuals on the waitlist within their respective group. The two individuals on the waitlist were contacted to inquire about their interest in participating, given the consent and participation form, and proceeded to provide their electronically signed documents. All remaining individuals on the waitlist were contacted regarding their removal from the waitlist after two months (*n* = 15). Following enrollment, participants consisted of mothers (*n* = 4) and their children (*n* = 4) to form four dyads.

Participants

Four mothers of children between the ages of three and five participated in the study (see Table 9). Throughout the study, both mothers and their child were given pseudonyms. Kristin and Shannon both had a son (4.5 years of age) with an IEP, although neither were attending a public school, they were both receiving services through the school district for their speech-language delay (SLD). Kristin's son, Harris, was attending public preschool, but the decision was made to pull him out due to COVID-19 restrictions and the new virtual learning format, which did not agree with Harris's learning style. Nick attended a private play-based preschool part-time and received speech services over Zoom™. Harris speech therapist came to the house

for services twice a week. Both Kristin and Shannon were former educators with master's degrees who had transitioned into roles as stay-at-home moms.

In the group of mothers with a child without an IEP, Laura and Rebecca were working mothers. Laura's daughter, Mae, was 4.5 years old, and Rebecca's daughter, Amelia, was 3.5 years old. Laura worked in a school district as an administrative assistant, and her daughter, Mae, attended a full-time preschool that was virtual due to COVID-19. Rebecca was a single mom who co-parented her daughter Amelia who also attended a full-time in-person preschool. Neither Amelia nor Mae had indications of developmental delays and did not qualify for an IEP. Both Shannon and Rebecca held bachelor's degrees.

Table 9

Mother and Child Dyad Information

Caregiver & Child	**Mother Information**				**Child's Information**			
	Gender	**Ethnicity**	**Highest Degree**	**Back-ground**	**Gender**	**Ethnicity**	**Age**	**IEP Status**
Shannon & Nick	F	White	Masters	Former teacher; stay-at-home mom	M	White	4.5	SLD
Kristin & Harris	F	White	Masters	Former teacher; stay-at-home mom	M	White	4.5	DD SLD
Laura & Mae	F	Latina	Bachelors	School employee	F	Latina	4.5	None
Rebecca & Amelia	F	Hispanic	Bachelors	Social Worker; single mom	F	Hispanic & White	3.5	None

Note. F= female; M = male; DD = developmental delay; SLD = speech language delay.

Instruments

Demographic information on dyads was gathered on mothers and focal children during pre-interviews. Information on caregiver's knowledge and facilitation of pretend play was gathered through a pre-and post-interview, coaching logs, debrief conversations, and observation data. Changes in focal child play behaviors was collected through partial interval observation data, post-interview data, and debrief conversations information related to the caregiver's perspective.

During eCoaching data collection, I took on the role of a "participant observer". Research utilizing a participant as observer role requires actively participating in an activity with the individuals they observe (Creswell & Poth, 2018). As I was conducting eCoaching procedures, data collection, and analysis, my role as a "participant observer" was integral to this case study as I worked alongside mothers. In this study, to mitigate potential bias often connected with taking on a participant research role (Becker, 1958), interobserver agreement and specific instruments intended to capture behaviors associated with the research questions.

Interviews

Mothers participated in a pre- and post- coaching interview**.** Both the pre- and post-interview consisted of sections related to family dynamics, home play, pretend play, and coaching information. These sections were intended to gauge mothers' perspectives on areas associated with their knowledge and facilitation of specific play behaviors. Interview data was audio recorded during the time of the interview. As the primary researcher, I transcribed the interviews. All identifying information from interviews was deleted from the transcript, and children were given a pseudonym. Mothers were emailed the completed transcript to conduct a member check for both the pre- and post- interview. Participants were provided a link to a secure

electronic database file with only their transcript for each of the two interviews, which would expire after two weeks. None of the participants submitted clarifications or modifications to their interview transcripts during member checks. One participant did request a copy of their transcripts.

Pre-Interview. During the pre-interview, 23 questions were asked with the addition of two sections: child information and caregiver demographics. See Appendix C for the pre-interview protocol. These questions were intended to better understand the qualities of each dyad of participants. Additionally, in the pre-interview, more general questions around home play were asked to better understand a child's current play interest and behaviors before beginning the eCoaching intervention.

Before beginning eCoaching, all dyad mothers were interviewed by me on a date and time convenient for the mother. The pre-interview's purpose was to understand the characteristics of the caregiver dyad and their current practices and behaviors related to general play, pretend play, and the facilitation of play between the mother and child. Mothers of children with an IEP also provided information related to their child's developmental needs and disability. The pre-interview took between 38 – 59 minutes to conduct (M = 51). During the interview, I asked follow-up or clarifying questions that would contribute to a clearer representation of the mother and child's current play behaviors and practices in the home setting.

Post-Interview. In the post-interview, 29 questions were asked related to play facilitation and the evaluation of eCoaching. The post-interview protocol can be found in Appendix D. The post-interview also utilized a 5-point Likert scale ranging from "very poor" to "excellent." Likert questions were adapted from Allen and Nimon's (2007) professional development evaluation survey and Johnson et al. (2016) Coach-Teacher Alliance measures. These questions were

intended to gauge caregiver's reactions to eCoaching as a means of professional learning and gather information related to changes in learning because of eCoaching. Open-ended questions mirrored questions asked in the pre-interview and were intended to identify any changes to behaviors and practices related to general play, pretend play, and play facilitation in the dyad. Other questions were intended to investigate caregivers' feelings on the social validity of eCoaching and the potential generalization or maintenance of practices. The post-interview was conducted by a researcher not responsible for eCoaching and took between 27 – 47 minutes to complete (M = 37). The researcher conducting the interview was provided an overview of the eCoaching framework and trained on directions for the post-interview protocol.

Coaching Conversations and Logs

During the duration of eCoaching, all coaching related conversations between the participating mothers and I were video and audio-recorded using Zoom™. Following each of the six coaching conversations, I summarized key points of the conversation in a spreadsheet eCoaching log highlighting (a) the date and time, (b) areas of strength, (c) areas of need, (d) learning plan and resources shared, (e) mother's next steps, (f) visual representation of data used in debrief, (g) goal set, (h) feedback during implementation, (i) date for next observation and coaching debrief, and (j) additional notes. See Appendix E for an example of the coaching log. Coaching logs were stored on a secure electronic database and password protected. The major areas of the coaching log were synthesized and shared with the mother via email 24 hours following the virtual coaching conversation. Those areas include (a) caregiver next steps, (b) goals set, and (c) date of next observation and debrief. The coach also shared resources discussed in the debrief (e.g., web links, visuals). A copy of these correspondences was saved to the same electronic database, and identifying information was excluded (e.g., email address, name).

Caregiver Observations

Observation data was collected on mother and child interactions. The mothers were observed for the intention of feedback within the coaching cycle and a researcher-based tool aligned to research questions. Observations focused on a mother's play facilitation could occur weekly, with no more than six observation videos collected throughout the study. Observation videos were collected through a Zoom™ within the coaching cycle and leading up to the debrief conversation.

Before eCoaching debrief conversations, I would view 10 minutes of mother and child play in a virtual observation using technology where a video was positioned to capture the caregiver's interactions (e.g., laptop, smartphone, tablet). During this time, data was gathered by the coach to provide data that would guide the debrief conversation and provide feedback. The data collected related to goals set by the coach and caregiver. The first goal would be set following the pre-interview, and subsequent goals would be identified in the debrief prior to an observation. Data collected for feedback took the form of scripting, frequency, duration, or any other medium that aligned with the goal set. For example, if the goal sought for caregivers to use a least-to-most prompting strategy, the coach may script caregiver language followed by child behaviors in the form of a t-chart. The data collected for feedback was intended to be directly aligned to a mutually set coaching goal, accessible to the mother, based on data, and visually represented. The specifics of this data collection (e.g., photo, document, chart) were documented in the coaching log.

Outside of caregiver feedback data that occurred in the moment during the coaching cycle, the same 10-minute mother and child play virtual observation was analyzed to answer study research questions. Video data collected during eCoaching observation would be

transcribed and coded using an observation tool (Appendix G) to investigate growth over time in a mother's play facilitation area. When viewing videos, mother and child interactions were given a code of 'good-fit' or 'poor-fit', using an adapted version of an instrument developed in Trawick-Smith and Dziurgot (2010). The scoring related to the observer's response to the consideration of: Does the amount of caregiver support (direct, indirect, observation, or no interaction) match the level of the child's need for support (much, some, or no need)? Children were indicated to have 'much need' if they could not proceed in their topic play without caregiver support. 'No need' of play support signifies a child who was engaged, self-directed, and able to sustain their pretend play independently. When a child was able to continue pretend play independently but would profit from adult contribution to extend or elaborate a play theme that was considered 'some need.' Levels of adult guidance were represented as direct guidance, indirect guidance, observation, or no interaction. Interactions were classified as 'good-fit' when the child-mother behavioral combinations resulted in 'no need.' Additionally, when a mother presented an idea for play elaboration that was accepted or passed on by the child, codes of instances were given the code 'no need-accept' and 'no need-pass.' The addition of these codes was intended to capture opportunities where the child displayed 'no need', but the caregiver's actions intended to provide an opportunity to expand pretend play. The observational definitions for each of the levels and the observation tool can be seen in Appendix G. Data gathered from these observations was used to determine progress throughout the intervention related to caregiver-child play interactions. All data was stored in a password-protected electronic database with no identifying information included.

Throughout the study coding done utilizing the Trawick-Smith and Dziurgot (2010) instrument on mother and child observation data incorporated interrater reliability. Interobserver

agreement data (IOA) was obtained for 25% of data equally distributed across participating dyads. A single doctoral student coder with a background as an early childhood educator was trained and practiced on 10-minute segments of adult-child dyads not included in the study. Training continued until 85% agreement is reached between coders. Coders proceed through three rounds of video until an eventual 88% agreement was reached. Following the first four rounds of coding, the IOA coder and I met to discuss variances in our codes and review the coding definitions. Interrater agreements are expressed in the percentage of total agreement across raters. The results of IOA coding for the caregiver and child interactions is found in Table 10.

Table 10

Interobserver Agreement Calculations (%) for Interaction Data

Rounds	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Collective**
Child Need	**76**	**83**	**85**	**98**	**92**	**69**	**75**	**87**	**82**
Primary code	74	83	87	100	94	83	73	88	85
Sub-code	78	83	83	96	89	55	77	85	80
Adult Behavior	**91**	**93**	**89**	**98**	**89**	**78**	**89**	**88**	**78**
Primary code	96	91	87	100	94	83	95	96	80
Sub-code	85	94	91	98	83	72	82	81	75
Child Response	**93**	**86**	**76**	**91**	**92**	**90**	**80**	**94**	**84**
Primary code	89	74	70	83	89	90	77	88	74
Sub-code	96	97	83	100	94	90	82	100	93
Fit	**93**	**100**	**74**	**96**	**94**	**97**	**86**	**100**	**93**
Total	**87**	**89**	**82**	**96**	**91**	**81**	**82**	**91**	**83**

Focal Child Observation

Children within each dyad were observed within a mother-provided 10-minute video or through a 10-minute virtual observation with no more than three videos collected throughout the

study and at least one week between data collection videos. Two of the observation videos were gathered as a pre- and post-observation with one before entering the coaching cycle procedures and following the conclusion of eCoaching sessions. A third video was collected after the third eCoaching session. The other two videos were focused on child play in eCoaching sessions 1-3 and 4-6. This data focused on independent or child-based play behaviors alongside their mother. Data on focal child pretend play behaviors provided by caregiver videos (n = 3) were uploaded to a password protected box folder unique to each dyad. Caregivers received a brief training following the pre-interview on recording and uploading videos from their device (e.g., iPad, smartphone).

Data for child observations utilized an interval recording related to cognitive and pretend play behaviors (Barton & Wolery, 2008; Rubin, 2001) for observations 10-minutes in duration. Interval data is a discontinuous observation procedure where a set observation period is divided into equal intervals and scored based on a set rule (Johnston et al., 2008). Intervals were 10 seconds in length and coded in relation to Rubin's (2001) Play Observation Scale (POS) and Barton & Wolery's (2008) pretend play taxonomy. The adapted version of the Play Observation Scale (POS-A) utilizes a 10-second partial time sampling method to capture a child's cognitive play qualities (Rubin, 2001). Additionally, the tool will allow for field notes, a tally, and list of all pretend play vocalization and vocabulary used by the child.

Codes were assigned to each interval depending on the behaviors displayed for most of the time by the focal child within that set interval. If two behaviors were displayed for an equal amount of time, the behavior higher on the taxonomy and/or higher cognitive play category was coded. For example, if a child engaged in constructive play for 80% of the interval and

functional play for 20% of the interval a code for constructive play would be assigned. See Appendix H for coding definitions as well as the observation tool.

Throughout the study coding done on child observation data (POS-A) incorporated interrater reliability on 25% of data equally distributed across participating dyad. A doctoral student coder with experience in early childhood research was trained and practiced on 10-minute segments of a child's play of a child not involved in the study. Training continued until 85% agreement was reached between coders. Coders proceed through three rounds of video until an eventual 94% agreement was reached. Between each of the three rounds, the IOA coder and I met to discuss variances in our codes and review the coding definitions. During the IOA coding of child videos, the primary research conducted two maintenance trainings following the coding of three child videos. Interrater agreements were expressed in the percentage of total agreement across raters. Agreements were also expressed as total agreement and agreement per category (e.g., non-play, pretend play). The results of IOA coding for the POS-A are found in Table 11.

Table 11

Interobserver Agreement Calculations (%) for Play Observation Scale (POS-A)

Rounds	1	2	3	4	5	6	7	8	Collective
Non-Play	93	97	98	96	97	98	92	98	96
Play	90	95	90	99	97	97	83	98	94
PP V&V	80	83	93	90	90	99	100	82	90
PP Taxonomy	86	82	77	97	90	100	100	89	90
Total	89	90	89	96	94	98	93	93	93

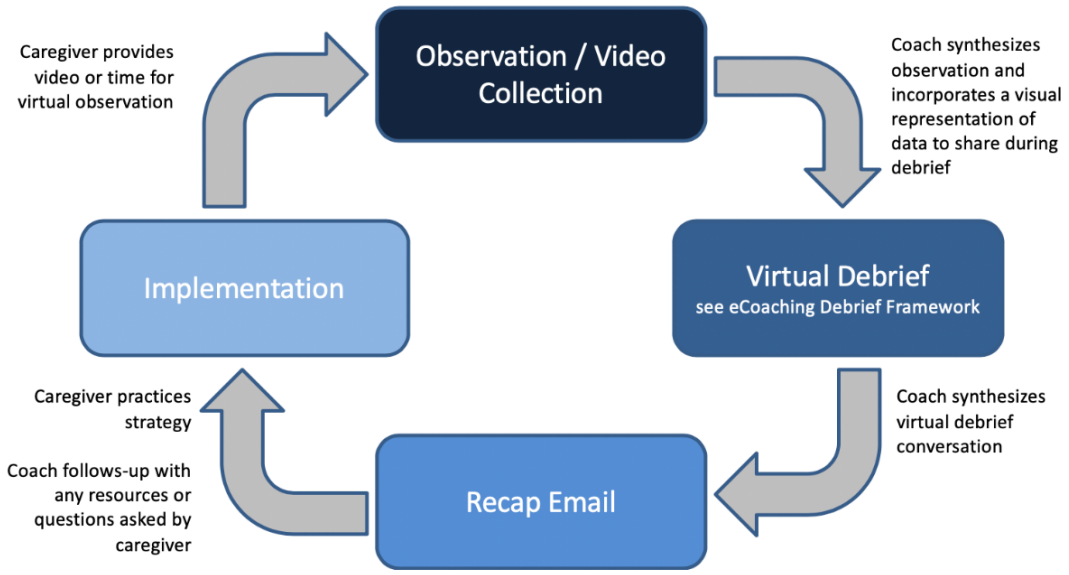
Note. PP= Pretend Play; V&V= Vocalizations and Vocabulary.

ECoaching Procedures

Following enrollment, all mothers participated in an audio-recorded pre-interview. After the completion of the pre-interview, each mother entered an eCoaching cycle. The eCoaching cycle consisted of four phases: observation and video collection, a virtual debrief, post-debrief recap email, and implementation (see Figure 6). The entrance into the eCoaching cycle began with the mother's collection of a 10-minute video of their child playing to share with the coach. Each mother was given a brief 10-minute training on video collection and uploading at the end of their pre-interview. After their pre-observation child video was received, the mother and I scheduled our first virtual coaching session via email.

Figure 6

eCoaching Cycle



Each of the six virtual observations and debrief conversations were scheduled for a time and date convenient to the mothers. Kristin and I meet weekly for the duration of eCoaching, lasting six weeks. Laura and Shannon met with me weekly with a break during the week of the Christmas holiday. Rebecca met weekly and took a three-week break for the Christmas and New Year's holidays. A breakdown of each mother's time spent in eCoaching is provided in Table 12. Coaching of all mothers took thirteen weeks, and mothers' completion of six sessions took six to nine weeks. Mothers participated in eCoaching session between 36 and 59 days (M = 45). The three mothers engaged in eCoaching longer than 40 days participation overlapped with the Christmas holiday. Rebecca was involved in eCoaching sessions for the greatest number of days due to scheduling that needed to occur as a co-parent.

Table 12

Mothers' Meeting schedule for eCoaching

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	Weeks
Shannon				T	M	M	M	M	X	M				7
Kristin	W	W	W	W	F	W								6
Laura			W	F	W	F	Th	X	W					7
Rebecca					M	W	W	X	X	X	M	W	W	9

Note. M = Monday; T = Tuesday; W = Wednesday; Th = Thursday; F = Friday.

During the observation portion of the session, mothers captured 10-minutes of play between themselves and their child. The 10-minutes was considered a virtual observation where I watched in-person play between the caregiver and child through video conferencing while collecting feedback-based data. Between this observation and virtual debrief, I completed data collection and initial analysis of that data to share with the mother during the debrief conversation. The data was intended to support feedback and debrief conversations. The data collected during the virtual observation was related to mutually set goals between caregiver and I. Potential strategies for guiding debrief conversations and targeting areas observed during a

virtual observation are outlined in Appendix I. The alignment table of play strategies and child needs in Appendix I was used to guide virtual debrief conversations in conjunction with caregiver strengths and child interest.

The virtual debrief occurred immediately following a virtual observation for three of the four dyads. Halfway through eCoaching sessions with Rebecca and Amelia, the decision was made to conduct debriefs the morning following the observation the evening before. Amelia had become attached to the one-on-one time playing with her mom and became frustrated when the 10-minute play session ended. During the debrief with her mother, Amelia would become visibly upset and repeatedly say, “meeting over” or “mommy play with me.” For this reason, Rebecca and I debriefed the next day for sessions three, five, and six. These conversations were less than 14 hours removed from the observation of Rebecca and Amelia playing.

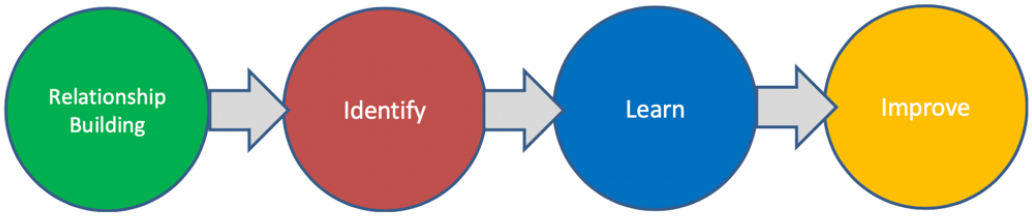
Each debrief conversation was video recorded and progressed through the components of relationship building (2-3 minutes), identification (5-10 minutes), learning (10-15 minutes), and improvement (5-8minutes) (see Figure 7). The Knight and colleagues' (2015) framework was adapted to include attention toward building relationships and rapport with the mothers. "Relationship" within the eCoaching framework is defined as attention to building mutual trust and rapport through the work done in eCoaching conversations. During the relationship-building component, the mother and I would connect on any topics that may operate within or outside eCoaching. Building a working relationship with mothers during eCoaching revolved around communication that demonstrated trust, respect, and attention to cultural norms (Knight, 2016). Crane (2007) shares specific interactions to build relationships during coaching as collectively sharing passions or interests, validating mothers' experiences through empathetic and reflective

listening, and being authentic and sharing experiences. While "relationship" is identified at the beginning of the framework, its influence extended across all parts of eCoaching.

The next component of identification involved a collaborative review of data from the observation to set goals and select a strategy to meet those goals. These moments where the mother and I identified data based on observation were referred to as “data visualization” and made play facilitation behaviors more “visible” to the mother. The most common “data visualization” utilized was scripting of the mother and child language (see Table 13). Through scripting, I could directly share the language used by the mother and child during the eCoaching observation. Other forms of data visualization included highlighting language, vocabulary, or pretend play taxonomy behaviors that may be related to previously determined goals. More quantitative data (i.e., frequency, ratio) were used but with less frequency in comparison to more qualitative means of “data visualization.”

Figure 7

eCoaching Debrief Framework



Adapted from Knight et al. (2015)

Table 13

eCoaching Learning Facilitation

Dyad Mother	Shannon	Kristin	Laura	Rebecca	All Mothers
Data Visualization					
Scripting Language	6	4	5	6	**21**
Scripting Action	4	0	4	5	**13**
Highlighting (behavior)	2	2	4	3	**11**
Identify PPT Element	1	2	1	3	**7**
Highlighting (language)	2	2	0	0	**4**
Direction of Initiation	2	0	0	1	**3**
Highlighting (vocabulary)	1	0	2	0	**3**
Tallies (frequency)	0	1	0	0	**1**
Ratio/Percentage Calculation	0	0	0	1	**1**
Learning Plan					
Direct Instruction	6	4	5	5	**20**
Review Data	6	5	3	4	**18**
Modeling	4	4	2	2	**12**
Discussion /Questioning	1	2	1	4	**8**
Brainstorm Ideas	2	1	3	1	**7**
Shared Visual	2	1	1	1	**5**
Link to Pretend Play	0	0	3	0	**3**
Co-Facilitation of Play	0	0	1	0	**1**

Note. PPT = Pretend Play Taxonomy.

Following identification with the use of "data visualization," the debrief conversation moved to learning. During learning, I facilitated the mothers' understanding of the strategy and ability to implement that strategy. The learning component, or "lesson plan," could involve strategies such as virtual modeling or role-playing. The mother and I may have also discussed feedback of concerns mentioned by the mother to modify the strategy to best meet their child's needs or strengths (Knight et al., 2015). In terms of eCoaching "lesson plan" strategies, more than one strategy could be used in debriefs and was dependent on the learning taking place within that session or through the trajectory of eCoaching. An overview of strategies used to

facilitate learning within eCoaching sessions are outlined in Table 13. Direct instruction involved teaching the mother about a facilitation strategy or providing knowledge about pretend play unfamiliar to them. Strategies were selected based on a mother's coaching goals and personal learning style during eCoaching. The most common learning plan used across mothers was direct instruction.

In the final debrief component of improvement, the mother and I collectively determined indicators of improvement based on their child's behavior. During this time, next steps for an observation and future debriefs were negotiated between the mother and me. Debrief conversations lasted between 14 and 36 minutes (M = 21). A breakdown of observation and debrief lengths for each dyad is outlined in Table 14. Virtual debrief conversations were limited to no more than once every five days to allow caregivers time to practice agreed upon next steps or strategies.

Table 14

eCoaching Session Participation (minutes)

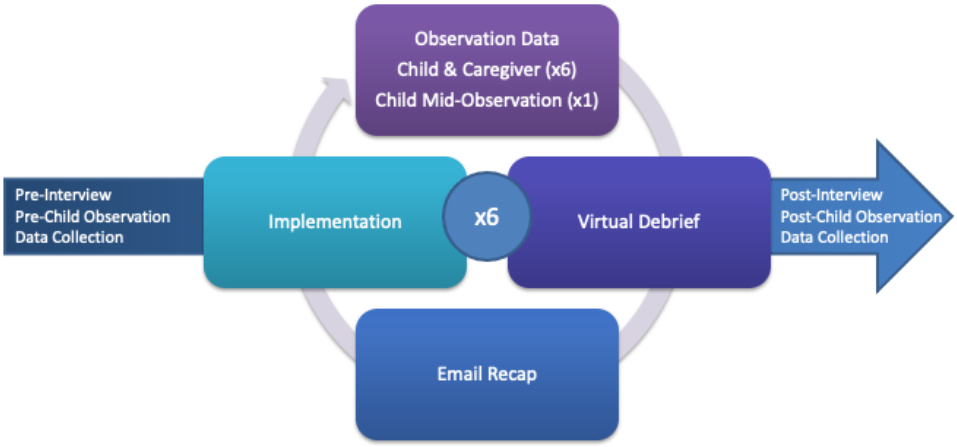
Dyad Mother	Shannon	Kristin	Laura	Rebecca	Across Mothers
Observation					
Sum	73	70	73	73	**289**
Mean	12	12	12	13	**12**
Range	11-14	10-13	10-16	10-16	**10-16**
Debrief					
Sum	156	106	114	135	**511**
Mean	26	18	19	23	**21**
Range	20-36	14-20	16-28	18-29	**14-36**
Collective Session					
Sum	229	176	187	208	**800**
Mean	38	29	31	35	**33**
Range	31-49	26-32	25-44	29-45	**25-49**

Note. Times rounded to the nearest whole minute.

Following the virtual debrief, I provided an email recap to the mother to synthesize the goal set and next steps. The coaching cycle continued into the implementation stage where the mother practiced the strategy(s) outlined in the debrief conversation and email recap. At this point, the eCoaching cycle moved back into the observation phase and continued until six eCoaching session were conducted. See Figure 8 for an overview of all eCoaching procedures.

Figure 8

eCoaching Cycle Procedures



Over the course of the eCoaching study, participating mothers were compensated on a progressive timeline. The total compensation was $200 per mother. The first $25 was shared after the completion of the pre-interview. The next $100 was given following the completion of all six eCoaching cycles. The final compensation of $75 was provided following the completion of the post-interview and post-video collection of child play. The amounts within the timeline are based on the required level commitment for those components of the study by the mother. The child that was a part of the mother's dyad received a $20 age-appropriate toy. These toys were sent to each dyad's house though Amazon™ following the fourth eCoaching session

Fidelity of Implementation

A secondary researcher, not responsible for eCoaching cycles or debriefs, completed fidelity checks on 25% of virtual coaching debriefs, equally distributed across participants and the various debriefs during the eCoaching process. Fidelity checks utilized a checklist that aligned with the eCoaching debrief framework (see Appendix F) to guide virtual coaching debriefs. Fidelity was evaluated through the percentage of procedures observed in video recorded debriefs and total procedures associated with the framework. The researcher conducting fidelity had nine years of coaching experiences. After each fidelity check, this individual and I debriefed to adjust my eCoaching debrief facilitation if needed to ensure fidelity. An overview of fidelity during eCoaching debrief conversations are provided in Table 15.

Table 15

eCoaching Debrief Fidelity (%)

Fidelity Check	1	2	3	4	5	6	Total
Component							
Relationship Building	100	100	0	100	100	100	**83**
Identify	83	100	100	100	100	100	**97**
Learn	100	100	100	100	100	100	**100**
Improve	100	100	100	100	100	100	**100**
Total	**95**	**100**	**95**	**100**	**100**	**100**	**99**

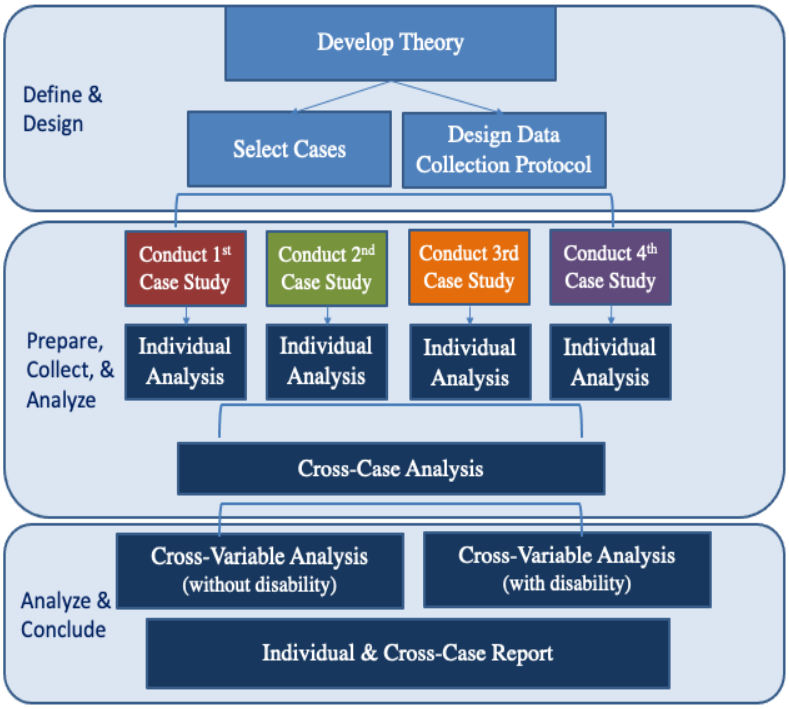
Data Analysis

To complete a collective case study design, evidence was first collected on each case and analyzed within and between cases, including comparison groups of dyads of children with and without an IEP. Each mother and child dyad was analyzed first as a unique case. Individual case analysis involved qualitative, descriptive, and visual analysis across all instruments utilized in

data collection in connection to the three primary research questions. I analyzed data ongoing throughout the eCoaching and employed 'memoing' to highlight any initial trends. An individual dyad analysis was followed by a cross-case analysis which combined all data analyzed on individual cases to unearth collective trends across all four dyads. The cross-variable analysis followed the conclusion of a cross-case analysis to investigate trends associated with the variable of children with and without a disability (Yin, 2017). During cross-case and variable analysis, pattern matching was applied. Analysis attended to all evidence collected and plausible interpretations; components that Yin (2017) considers high-quality case study analysis procedures. Figure 9 provides an overview of the transition from data collection, individual data analysis, cross-case analysis, and comparison of a child's disability as a variable.

Figure 9

Multiple Case Study Analysis Procedure



To support the overall internal validity, pattern matching was utilized. Pattern matching of process and outcomes across cases allows for internal validity to be strengthened through patterns that appear to be similar (Yin, 2017). For this study, the eCoaching procedure fidelity, mother knowledge and understanding, mother facilitation, and child outcomes were matched across cases in conjunction with theory that predicts eCoaching to impact these variables positively. Pattern matching was also used to compare variance in dyads with and without a child with a disability. Additionally, pattern matching for a rival explanation was utilized to account for the existence of threats to the logic between process and outcomes. Pattern matching was completed in all stages of individual, cross-case, and variable analysis.

Data analysis included analysis of my influence in analysis and role as a coach in the intervention. Additionally, to bring to the surface any initial bias, I outlined assumptions and experiences in my role as an educator and instructional coach. This process was completed before each individual and cross-case analysis. To attend to validity within analysis, data was triangulated in multiple forms including coaching logs, video debriefs, observation data, and interview transcripts. When identifying and analyzing data, a search for discrepant data or negative cases was completed as a form of validity testing.

Qualitative information was analyzed using an on-going, interrelated, and simultaneous process that included (1) organization and data management, (2) reading and 'memoing' of emergent ideas, and (c) describing and classifying codes into themes (Creswell & Poth, 2018). Quantitative data included the use of frequency and duration data to ascribe quantity within data analysis. Coding done on qualitative data analysis was also represented using descriptive statistics and visual analysis.

Pre- and Post- Interview

Data analysis began with both listening to, transcribing, and reading all interviews. Following respondent validation using a member check, a mother's pre- and post-interview transcripts were first to be organized by dyad. This organization was followed by my reading each interview transcript in its entirety while making memos of any emergent ideas. Coding began with identifying units or segments of data that appear meaningful based on prior ideas, experiences, and new insights. Coding then progressed through initial and focused coding (Charmaz, 2014) around "organizational," "substantive," and "theoretical" categories (Maxwell, 2013). Organizational categories consisted of broad areas or issues and served as categories for further analysis into subcategories (e.g., knowledge, facilitation). Substantive categories were descriptive and encompass participants' concepts and beliefs around play facilitation and pretend play. Lastly, theoretical categories were related to an abstract framework (e.g., pretend play taxonomy). Codes were grouped into categories organized into themes aligned to the research questions. Those themes included (a) knowledge and understanding, (b) facilitation, (c) child play behaviors, (d) demographic or personal information, and (e) the eCoaching process. All interview transcripts were printed out and coded by hand using highlighters of various colors to align to themes. Data analysis also leveraged a constant comparative method (Glaser & Strauss, 1967) to associate connections and variances within a case and across cases. These connections were made in the margins of the transcript. Within-case comparison also attend to pre- and post-interview responses.

As themes emerged, a matrix of all participant responses within pre- and post-interviews was created. The matrix allowed comparisons across pre- and post-interview responses horizontally on a table to allow a single mother's response to be seen side by side. Similarities

and variances with mother's pre- and post-interview responses were highlighted to draw out comparisons within-cases. The utilization of a matrix to compile questions based on research questions then progressed to examining responses across cases vertically among dyads. Once again, variances and similarities were noted. Descriptive information from the data analysis of interviews was used in individual and cross-case results to support triangulation and create a rich description of dyads.

Coaching Conversations and Logs

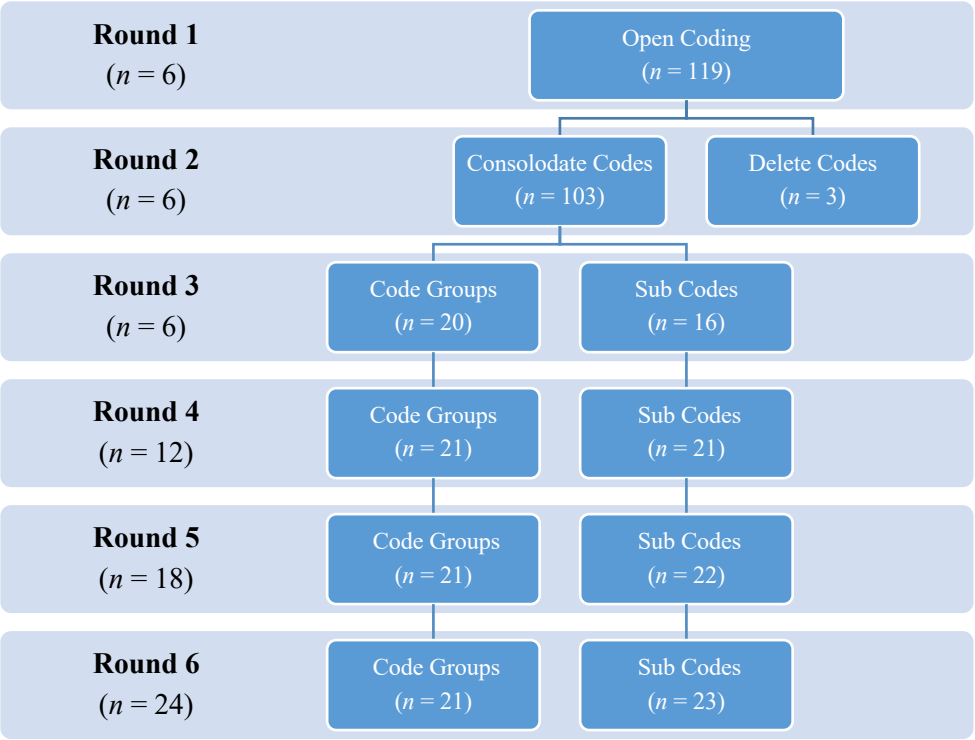
Caregiver video recorded debriefs, coaching visualizations, and coaching logs were first organized in chronological order per dyad. ATLIS.ti was utilized for the coding of debrief conversations. I watched each coaching conversation, review coaching visualizations, and logs in their entirety while making memos and timestamps of any emergent ideas. Coding then progressed through initial and focused coding with an emphasis on incident coding regarding video conversations and logs (Charmaz, 2014). A codebook was created and refined as the coding process progressed. Open coding of six debriefs resulted in 119 codes which were consolidated to 16 categories of codes and 103 descriptive sub-codes. The 103 subcodes were reviewed and either collapsed (n = 36) into a single sub-code or removed (n = 3). Deleted codes were those that were captured in other parts of the data (e.g., start of debriefs). Through the creation of an initial codebook, codes were further refined to encompass 20 code groups with 16 sub-codes within those groups. Throughout the coding process within ATLIS.ti, coding underwent six rounds utilizing constant comparative analysis (Glaser & Strauss, 1967) to make associations sequentially within and across cases. Figure 10 outlines the process the led to the final coding scheme. Codes were grouped into categories (e.g., connecting) and organized into

themes (e.g., connecting to data). The final codebook consisted of 21 code groups and 23 sub-codes (see Appendix J).

To represent quantitative data in the coaching log (e.g., length of debrief, type of learning strategy used), a frequency and duration table was created per case and across participants. Qualitative data (e.g., identified strengths, goals) were analyzed using initial and focused coding (Charmaz, 2014) and constant comparative method (Glaser & Strauss, 1967) to make similarities and differences connections sequentially within a case and across cases. Results from these analyses are found in Table 13 and 14.

Figure 10

eCoaching Debrief Coding Sequence



Observation Data

Data from observations was represented in numerical form and imputed SPSS version 14.0. Descriptive statistics were calculated as a preliminary analysis on each of these items.

Distributions, ranges, means and standard deviations for each comparison groups were reported. Non-parametric statistics were computed and used in the analysis of the two comparison groups.

Coding done on caregiver research-based and child observations incorporated interrater reliability on 25% of data for each dyad. Data used in interrater reliability was randomly selected. Both interrater agreements were expressed in the percentage of total agreement across raters (see Table 10 and 11). The interrater will be blind to a child's IEP status.

Mother and Child Interaction Observation Data. To analyze sub-units (1 observation, $n = 24$) and the collective units (six observations per caregiver, $n = 4$), the frequency of each variable on the observation tool were calculated. Coders determined the duration of caregiver-child interactions that were observed for each child in the observation video (sub-unit and collective units). An interaction could be verbal or non-verbal but will only be counted if the caregiver directed interaction with the focal child. An interaction was considered complete once the caregiver disengaged with the child's play. Interactions considered 'good-fit' based on Trawick-Smith and Dziurgot (2010) were identified for sub- and collective units of caregiver observations.

Focal Child Observation Data. To analyze sub-units (one observation, $n = 20$) and the collective units (five observations per child, $n = 4$), the frequency of each variable on the observation tool was calculated. Those variables included non-play behaviors and cognitive play behaviors. The instances of double coded pretend play behaviors, pretend play vocalization and vocabulary were also be determined using a frequency count. Pretend play cognitive behaviors and pretend play taxonomy behaviors were combined. Additionally, field notes, vocabulary words recorded, and episodes of play per child (n =5) were analyzed using initial and focused coding (Charmaz, 2011).

Establishing Validity, Trust, and Credibility

Within qualitative research, establishing trust and credibility are important considerations for data collection and analysis (Maxwell, 2013). Threats to validity are a key concept within research and described by Huck and Sandler (1979) as a "rival hypothesis" or alternative interpretations or understanding of the data within a study. A way to counter threats to validity is to attend to validity considerations and strategies within the research design. Presented are validity considerations in the areas of (a) objectivity and confirmability, (b) construct validity, (c) reliability, (d) internal, and (e) external validity.

Objectivity and Confirmability

Bias occurs in qualitative research by selecting data that adheres to a researcher's preconceptions, existing theory, or goals (Shweder, 1980). Engagement as a participant researcher has the potential to increase this threat (Becker, 1967). While all researcher's values and expectations cannot be eliminated, some steps can be taken to reduce their influence on research (Maxwell, 2013). One way to combat this reality is to explain potential biases. Unearthing potential biases occurred by bringing to the surface any initial bias within an outline of assumptions and experiences before data analysis. By engaging in disclosure of potential assumptions, I was made aware of these and spent time attending to potential rival hypothesizes that may exist.

Second, I relied on direct observation tools in mother and child observations. These tools eliminated the potential for observations to attend to areas that may align with my assumptions or initial hypothesis. Additionally, the caregiver observation research data and child interval data collection were corroborated using interobserver agreement for 25% of all observations across dyads. The interobserver was blind to the disability status of the child within the dyad to reduce

their own potential bias. Refer to Table 11 and 15 for a breakdown of interobserver agreement data.

The researcher's influence on participants during interviews or observations is often referred to as “reactivity.” While there is no way to eliminate this phenomenon, there are ways the researcher can reduce its influence (Maxwell, 2013). The benefit of observations being done in a natural setting provided one method for reducing reactivity in participants. Becker (1970) suggests that when participants are observed in a natural setting, as opposed to a clinic, they are much less influenced by the presence of an observer. Additionally, the observer will be through video conferencing will further decrease their presence during observations.

Reactivity is also a threat during interviews. Hammersley and Atkinson (1995) refer to this reactivity as “reflexivity,” which occurs when a participant is influenced by the interviewer or interview situation. To combat reactivity, a research protocol was designed to avoid judgmental or leading questions. I was also aware of their influence and provided a comfortable context for the interviews in this study. For example, Charmaz (2014) provides the example of a stem such as ‘That’s interesting, could you tell me more?’ versus ‘Why do you think that’ to avoid participants feeling that the interviewer is casting doubt on their response.

Additionally, for the post-interview, the mother was interviewed by an individual who was not responsible for eCoaching to avoid the potential for a mother to report self-changes or experimental outcomes based on eCoaching reactively. The post-interviewer was trained in interview procedures for reducing reactivity and reflexivity. Following both the pre- and post-interview, each mother engaged in a member check of the interview transcript. Through member checks, mothers could provide feedback on data gathered and make any corrections or additions that they see necessary to capture their experiences fully.

A final way I remained objective in data collection and analysis is through the adherence to the research protocol. By remaining true to the procedures for eCoaching, data collection, and analysis I ensured they were not making structural changes to align with their inevitable preconceived assumptions or biases. The structures put in place were designed to aid me in remaining objective through the entire research process.

Construct Validity

Construct validity refers to a study's ability to match procedures to constructs used to describe those procedures (Shadish et al., 2002). To address the treat to construct validity, careful attention was paid to defining, explaining, and grounding in previous literature the constructs used. To ensure that the measurement tools being used measured intended outcomes previous literature was considered. Also, the interview protocol was reviewed by two researchers in the field with experience in early childhood play research.

Reliability

Reliability seeks to ensure that the study is consistent. To address reliability, careful consideration was given to the development of research questions and selecting the design for the study to answer those questions. Measurement tools were specifically aligned to the research questions with detailed procedures for collecting data based on those tools.

Furthermore, the eCoaching debrief procedures were monitored using fidelity checks on 25% of all eCoaching debrief sessions by a researcher not engaged in dyad coaching. These fidelity checks were conducted throughout the eCoaching intervention to provide feedback to me so that adjustments could be made to their actions in future debriefs to maintain consistency. Fidelity checks supported consistency throughout the study as it related to the eCoaching intervention. Overall implementation fidelity during eCoaching was 98%.

Lastly, multiple means of data collection and triangulation contributed to reliable data and captures study outcomes (e.g., interviews, observations, coaching logs, debriefs). A variety of methods for data collection and multiple participating dyads reduced the risk of chance assumptions (Maxwell, 2013). Observations of mothers and children also occurred numerous times. These various observations allowed for a collection of data points. Data was reported with rich descriptions through detailed notetaking within coaching logs and videoed debrief conversations. The attention to rich data allowed me to paint a clear and full picture of what is occurring in the study (Becker, 1970).

Internal Validity

Multiple means of rich data collection and triangulation of that data assisted in threats to internal validity. Internal validity refers to ensuring that the intervention provided led to the outcomes observed (Shadish et al., 2002). Internal validity threats were addressed through consistent instrumentation, selection of participants, and pattern matching.

Controls were evidenced in the selection of participants such that all children were within the same age range. Additionally, children with a disability focus on high-incidence categories such that the influences of more severe disabilities (e.g., severe cognitive, deaf and blindness) would not confound outcomes. This narrow range decreased the likelihood of differences based on respondent characteristics. Within these participating dyads, the same tools were utilized for caregiver and child observations. Consistency in measures ensured the elimination of internal validity threats based on instrumentation.

One major way to address internal validity in a case study design is using pattern matching (Yin, 2017). Pattern matching in this study focused on matching from process and outcomes as well as rival hypothesizes. Repeated comparisons of eCoaching among dyads

allowed me to demonstrate outcomes across participants and look for patterns within those outcomes.

External Validity

Related to external validity, the researcher attended to why inferences would not be generalized over variations to participants, settings, or interventions (Shadish et al., 2002). To address generalizations to children and mothers, I clearly defined the eligibility criteria for participation and designed interview questions to provide a rich description of the characteristics of participants and settings. Likewise, eCoaching procedures were clearly defined to reduce the risk that any type of coaching would replicate outcomes.

IV: Results

Individual case study reports on the four mother-child dyads were developed to understand the influence of eCoaching. Each case study begins with an introduction of the mother and child within that case. The case study findings are then organized around each related research question: (a) mother's understanding of play, (b) mother's facilitation of play, and (c) child's play behaviors. Following the presentation of each mother-child case, a cross-case analysis is provided. Within the cross-case analysis, within-case findings will also be highlighted in terms of children with and without an IEP. The cross-case analysis is organized around the same three findings with the addition of finding related to mothers' perceptions of the eCoaching intervention.

Case 1: Shannon and Nick

Mother and Child Background

Shannon was Nick's mother, a four-and-a-half-year-old with an IEP for a speech delay (SLD). Shannon's older son (seven years) was a primary playmate for Nick at home and served as a point of reference for Shannon as she reflected on her interactions with Nick during eCoaching. Shannon, a stay-at-home mom, previously worked as a high school teacher and held a master's in education. One of her perceived strengths as a parent was not overreacting. Shannon aims to provide ample room for her sons to explore and was willing to admit when she was wrong in moments when her patience is lost. Shannon was proud of her ability to keep her sons feed and maintain the "routines of life," mentioning her sons rarely missing a bedtime. While Shannon receives parenting support from her mom and friends with kids of a similar age, she likewise seeks out books and professional developments offered through her sons' schools.

Shannon described her son, Nick, as "happy, exuberant, loud, and full-body." Nick is happy to go along with anything and is very creative within the imaginary worlds he frequently engages in during play. Shannon shared how Nick could independently escape into a fictional world for anywhere from 30 minutes to two hours. His primary interests currently include dogs and eating. Shannon shared that she can "make his day" by putting a bowl of Cheerios™ and water on the floor to allow him to pretend he is a dog. Shannon also discussed Nick's ability to observe the world around him and incorporate those ideas into his play. For example, he would often want to play "office" to mirror his dad working from home due to COVID-19. The events of COVID-19 also impacted Nick's play concerning fewer activities outside the home (e.g., swimming, music lessons) and shifted his brother into the position of his primary playmate.

At the age of three, Nick's preschool teacher expressed concerns with understanding Nick's speech. Words such as "fork" and "fort" were often hard to distinguish in his speech. Following an evaluation and receiving an IEP the previous year, Nick was currently attending a part-time private preschool and receiving speech services through Zoom™ for 25 minutes. This year doctors also uncovered a hole in his heart. While it does not impact Nick developmentally, he was scheduled to undergo surgery shortly after eCoaching ended.

Mother's Understanding of Play

Shannon exhibited some initial understanding of play-based learning, with her interest being spurred by the birth of her first son. Over time this understanding transformed and was further refined with her second son within eCoaching. Shannon used three main strategies to develop her understanding of pretend play as it pertained to Nick: connections to her eldest son, targeted observation, and opportunities for personal reflection. One of Shannon's main goals was to incorporate academic interest into play with Nick. Through eCoaching, she expanded her

understanding of how Nick's inherent love of pretend play could lend itself to these academic goals.

Beginning with the birth of her first son, Shannon gravitated towards Montessori play-based learning strategies. She described the idea of putting her child's mattress on the ground to promote play exploration. Ultimately after trying this technique, which did not go as planned, Shannon realized that not all aspects of Montessori application would necessarily translate to her child or family. This prior learning played a part in how she processed the application of pretend play during eCoaching. Shannon discussed that eCoaching allowed her to take ideas and move beyond theory to understand their application better. "Talking through goals and the strategies of connecting play with [Nicks] development… was really helpful to have happening in real-time," expressed Shannon. During her post-interview, Shannon voiced how eCoaching made her more aware of what play "could be" and reinforced her existing belief that play is "vital for childhood and human development." Some of the specific areas indicated by Shannon that were not initially present in her pre-interview discussion were the areas of vocabulary, pre-academic skills, and problem-solving.

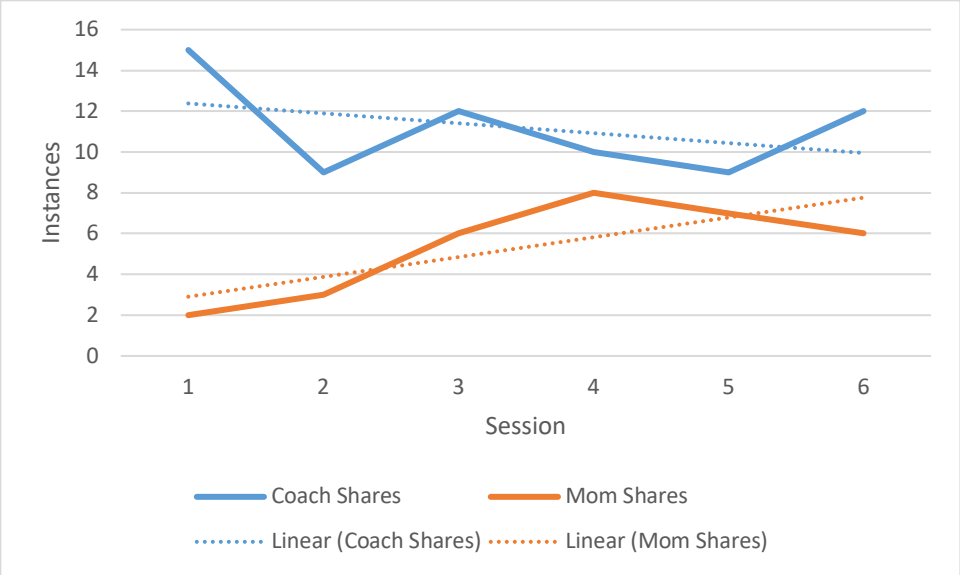
Shannon was initially drawn to participate in eCoaching by observing Nick's ability to engage in "great wide-reaching imaginary worlds" and a desire to capitalize on that interest he was naturally demonstrating. The informal observations that initially drew Shannon to eCoaching became more concrete and contributed to a well-rounded understanding of how Nick manifested pretend play behaviors. An important component of the coaching framework used is identifying observational evidence to compose a clear picture of reality (Knight et al., 2015). As the coach, I began to model specific observational data I saw in the ten-minute eCoaching observation and independent play video shared. For example, in session one, I shared, "what I

saw today was that everything you said when you were doing your piece, word for word he took that, internalized it and did it when he was playing" to highlight Shannon's actions leading to outcomes in Nick's play. Shannon was quick to zero in on this method of identification and incorporated it into the eCoaching debriefs. By session three, Shannon and I were engaging in an equal back-and-forth conversation around play. Shannon was particularly instrumental in her ability to generalize these observation skills to moments outside the eCoaching framework. Shannon would often add to the discussion by illustrating examples like, "there have been times that he has wanted to write right next to me and play office." These outside observations could then be used in the eCoaching conversation to develop a goal.

Shannon was also able to connect observations made to her new learning within pretend play behaviors. When discussing the role of assigning absent attributes in pretend play, Shannon related the discussion to a game she knew Nick enjoyed playing at school. Children rotated roles of being a "dog catcher" on the playground, she shared. These observations added to the eCoaching debriefs and helped Shannon anchor her learning in observations of Nick she engaged in daily. The utilization and trajectory of the sharing observational data related to Shannon's understanding pretend play is outlined in Figure 11. The figure demonstrates an increased coming together of Shannon and me as eCoaching progressed with an increased trajectory of citing evidence on Shannon.

Figure 11

Shannon's Sharing During eCoaching Debrief Conversations



Another tool that Shannon used to develop her understanding of pretend play was personal reflections. Shannon demonstrated 22 instances of reflection related to her role in play and her child's behaviors throughout six sessions. These reflections typically led to the direction of the goal in each eCoaching session. In session five, Shannon had a particularly insightful examination of her behaviors during play with Nick when she mentioned:

> I think the biggest awareness I have in those [play moments] is the realization that I too am stubborn and have my own way of thinking about how I would design a building. And so, realizing that 'this is not your building Shannon'. So, step back and simply be the support.

This exchange illustrated the internal processing that Shannon was undergoing to take her son's lead in play and enact goals related to facilitation. Shannon also made connections to her previous role as a high school teacher during these reflective moments. "I am probably more influenced by how I taught high school even than I think about daily." These connections once

again aided in anchoring her understanding of early childhood pretend play and knowledge gained through previous experiences around a 'good' and 'poor-fit' interaction.

One of Shannon's major connective learning points was the observations and experiences represented in play with her eldest son. Connecting to experiences with her other son was represented in four out of the six eCoaching sessions. These connections were particularly representative of discussions around pretend play, where Shannon felt that her eldest son was moving away from pretend play and into 'games with rules.' She discussed how this dichotomy impacted Nick and his brother's interactions. "I think that my older child benefits from Nick for the pretend play," expressed Shannon. She shared how Nick often wants to elaborate on a construction with blocks by infusing a pretend play narrative that the building was a "base" or "fort." Additionally, when Nick engaged in a game with his brother, he often desired to make up rules outside the initial game structure. These comparisons between her two sons allowed Shannon to highlight variances in cognitive play behaviors and the developmental stages of play.

The combination of Shannon's observations, reflections, and comparisons between her sons lead to an interest in academics within pretend play. Shannon was able to observe evidence of Nick's interest in writing. She related this interest to her second-grade son's increased writing skills. She shared that Nick had taken to writing "notes" during his speech sessions. Initially, within sessions one through three, academics were at the forefront of goals Shannon expressed for Nick during eCoaching. These goals were often redirected or expanded on by me to infuse a pretend play lens. For example, after building a "zoo" out of MagnaTiles™, I suggested making signs or a zoo map to infuse writing. By the fourth session, Shannon had begun to incorporate the desire to capitalize on Nick's writing interest within pretend play opportunities during eCoaching sessions and throughout the week. She discussed the utilization of play schemes such

as playing “hotel,” where Nick made signs for each “room.” In an eCoaching session, Shannon and Nick co-constructed an “office” out of large blocks together, and Shannon prompted Nick to bring in his “office materials” to “work.” These instances demonstrated a greater understanding of how academics could be infused within Nick’s natural pretend play interest.

In her post-interview, Shannon discussed her ambitions of wanting to “incorporate play with [Nick] on a more regular basis.” In her final eCoaching session, Nick was moving into preparations for his upcoming surgery. Shannon was instrumental in encouraging Nick’s love of play in his processing of the forthcoming events and his hospital stay. Ultimately, Shannon could generalize her knowledge and understanding of play to a completely different scenario and environment. Shannon shared how she was “thinking about some things that will be good when we are at the hospital for him to still be able to explore, be imaginative, and creative. While certainly more limited.” This statement highlights her appreciation for play, especially pretend play, as a medium for expression in Nick. She further shared her plan to get out a play doctor kit they had at home to provide an opportunity for Nick to incorporate doctor-related themes into his pretend play. In the end, Shannon reinforced her belief that play and pretend play were “crucial” for Nick’s development.

Mother’s Facilitation of Play

From the beginning of eCoaching, Shannon discussed feelings of being outside the sphere of Nick’s pretend play. Even stating, concerning her ability to engage in pretend play, “I don’t necessarily feel like I have that gift,” as she compared herself to her mom, a former preschool teacher. As eCoaching progressed, Shannon became an active play partner for Nick during his pretend play. Over time, Shannon was able to leverage this role to prompt and expand

Nick's pretend play while also relying on her keen observation skills to know when to withdraw a suggestion that did not meet her son's needs at that moment.

Initial barriers to Shannon accessing pretend play was attributed to Nick's feelings about his mom's role in play. Leading into the first eCoaching session, Shannon shared:

> So, right before we got on the Zoom™ call, I described that we would be playing. And he is like, 'but you do not know how to play?' And I was like 'm…hum…okay.' I was like, 'do you want to play dress up?' And he is like, 'no'. And he then described all of his favorite pretend games, but he plays them with his brother… He said that he only wanted to play a board game with me. And I was like, 'alight.'

Shannon attributed this to the reality that Nick's brother was a primary play partner for him. She also reflected that the interaction highlighted how she did engage with her youngest son one-on-one. Shannon discussed that role when she aforementioned:

> I am reading to him, I am feeding him, eating, and chatting with him, I am writing down his stories, or I am playing board games. I clean up toys with them, but I don't do a ton of pretend play.

It was not until the third coaching session that Shannon was welcomed as a pretend play partner with Nick. Before this session, Shannon pushed Nick to select a play activity outside of a game. He selected building with blocks, and they collectively decided to make a zoo for his animal figurines. Following this interaction, subsequent observations within eCoaching involved pretend play opportunities. In session four, Nick did introduce a game, but in contrast to previous games, this game was one that Nick had devised and invented rules around. While not a major step in the trajectory towards pretend play, it was a step towards Nick opening up to his mom.

Additionally, early on, pretend play between Shannon and Nick incorporated a more parallel play model (session three). When building a zoo, Shannon and Nick built their own "habitats" beside one another without crossing their play. Eventually, by sessions four and five, Shannon and Nick demonstrated moments of group play where they both held a key role in the pretend play. For example, when playing "office," Nick introduced dollhouse figures to visit the office. Nick took on the "tour guide" role and requested his mom be the "visiting family." In the sixth coaching session, I prompted Shannon on whether Nick's desire to pretend play with her had changed. She responded:

> Maybe…I think that there are times when he is happy to, but I don't think this has changed his ability to be independent. Like he doesn't need me to pretend play. But he is happy to incorporate anyone who is around and willing to listen.

Overall, Nick's acceptance of his mom as a pretend play partner was solidified in a post-observation video intended to capture independent play. Nick specifically requested his mom participate as a character within a pretend play hospital scenario he had created.

As Shannon became more incorporated into pretend play with Nick, she used facilitation strategies to expand on targeted goals for his cognitive behaviors during play. For example, in encouraging Nick to verbalize pretend play ideas while playing "office," Shannon asked, "Is there an elevator in this building?" Nick responded that the building did have "two stories" and that the mattress was the second story. This interaction incorporated the idea of verbalizations, vocabulary, and object substitution into this pretend play scenario. In another instance, during session six, Shannon aimed to integrate language and writing into pretend play by suggesting that Nick incorporate business cards. Nick happily accepted this during the scenario.

Other times, Nick was not as accepting of his mom's play suggestions. When playing with dollhouse figures, Nick called one of the characters "Mrs. Nobody" because they did not have a name. Shannon prompted around this several times, even asking how having no name made the character feel. Nick pushed to proceed in the play scenario and rejected his mom's appeal to give the character a name or identify emotions. Shannon talked about this idea in her post-interview concerning interacting with both of her sons. "Sometimes my suggestions are taken, and other times I go through a handful of rounds of discussing what we could do, and then they come up with something on their own," shared Shannon. Whether accepted or ignored, these examples highlight how Shannon's gradual infusion into pretend play allowed her a voice in supporting play behaviors related to Nick's interests and developmental needs. See Table 16 for the trajectory of goals set during eCoaching.

When facilitating play with young children, adults utilize observations and interactions to produce 'good-fit' interactions that either expand a child's play behaviors or address a demonstrated need on the integrated, responsive model (Trawick-Smith & Dziurgot, 2010). As Shannon took on a greater role during pretend play, she also learned how to recognize and be responsive to 'good-fit' and 'poor-fit' interactions with Nick and be responsive in the moment. In session three, for example, Shannon tried to incorporate higher-order thinking and the idea of repeated addition in Nick's imaginary game. Nick responded to this prompt with an incorrect mathematical answer, and Shannon continued to model with objects. Nick watched his mom and did not verbalize any exchange. Nick proceeded to grab and roll the dice to communicate his desire to advance in his invented game scenario. During the eCoaching debrief, Shannon reflected that Nick was not into this academic push within Nick's play.

Table 16

Trajectory of Coaching Goals for Shannon and Nick

Session	Goal Set	Shannon's Facilitation Topic	Nick's Behavior Topic
1	During Nick's play, Shannon will ask 1-2 questions that allow Nick to verbalize his thinking around his current play.	Questioning	Verbalizations
2	Shannon will use a combination of narrating her thinking/actions and questions with Nick during play.	Model Questioning	Verbalizations
3	During Nick's play, Shannon will look for opportunities to infuse writing into Nick's pretend play. Shannon will support emergent writing by scribing words to model the writing process or supporting letters to symbolize words.	Questioning Prompt Model	Writing
4	Shannon and Nick will consider an extended scene or scenario (e.g., pet store, vets office, restaurant) that could build around and include writing (e.g., signs, menu, store name). Shannon will incorporate ways to gradually release thinking responsibility onto Nick when developing these scenarios through questioning.	Gradual Release Questioning	Sequences Writing
5	When pretend playing with Nick, Shannon will observe how she can use narrations of the play and questions to enhance Nick's vocabulary or pretend play behaviors (e.g., taxonomy).	Narrating Questioning Observation	Vocabulary Verbalizations Sequences OS AAA IAO
6	Mom will continue to observe Nick's interest in play to determine how to infuse higher-level academic and imaginary concepts. Currently, this is specifically related to an upcoming surgery that Nick will be having.	Observation Generalization of Skills	Vocabulary Verbalizations Sequences OS AAA IAO

Note. AAA = assigning absent attributes; OS = object substitution; IAO = imagining absent. objects.

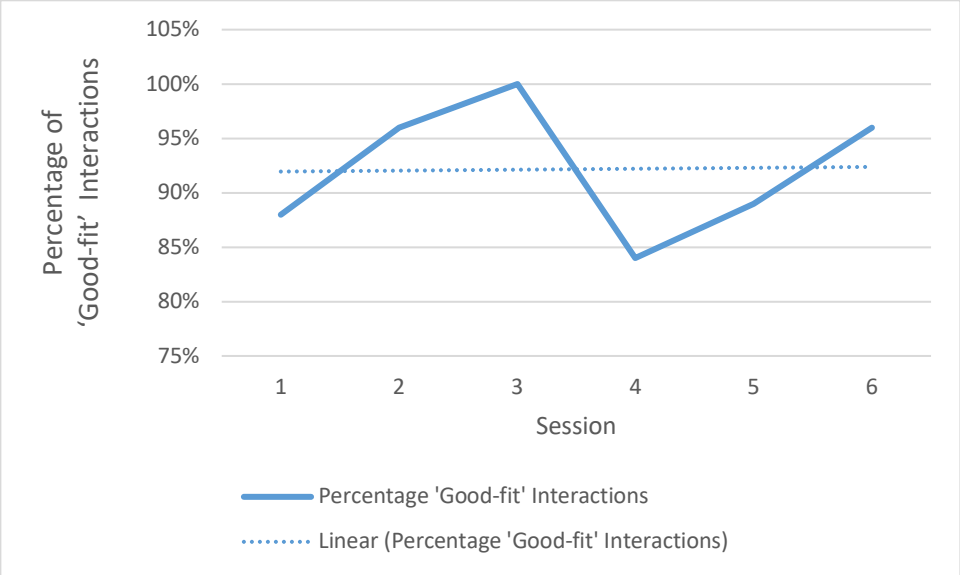
Shannon did demonstrate growth in observing Nick's need and responding to that need in the moment within session six. In playing with a mailbox toy set, Shannon prompted Nick to add a visual of a cat. Nick replied, "oh, what if I draw a white cat!" and proceeded not to draw the cat, stating you could not see it because it "matched the card." Accepting Nick's direction of play, Shannon responded, "that works." Shannon reflected on the internal conflict she

experienced during the debrief conversation when taking Nick's lead in this activity. "He was quite happy writing his letters, and it didn't have to have an overarching theme or message… he just wanted to write the letters… So, slowing myself down to write some letters was probably - it was good," Shannon shared. This response illustrated further understanding of the underlying themes of the Trawick-Smith and Dziurgot (2010) integrated, responsive model. In connection to this conversation, when I shared the integrated, responsive model with Shannon, her response further anchored her understanding of underlying themes on the path to interacting with children during play. Shannon shared, "I like the diagram for the reassurance that you can always try again," highlighting the responsive nature of the model.

Ultimately, Shannon was proficient at demonstrating 'good-fit' interactions to address Nick's needs related to 'knowledge construction' and 'task-completion' from the initial eCoaching session. These 'good-fit' interactions often took on the form of language opportunities, especially present during pretend play interactions where language was important in the communication of ideas within the imaginary scenario Nick had envisioned. For example, Shannon clarified the meaning of "artistic" and "authentic" during a pretend play session around building an office. In another session, Nick's annunciation was addressed in pronouncing "seal" and "steal." The graph outlining the trajectory of 'good' fit observations observed during eCoaching is displayed in Figure 12. The dip in the trajectory during session four relates to Nick's inventive game and the learning curve Shannon was experiencing as she pushed mathematical concepts outside Nick's zone of proximal development and interest.

Figure 12

'Good-fit' Interactions During Shannon and Nick's Play



Reflecting on these 'poor-fit' interactions within session four laid the groundwork for conversations with Shannon related to following Nick's lead and using observation to be responsive to play needs. The dip in this trajectory may ultimately reveal how Shannon was trying out facilitation moves outside of her comfort zone to find her role in pretend play interactions that took precedents beginning in session three, as evidenced by an increase in play suggestions as eCoaching progressed. This shift in interactive behaviors coupled with Figure 12 indicates how play suggestions coincided with Nick's decrease in play need. As eCoaching progressed, Nick demonstrated a reduction in 'much need' behaviors and increased his 'no need' behaviors during play. The shift in Nick's needs allowed Shannon to engage in more prompting around play elaboration (i.e., writing concepts, character feelings).

In the end, during her post-interview, Shannon discussed how participation in eCoaching served as having the greatest benefit to her. "I tend to say that I think that I was maybe the greater beneficiary of the coaching. As far as how to support and integrate with his play,"

Shannon shared. Participating in eCoaching also made Shannon reminisce on the professional development opportunities she was missing in her former role as a teacher. “In parenting, there is never feedback,” stated Shannon. Shannon discussed how being a stay-at-home mom can be “isolating” and that she looked forward to eCoaching as an opportunity to engage in dialogue around her facilitation of play with Nick. Shannon also remarked on how I could pick up on stuff she did not initially observe and explain how facilitation goals were connected to her individual child’s behavior. This dialogue was a positive experience for Shannon, who saw eCoaching as “professional development for parenting.”

Child’s Play Behaviors

Shared by Shannon and observed by me, Nick demonstrated a heightened level of interest in pretend play and was proficient in exhibiting several pretend play behaviors independently. However, Shannon’s gradual infusion into Nick’s play through eCoaching highlighted areas where a change in play behaviors was observed. Aligned with Shannon’s goal to capitalize on the writing interest, Nick demonstrated increased incorporation of wiring into pretend play inside and outside eCoaching. Nick also showed a moderate increase in his ability to incorporate verbalizations, vocabulary, assigning absent attributes, and sequences into his pretend play. Many of these increases were related to Shannon’s presence in pretend play with Nick. Shannon desired to capitalize on Nick’s new fascination with writing. Before eCoaching, Nick was not incorporating writing into his play. Within session three, Shannon and I brainstormed ways writing could be incorporated into some play interests Nick demonstrated recently (e.g., sharks, pets). Writing was observed in eCoaching sessions four, where Nick led his mom in a make-up game, and session six, where Nick and his mom pretended to be writing and delivering mail. Furthermore, Shannon shared play outside eCoaching where she was able to prompt Nick

to include writing in his play. For example, Shannon shared instances where Nick and his brother created menus when playing “restaurant,” combining Nick’s love for pretend play and a new interest in writing. In her post-interview, Shannon noted growth in Nick’s writing development throughout coaching. Shannon attributed this growth to my suggestions, serving as a scribe for Nick and capitalizing on Nick’s general interest.

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Shannon’s presence in Nick’s play also demonstrated an influence on language use during pretend play. Throughout eCoaching, Nick did show moderate increases in his use of verbalizations and vocabulary when engaging with his mom in pretend play (see Table 17). Nick was particularly good at incorporating themed language into his pretend play. For example, when playing “hospital,” he used words such as “patient,” “healthy,” and “doctor.” Nick’s increase in verbalizations was attributed to his need to vocalize imaginary worlds he was engaging in with his mom. When playing independently, Nick rarely engaged in verbalizations as he was the only

player in a scene. However, when with his mom, Nick had to communicate these ideas with another individual. For instance, when creating an office, Nick vocalized where "doors" were located and how the "workers entered the building." These ideas would not be initially apparent to Shannon without the language context provided by Nick. In another interaction, while planning a "zoo" and utilizing object substitution with MagnaTiles™, Nick stated, "let's pretend this part is hay for them." These pretend play interactions offered multiple opportunities for Nick to use language to communicate abstract ideas within pretend play.

Table 17

Nick's Instances of Pretend Play Behaviors

Observation	1	2*	3	4*	5*
AAA	3	9	0	15	43
Sequences	31	0	44	8	42
Verbalizations	16	23	31	21	41
Vocabulary	2	8	5	5	16

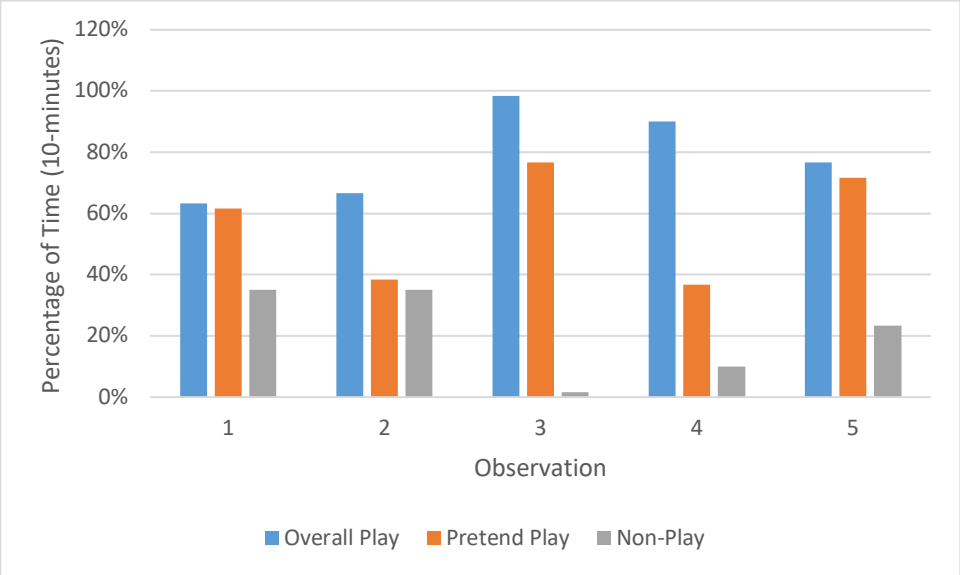
Note. * = mom engaging in play; during observation five, Nick requested that Shannon come play on the floor while starting independent; AAA = assigning absent attributes. Observations lasted 10-minutes made up of 60 10-second intervals.

Nick's natural affinity for pretend play was observed in a pre-observation video of pretend play shared by Shannon. Pretend play accounted for 97% of Nick's play behaviors as he imagined he was on a "mission" within a "military base" built out of boxes. Figure 13 highlights Nick's continued interest in pretend play throughout eCoaching. While initially, Nick's ratio of pretend play behaviors was highest when playing independently (observations one and three), by the final observation where Shannon was invited to play (observation five), Nick again showed an increase in his ratio of pretend play behaviors. Even when given a toy not intended to foster

pretend play, Nick would create his scenario. When playing a *Bugs in the Kitchen* game, Nick forwent rules and moved the bugs around in a created scenario on the gameboard.

Figure 13

Nick's Play Behaviors on the Play Observation Scale (POS-A)



While Nick demonstrated all the pretend play taxonomy categories in his pre-observation video, he showed moderate growth in assigning absent attributes and sequences over eCoaching (See table 17). Nick was comfortable assigning roles during play, but he was also utilizing emotion in his characters. Still, by the post-observation, he was encouraged by prompting provided by Shannon in the fifth observation. While making a character voice with a Hatchimal™, Nick claimed, "Hatchimals™ are not always grumpy, but they sound grumpy."

Nick also increased the utilization of sequence in his pretend play. Sequences were most closely associated with pretend play that involved a theme (e.g., hospital, office workers). These scenarios also contained figures or stuffed animals. Consequently, despite Nick's initial strengths in pretend play behaviors, eCoaching demonstrated a nuanced way Shannon's participation supported Nick in specific areas.

Conclusion

Initially drawn to eCoaching through the creativity and engagement Shannon was noticing in Nick's pretend play. Shannon saw eCoaching as a way to benefit her support of Nick's play. During debrief conversations, Shannon leveraged personal reflections of her own experiences, observations, and comparisons related to her two sons to develop her understanding of Nick's pretend play. Ultimately, Shannon was able to couple her knowledge of play throughout eCoaching to sharpen her ability to observe her son's behaviors and interests. Shannon also demonstrated the ability to generalize her knowledge and understanding of pretend play to a context outside of eCoaching involving Nick's upcoming surgery.

The developed knowledge of pretend play allowed Shannon to excel at setting goals for herself during eCoaching. Initially, Shannon was limited in directly facilitating Nick's pretend play due to restricted access to pretend play with Nick. Nick served as a "gatekeeper" to Shannon's opportunities in play. Perhaps, for this reason, Shannon's goals focused on writing in a way isolated from engagement within pretend play. Over time, Shannon was invited to engage in pretend play with Nick, albeit mainly parallel; as these interactions increased, more group play was also demonstrated between Nick and Shannon. This entrance into pretend play allowed Shannon to infuse facilitation to extend Nick's play's knowledge and construction (e.g., investing in writing, supporting language).

Shannon's demonstrated knowledge, understanding, and facilitation of pretend play did exhibit shifts in Nick's behaviors as well. Vocabulary and verbalizations were expressed more over time and particularly when Shannon was playing alongside Nick. Moderate increases in the behaviors of assigning absent attributes and pretend play sequences were also observed. Nick also found ways to incorporate his interest in writing directly into his pretend play through

Shannon's guidance. While Nick's pretend play behaviors were being expressed well before eCoaching, Shannon's incorporation into Nick's play demonstrated benefits unique to Nick's needs and Shannon's inherent interest and appreciation for pretend play.

Case 2: Kristin and Harris

Mother and Child Background

Kristin was the mother of Harris, a four-and-a-half-year-old with an IEP for a developmental and speech-language delay. Kristin's experiences with early childhood intervention services and previous roles as a teacher afforded her familiarity with coaching practices. Kristin described herself as being open to feedback if it was constructive and positive. After engaging in the first session, Kristin noted that she did acquire in-depth information on play-based learning related to her background in early childhood education. As a mother to Harris, Kristin communicated values in providing her son "love above anything else." She also described herself as a competent caretaker with a wealth of knowledge in nutrition and development. Kristin's educational background was an anchor within eCoaching conversations where she connected to best practices and theory such as Vygotsky's zone of proximal development. When Kristin sought advice in parenting, she mentioned appreciation for her mother-in-law's input, who spent most of her time with Harris. She also conversed with friends with kids of a similar age to Harris. Kristin mentioned several sources such as social media, blogs, and google searches to influence her parenting knowledge. Topics of these media sources include speech-language support, early childhood development, and nutrition.

Kristin described her eldest son, Harris, as "fun-loving," "active," and exhibiting "lots of energy." Harris was naturally drawn to play and showed curiosity about the world around him. Kristin stated that Harris has excelled with counting and writing. "He is good at remembering

and memorizing things like that," remarked Kristin. Harris was very social, and his play interest gravitated towards superheroes, animals, and sports. Kristin did note that Harris tended to lean into "fighting" interactions with superheroes or animals. In play, Kristin said that Harris would readily try anything put in front of him, although certain play objects can hold his attention for longer periods. Kristin described crafts as an area that Harris did not have much stamina around.

Over the past year, Harris had undergone a couple of life events that his mother believes have resulted in more tantrums. The family recently moved to a new city, Harris welcomed a baby brother, and COVID-19 had changed the families' social routines. Kristin noted that these tantrums were typically a result of being told "no" or frustration with not being understood due to his SLD. In addition to sometimes needing to restrain Harris in a "bear hug," Kristin worked on several strategies to support Harris's regulation of emotions, including deep breaths and calming down in his room. Kristin noted improvement as she continues to stay calm and not react during Harris's moments of frustration. Lastly, while COVID-19 has decreased Harris's social interactions, Kristin cited an improvement seen in her son's independent play abilities.

Mother's Understanding of Play

From the start, Kristin's background as an early childhood educator provided her a lens through which to see the value of play in her son's development. Kristin's main areas of growth related to her understanding of pretend play's direct correlation to influencing the learning goals she had for her son's speech-language delay. She could use her background as an educator and be responsive to her son's interests and the natural environment when planning pretend play opportunities. Lastly, over the course of six coaching sessions, Kristin became more attune to observing the behaviors of Harris during his pretend play and used that knowledge to set future goals she believed would enhance his overall pretend play experiences.

Kristin's value in play-based learning was evident in her interview responses and eCoaching conversations. "I believe that play is the most important thing for children to do," remarked Kristin in her pre-interview. Kristin saw play as supportive of how children interact and communicate with other kids (e.g., turn-taking, conflict resolution, problem-solving), build knowledge, engage creatively, and increase their overall language abilities. Kristin shared an example of the influence of these skills in play through a scenario anecdote where Harris created a structure with blocks and would fall. In contrast, this outcome would previously upset Harris; now, his emotional management skills have supported his reaction in these scenarios. Kristin encouraged the use of open-ended play through her selection of play materials in the home. "I am not into toys with batteries," Kristin mentioned in her pre-interview. Kristin felt like open-ended toys afforded Harris opportunities to be creative and contributed to an "infinite number of scenarios" in play.

A focus in eCoaching conversations was Kristin's desire to focus on learning goals through natural interactions. For example, when discussing play scripting to promote pretend play vocabulary and sequences, Kristin rejected the intervention favoring of a more natural approach that she applied in-between eCoaching sessions. Instead of a formal play planning session, Kristin engaged in a natural discussion with Harris on their walk home from the park. In discussing their plan for play together, the pair proceeded to incorporate vocabulary (e.g., skyscrapers) into their block building, which resulted in a superhero play sequence. In session two, when promoting language through a prompting hierarchy, Kristin noted that focusing on more than one term resulting in increased prompting during play which frustrated Harris. Consequently, Kristin transitioned to a focus on a target term related to Harris's natural interest. This shift towards a natural strategy implementation was observed during a play session where

Kristin focused on the singular term of "drawer" in a cash register play scenario. Kristin was able to discuss this personalized application of an intervention and modeled its implementation. In another play session where Harris gravitated towards colors and shapes, Kristin used the strategy of prompting to encourage language in those areas based on her son's interest.

While Kristin still used Harris's playtime to multitask on household chores (e.g., cooking, cleaning) or taking care of her other son, she mentioned increased intentionality in the post-interview. She focused on the moments where she was able to play with Harris. Kristin saw play as an opportunity to expand Harris's language, vocabulary, use of complete sentences, and articulations. At the same time, Kristin had an initial appreciation for play's benefits within young children's learning. Her post-interview indicated more appreciation for how play, particularly pretend play, could aid in language and empathy. She also connected these ideas to expand Harris's "mindset of what play can be" through the use of characters and elaboration within a scenario with those characters. In her post-interview, Kristin explained:

> It is just always in the back of my head how…like the goals of play for him is to use his imagination, build his vocabulary, and work on these skills. So, I am just thinking g about ways I can enhance it and be a little bit more deliberate…I am more deliberate with what I am trying to get out of him.

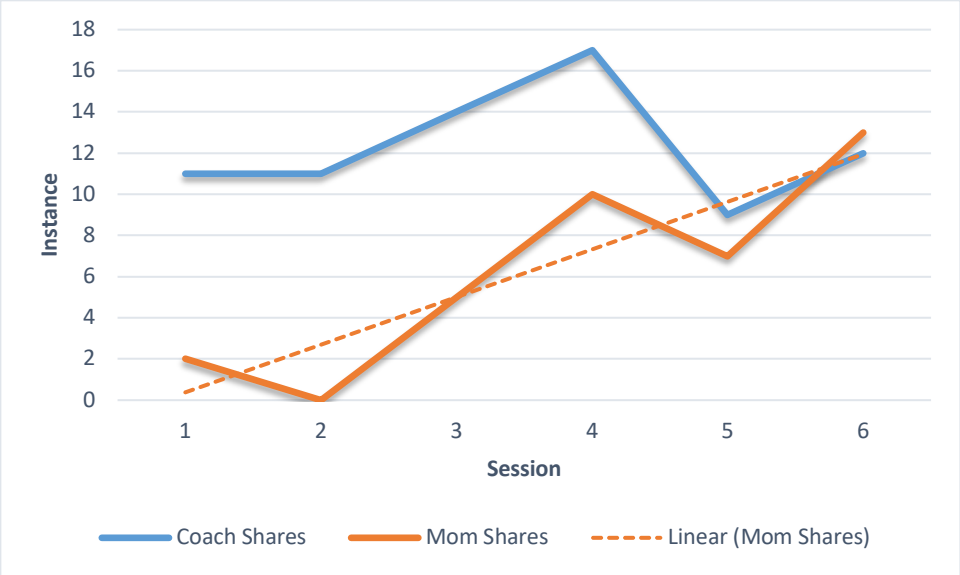
While Kristin had described an affinity towards play-based learning, this remark was a deliberate indication of her role in play-based learning alongside her son. The focus on language and elaboration was also connected to Kristin's constant awareness and concerns in terms of her son's speech delays.

Kristin's growth in personal knowledge was reflected in eCoaching conversations throughout six sessions. During initial debrief conversations, I carried the weight of identifying

evidence of facilitation outcomes through examples I observed within the independent and facilitated play. This facilitation was done by making connections to what was observed and generating potential ideas for play facilitation. For example, in session one I modeled this practice by stating, “At one point… you were like, ‘where do you think this train is going?’…as soon as he identified this train is going to Michigan or New Zealand it incorporated all these other language elements [to play]” By session four, Kristin initiated examples related to observations of Harris throughout the week by sharing anecdotally during debrief conversations. For example, in session five, Kristin shared, “I think that he has gotten more verbal and using sentences and describing words once we have started the pretend play.” This example highlights the shift in Kristin’s intentional observations of Harris’s play and the influence of pretend play on language goals she held for her son. A change in Kristin’s contributions to eCoaching conversations in terms of evidence is highlighted in Figure 14. Kristin and I’s contributions in identified evidence of play behaviors and facilitation are accounted on the figure. By session six, our identifications were nearly equal. In reference to observed assigning absent attributes, Kristin identified in session six, “kind of with the voices…we do the emotions. Like ‘errr!,’ but not necessarily saying I am mad.” Within pretend play, Kristin was also able to identify object substitution and imagine absent objects examples in her observations of Harris’s play during session six.

Figure 14

Kristin's Sharing during eCoaching Debrief Conversations



Concerning the pretend play taxonomy, through collaborative conversations during eCoaching, Kristin increased her ability to identify pretend play behaviors related to Barton and Wolery's (2008) taxonomy. In the final session, an image outlining each of the categories or pretend play was shared. Moving through each of the categories, both myself and Kristin were able to identify instances where Harris had demonstrated that nuanced pretend play behavior. Kristin was able to identify Harris's strengths with object substitution. She also noted that she had seen increases in Harris's ability to assign absent attributes. Imagining absent objects were also seen by Kristin in play outside the eCoaching observations. Kristin provided an example where Harris was shoot lightning and saying, "I am Thor, and I have lightning!" The indication of examples outside eCoaching sessions indicated an increased awareness of pretend play outside scheduled eCoaching sessions.

Setting a goal was an important aspect of the eCoaching framework, and this was another area where Kristin took on more independence as the eCoaching progressed. Debrief

conversations were coded to identify instances where myself or Kristin set the goal for a subsequent session. Goals set by Kristin were further coded as being "sure" or "unsure." An unsure goal set by Kristin embedded an appeal for confirmation from myself. For example, when prompted on a potential next step in session two, Kristin responded, "I don't know, is it to get him to actually use [vocabulary] or should we be changing it to more sentences?" When prompted to identify something she wanted to work on in play with Harris, Kristin responded, "I don't know," during sessions one and two. By session four, Kristin independently set her own goal following an eCoaching play session and debrief conversation. As a goal in session five, Kristin suggested, "so come up with a clear story for pretend play for next time." Over time, Kristin and my role in goal setting took on an inverse relationship regarding who was taking the lead in setting the next steps and goals within eCoaching.

Even after setting a goal, Kristin was further able to elaborate on how she would facilitate that goal's outcomes. For example, Kristin remarked that she would like to see Harris "elaborate the story behind the play scenario" within session four. Kristin proceeded to connect a facilitation role she could play to support the promotion of elaboration with Harris. She explained that this could look like "setting up more beforehand. Where are we? Give it just a little bit more background…" By the fourth session, Kristin was also using her experiences and knowledge in early childhood to expand on the ideas of pretend play facilitation. Building off one another's ideas is an important component of the eCoaching framework. Kristin and I were able to collaboratively arrive at a goal that would lead to subsequent sessions. The back-and-forth between us involved expanding on one another's ideas, connecting ideas to previous conversation points, family structures, child observations, and linking goals to pretend play or early childhood research. Kristin's knowledge of pretend play allowed her to incorporate

multiple facilitation skills when developing goals in eCoaching. A trajectory of goals collaboratively created throughout six eCoaching debrief conversations are outlined in Table 18.

Table 18

Trajectory of Coaching Goals for Kristin and Harris

Session	Goal Set	Kristin's Facilitation Topic	Harris's Behavior Topic
1	Kristin will focus on modeling, prompting, and praising the use of at least two vocabulary terms during Harris's play.	Model Praise Prompting	Vocabulary
2	Kristin will push Harris to use more specific words in his play instead of "here" and "this."	Model Prompting	Verbalizations Vocabulary
3	During Harris's pretend play, Kristin will use a combination of narrations with a gradual release of prompting to promote higher levels of language and pretend play (e.g., roles or emotions).	Questioning Prompt Model	AAA (emotions) Sequences
4	During Harris's pretend play Kristin will use a combination of narrations with a gradual release of prompting to promote higher levels of language and pretend play (e.g., roles or emotions).	Prompting Narrations Gradual Release	AAA (roles) AAA (emotion)
5	During Harris's play, Kristin will model, narrate, and prompt play behaviors to help Harris consider how he can incorporate a "story" or "sequence of events" into his play.	Model Narrating Prompting	Sequences
6	As Kristin is engaging in play with Harris, she will look for opportunities to expand his pretend play behaviors. She will use the knowledge of where Harris is independently and where he may need more modeling support.	Observation Modeling	OS AAA IAO Sequences Verbalizations Vocabulary

Note. AAA = assigning absent attributes; OS = object substitution; IAO = imagining absent objects.

The engagement in eCoaching provided an opportunity for Kristin to utilize her acquired understanding and knowledge of pretend play outside the realm of eCoaching. In her final session, Kristin discussed her concern around socialization as Harris moved into kindergarten. Kristin stated, "he has to be more deliberate with his character. Not just egh ha" as she gestured fighting seen in the observation with Harris's action figures. Kristin mentioned that she knows

things may change post-COVID-19 and when Harris is back in school, but she hopes to continue learning with the new baby.

Mother's Facilitation of Pretend Play

Kristin's background in early childhood education afforded her multiple points of knowledge in terms of pretend play. Still, there were several areas where she demonstrated a shift in her intentional interactions with Harris during play. Kristin increased her use of indirect play supports to expand Harris's cognitive behaviors during pretend play. Over time, Kristin did demonstrate an incremental increase in her 'good-fit' interactions with Harris during their play together.

Before coaching, Kristin described instances where she would provide Harris behavior-specific praise and encouragement to move play away from fighting scenarios. "I facilitate sometimes when I am not a fighter…just to get him off the fighting sometimes, and he thinks it is funny," remarked Kristin. Kristin also noted differences she has observed in other children, particularly a girl peer who "wants to make-believe more elaborate play scenarios and [Harris] doesn't do that as much." The most frequent play need Harris demonstrated was related to "thinking and constructing knowledge." During a pretend play session with a cash register, Harris took the opportunity to ask his mom what several components of the toy were (e.g., drawer, counter beads). Kristin's used a combination of indirect and direct responses to address Harris's needs during play. As eCoaching proceeded, Kristin relied less on direct supports, instead opting for a fully indirect method of addressing Harris's need. These responses were frequently used in pretend play. In one instance, Harris moved a rhino figure back to where he wanted it within the pretend play scenario. Kristin remained in character as Spiderman™ and responded to Harris's request with the response, "oh rhino, get back in the zoo." This indirect

response allowed the pretend play to continue and reinforce the goal aimed at Harris's development of more complex scenes and the use of characters.

Furthermore, Kristin utilized indirect supports to impose suggestions for more complex play behaviors in her son. Kristin used a camel figure to jump "really high" over a zoo wall they built, and Harris smiled before getting up to get SpidermanTM to serve as a character used to catch the camel escaping. These interactions served as a way for Kristin to encourage elaboration within Harris's play sequences. The most frequent use of indirect supports came in the form of language as one of Kristin's top developmental concerns for Harris, who often used non-descriptive words (e.g., there, here, this). For instance, when building a structure, Kristin pushed for elaboration through language by asking, "what are you putting there?" The child responded with the terminology "roof." This language provided an opportunity for Harris to practice descriptive language and related to identifying his blocks in an instance of object substitution.

Within initial eCoaching sessions, mother-initiated suggestions towards elaborating play were typically rejected by Harris. For example, when Harris and Kristin played with two figures, Harris exclaimed, "now we fight!" Kristin responded, "I don't want to fight you. I'm your friend." Harris responded by taking his mom's figure and throwing it down. Kristin picked up the figure and asked. "…why are you so mad? We have to save the city." Following this prompt, Harris used his figure to knock down the structure and get another figure to start fighting with opposite of his mom's play facilitation. Kristin's ability to respond to Harris's play interest developed through the utilization of observation. For instance, when playing with dinosaur figurines, Kristin attempted to encourage the utilization of characters by taking a "mother" dinosaur and exclaiming, "baby, where are you going?" Harris responded by taking the figure out of his mom's hand and putting it back in the structure. After taking 26 seconds to observe

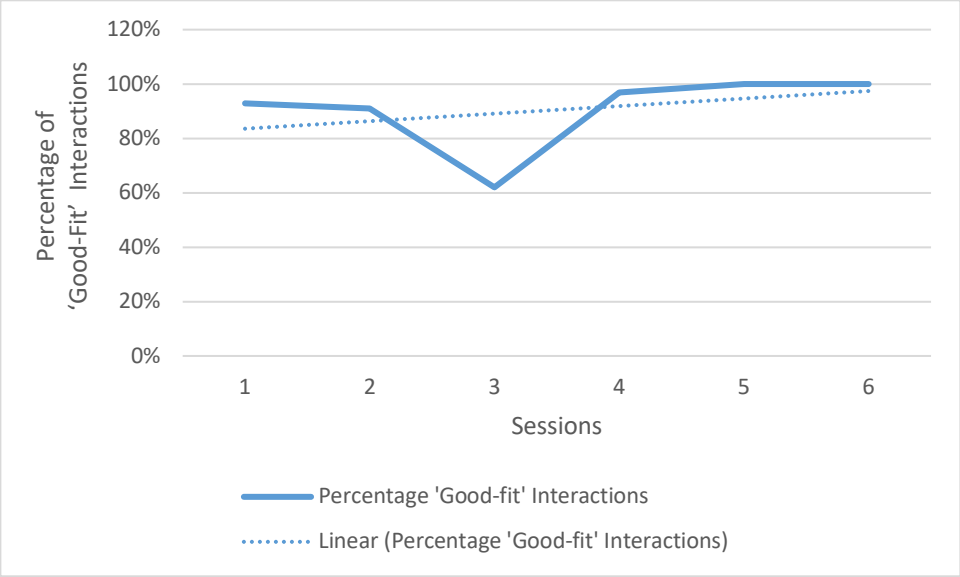
Harris's play intention, Kristin shifted her suggestion to a scenario of eating "lunch" in the structure. Harris accepted this suggestion by Kristin.

In contrast, by the last session, Kristin again took on the role of an animal character escaping the zoo. Instead of an initial rejection of the play suggested by his mom, Harris engaged with his mom's character by suggesting how they could escape. These interactions eventually progressed to Harris handing his mom a Hulk™ figure to play with inside the pretend play scenario and stating, "now do Hulk." Related to this growth, Kristin noted that Harris benefited from feeding "off of my modeling," as she also indicated a noticeable progression in Harris latching on to her suggestions during play in her post-interview.

When looking at Kristin's facilitation of play, 96% of her interactions with Harris in her initial observation were deemed to be a 'good-fit' on the integrated, responsive model. While this was a high baseline, she was still able to increase this percentage over the course of eCoaching to reflect 100% 'good-fit' interactions in her final two observations with Harris (see Figure 15). An outlier in Kristin's 'good-fit' interactions occurred in session three (62%). This low percentage may be attributed to the play materials selected by Harris for that session. He opted to play CandyLand™ and required multiple supports to access the game. Kristin tried to rely on indirect prompts, but these supports proved unsuccessful in play that involved a game-with-rules. Higher percentages were more aligned with play based in pretend scenarios.

Figure 15

'Good-fit' Interactions During Kristin and Harris's Play



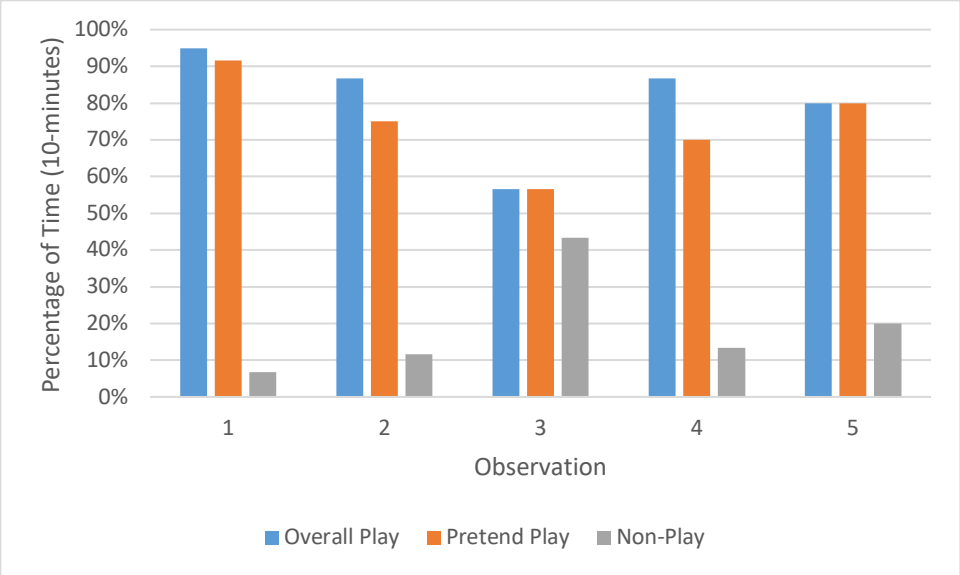
Overall, Kristin noted that the facilitation goals created through eCoaching were "pretty simple" and "super easy to implement." Kristin also mentioned that it was nice to have someone watching the play and "see what we are doing." During her post-interview, Kristin rated the relationship formed with the coach and the overall coaching process as "excellent." In terms of recommending eCoaching to a peer, Kristin noted that some individuals "may be more open than others" and contrasted individuals who prefer formal and informal types of development.

Child Play Behaviors

While Harris's ratio of time spent engaging in pretend play remained constant (see Figure 16), the growth appeared in the type of pretend play behaviors he was incorporating into his play.

Figure 16

Harris's Play Behaviors on the Play Observation Scale (POS-A)



Harris demonstrated growth in several areas of pretend play behaviors in terms of vocalizations, vocabulary, assigning absent attributes, and sequences. These behaviors increased throughout eCoaching and increased in frequency when aided by his mother's facilitation. As described by his mother and observed by me, Harris gravitated towards fighting-based pretend play independently and with others. Harris demonstrated increased verbalizations and vocabulary during pretend play throughout six eCoaching sessions with goals focused on modeling, narration, and prompting of language and pretend play (see Table 18). Specifically, related to pretend play, Harris demonstrated both assigning absent attributes and sequences for seven intervals (one minute, ten seconds) in his pre-observation video. These behaviors were more frequent when playing alongside his mother but moderately present in independent play as well (see Table 19).

Table 19

Harris's Instances of Pretend Play Behavior

Observation	1	2*	3	4*	5
AAA	0	42	33	35	38
Sequences	7	42	33	38	43
Verbalizations	7	39	21	29	12
Vocabulary	0	13	1	5	3

Note. * = mom engaging in play; AAA = assigning absent attributes. Observations lasted 10-minutes made up of 60 10-second intervals.

In terms of language, most vocabulary and verbalizations were associated with a play session where Harris and his mom took turns playing "restaurant" with a cash register. The language involved discussing types of food that were and were not available at the "restaurant." In comparison, Harris's pre-observation included no vocabulary and minimal verbalization (six instances). His post-observation after eCoaching increased verbalization by 100% and utilized vocabulary (ex. evil, sea monster). Growth in both verbalization and vocabulary within pretend play are highlighted in Table 19. Following eCoaching, Kristin did note that she had observed growth in Harris's language and ability to come up with complex scenes and scenarios that involved character development. Additionally, Kristin identified a benefit to pretend play as the opportunity for Harris to talk more and practice his language.

Lastly, there was an increase in the utilization of roles (assigning absent attributes) after the second eCoaching session. Initial play behaviors focused on superhero roles. In the fourth session, action figures took on the roles and dialogue related to making food, rebuilding buildings, protecting animals in a zoo. Even a post-eCoaching independent play video, while not completely void of fighting, Harris did indicate that some characters were "friends" in a play

scenario he created with animals and superheroes. Even so, the use of assigning absent attributes present in the post-observation was not apparent in the independent play sample before eCoaching (see Table 19). Increases in overall language may have also allowed pretend play ideas, such as assigning absent attributes, to become more observable. Within this post-observation, Harris demonstrated the ability to incorporate a sequence of events in his independent play, where 12% (pre-observation) and 70% (post-observation) intervals on the POS-A involved a sequence of events.

Generally, pretend play ideas were present when Harris played alongside his mom and aided by modeling, narration, and prompts. For example, when playing "restaurant" with a cash register, Kristin modeled first a sequence of ordering food, preparing food, taking money, and serving the food. When it was Harris's turn to be on the cash register, he mirrored his mom's sequences and imagined absent objects in the form of money.

Conclusion

Overall, the partnership between Kristin and myself consisted of collaborative discussion, which contributed to outcomes connected to Kristin's understanding, knowledge, and facilitation of pretend play with her son. Kristin incorporated her knowledge of early childhood learning and routines that were natural for her parenting style. Kristin's advanced understanding of educational concepts provided an initial affinity towards play-based learning; eCoaching lent itself to an increased appreciation for how pretend play could leverage various language goals she had for Harris. Initially, the growth observed within eCoaching was not inherently apparent to Kristin; however, over time, she became more aware of the growth Harris demonstrated in pretend play and independently identified these behaviors inside and outside of eCoaching.

Kristin took these observations and was then able to self-identify goals for Harris's learning and ideas for facilitation.

The eCoaching process and Kristin's facilitation also demonstrated growth in pretend play sequences, verbalizations, vocabulary, and assigning absent attribute behaviors for Harris's independent and mother-facilitated play. Over time, Harris became more accepting of his mother's suggestions during play and ultimately relied on less direct support (e.g., promoting language, character roles). This play partnership between Harris and Kristin ultimately resulted in more 'good fit' interactions. Kristin was responsive to Harris's needs, and Harris was more accepting of Kristin's promotion of play concepts that incorporated scene elaborations. Additionally, the play partnership created through eCoaching allowed Kristin to infuse more language into Harris's play. The incorporation of language was an important goal for Kristin throughout eCoaching because of Harris's speech delays. Ultimately, eCoaching with Kristin supported her concerns around language, specifically through behaviors associated with pretend play.

Case 3: Laura and Mae

Mother and Child Background

Laura worked full-time in a school-based administrative role, and her educational background included a bachelor's in psychology. With her husband, Laura cared for their three children, including their four-year-old daughter, Mae. In addition to Mae, Laura had two sons, two-years-old and six-month-old, who made up their family of five. Laura identified an appreciation for admitting where you have gone wrong and apologizing as a parenting strength for herself. She also believed in her adherence to a parenting style that supported her children in valuing their emotions and feelings. "I want to strive to be responsive, like 'gentle parenting'

because my nature is very Latina. Like, 'stop doing that right now!' kind of thing," expressed Laura.

Laura described her daughter, Mae, as "companionate and kind." Sharing that Mae had taken on a "motherly" role with her younger siblings during COVID-19 to support her parents' working from home. Mae's interest leaned towards the arts and dance. Laura shared that Mae tended to learn by "doing" and described Mae as an auditory learner. When trying something new, Laura expressed that Mae is often shy and will look towards her mom for approval until she gains confidence. These feelings often lead to Mae requesting to hold Laura's hand to request Laura to follow her when entering play with her peers. Laura added that Mae often becomes "frustrated when she does not get something right the first time." Laura described Mae as "sensitive" and frequently observed hurt feelings being expressed when Mae played with peers who did not want to take her lead. During these times, Laura tended to support Mae's expression of her feelings and social problem-solving skills. Laura described Mae as having a "type-A" personality, which can often lead to disagreements with peers.

During eCoaching, Mae was attending a half-day preschool that was engaging in virtual learning. Laura shared that Mae was eager to get back to school. Mae's parents had connected with a small group in their church where Mae could engage in unstructured play during the pandemic. However, Mae was keen to get back to a structured environment through school-based learning and play. Mae also missed other community involvement activities that she engaged in before COVID-19 through the park district. Despite the reduction of social interactions available to Mae during COVID-19, Laura did feel like the weekly interaction with a church small group aided Mae's social-emotional needs. Collectively, the transition to virtual learning, introducing a baby brother, and fear of getting sick induced from COVID-19 were

identified as Mae's major life events by Laura. Laura shared that Mae was reading at a Kindergarten level, and at the moment, she had no developmental concerns for her daughter.

Mother's Understanding of Play

Laura's understanding of play adhered to her admiration for social-emotional competence and specifically emotions and independence. Before and during eCoaching, it was difficult for Laura to connect her prior knowledge of social-emotional learning and pretend play. While Laura was able to identify some pretend play elements, this did not prove consistent throughout eCoaching and led to multiple misconceptions that ultimately impacted observational data. An effort to address this disconnect occurred at the mid-point of eCoaching, where a more direct approach was utilized. An interaction in session four resulted in incorporating some pretend play and Laura's ability to identify immediate benefits to Mae's play behaviors. Ultimately, Mae's interest in crafts and Laura's hesitancy towards pretend play resulted in a struggle to connect eCoaching goals to pretend play.

While Laura's background was psychology, she expressed a desire to understand what was developmentally appropriate for her daughter's age. In her pre-interview, Laura shared, "I am not a psychologist or preschool teacher," adding interest in knowing what is "normal" or "okay for her to do" for her age. Laura described prior knowledge in the benefits of play aligning mainly to social-emotional learning outcomes. To develop her knowledge and understanding around parenting interactions with her daughter, Laura primarily turned to social media and specific accounts she followed on Instagram™. When asked to reflect on the role of play in Mae's development, Laura identified play as having the "highest priority." Specifically, Laura felt that play supported Mae in identifying "boundaries." For Laura, "boundaries" related to the identification of what Mae "can and cannot" do, and this typically involved how much of a

"mess" she could make or the type of play that was allowed. Laura shared that she did not like the idea of pretend play involving "doctors" due to its focus on "body parts." Laura also tied these "boundaries" to Mae's interactions physically and emotionally with her peers during play. Within her pre-interview, Laura did not identify any initial knowledge or understanding of pretend play's benefits.

While Laura's identification of learning outcomes and pretend play were not represented in the pre-interview, she identified play components that she categorized as pretend play. Laura elaborated on a scenario Mae recently engaged in with her Grandfather. Mae was playing "school" and used a blanket to represent a "bookbag" and imagined another student who had "pinched her." When it came to sharing a pre-observation video of Mae's pretend play, Laura selected an instance where Mae was using kitchen items to make an invented "recipe". Mae's behaviors, while open-ended, related more to constructive play as opposed to pretend play. This trend continued into eCoaching, where Mae and Laura often engaged in "games with rules" and crafts. During the second eCoaching debrief, Mae used "hairdresser" props on her mom while talking. Even after using the "hairdresser" opportunity and other ideas (e.g., house, Barbies™) to prompt Laura on pretend play, Laura and Mae still trended towards crafts during observations.

As a more direct intervention during session four, I interrupted the pair to suggest a pretend play scenario that could be included. The suggestion led to Laura and Mae engaging in a "jewelry store" scenario where Mae was the "worker" and Laura was a "customer." Following this prompted pretend play interaction, Laura shared that the pretend play-based scenario "allows [Mae] to communicate more, think outside the box, and …goes more towards, 'okay, let's do this together'." The statement demonstrates Laura's identification of how play behaviors could vary depending on the type of play. Laura reflected by sharing, "I always forget we can do

something fun – like pretend play." Following a discussion of pretend play research and practices related to communicating with peers, Laura shared, "now that you say that, I have to do that a lot more. Just dialoguing with her. Just trying to help her with how to see things." The following reflection demonstrates an initial connection to the social-emotional goals Laura had for Mae.

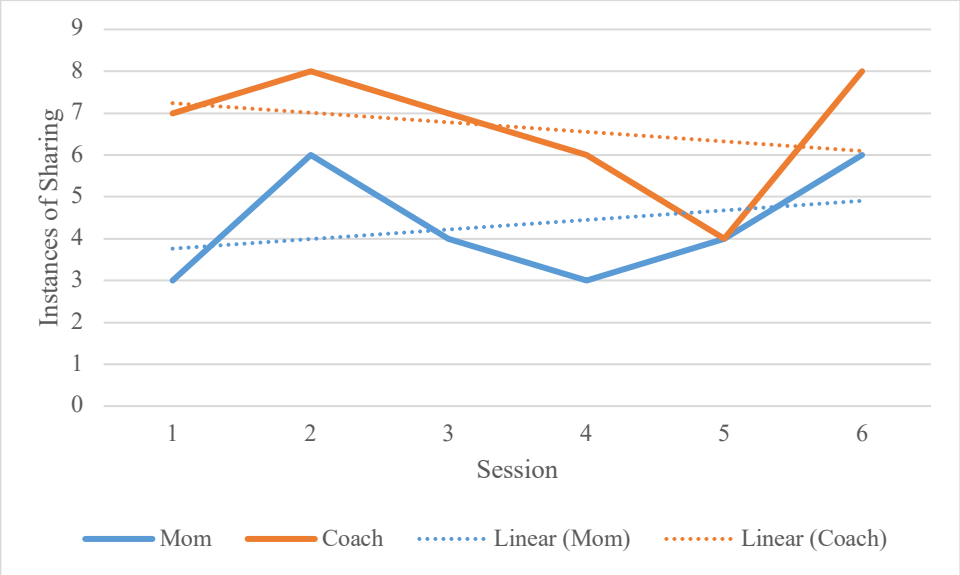
In the following eCoaching session, Laura began to process her new understanding of pretend play to incorporate into existing activities the pair enjoyed doing together. Laura shared that the incorporation of pretend play could "extend the time of the craft" versus just painting, which Mae tended to finish quickly. During their latest craft opportunity, Laura shared an instance outside eCoaching, where she was a customer and asked Mae, can you "help me find the blue paint?" Laura shared, "pretend play has allowed us to increase that time and just incorporate the next scenario." Another thing that Laura and Mae enjoyed doing together was testing products Laura was tasked with providing feedback on. Laura took this task and developed a pretend play scenario the pair could engage in where Mae was the "tester" and Laura was the "facilitator." Laura also felt that these interactions would allow Mae to expand on what pretend play could be by "increasing her awareness. It is not just doctor or house, but it can be other things."

The increase in Laura's ability to share observations, inside and outside eCoaching, related to pretend play is shared in Figure 17. There was an initial increase in sharing that occurred following the fourth eCoaching session and into session 5. However, the increased willingness to share also exposed misconceptions in Laura's understanding. To address misconceptions raised by Laura, my instances of sharing increased to counteract Laura's misconceptions in session six. While these actions demonstrated some increase in Laura's ability

to overlap pretend play into everyday practices, the generalization was not replicated in the final eCoaching session. It may have ultimately led to misconceptions in Laura's understanding of pretend play.

Figure 17

Laura's Sharing During eCoaching Debrief Conversations



Despite the inability to directly observe pretend play with consistency during eCoaching, pretend play concepts were represented in debriefing conversations. By session six, Laura had begun to relay data she had observed related to Mae's pretend play behaviors outside the eCoaching session. Laura identified play involving a "veterinary role" and "school" and an increased desire by Mae to include Laura and her husband. My inability to directly observe pretend play with consistency potentially led to misconceptions around pretend play during eCoaching with Laura. Within session six, Laura began to speak to pretend play as more of a "role play" task. After playing a game where Mae lost and became upset, Laura connected pretend play by sharing the idea of setting up:

> …a pretend play, so we can do more losing. And I think I want to incorporate more social-emotional pretend play. Like, 'I am mad that you said you are not my friend anymore.' Those are some of the things that she is experiencing…help her pretend play, like role play.

Expressions, the one above, highlight Laura's disconnect that social-emotional learning could occur within pretend play and not as a sole topic. The statement also highlights the misconception that good pretend play takes the adult's lead rather than the child's lead. I attempted to connect to early childhood learning, pretend play research, and Laura's personal experiences to account for the perceived disconnect related to pretend play. In session five, I attempted to decrease my use of connections as Laura expressed more reflection around pretend play observations to promote independence.

Ultimately these connections were unsuccessful at shaping Laura's understanding. In her post-interview, Laura expressed wanting to set up negative experiences with Mae as "pretend play." The realization of greater misconceptions in session six resulted in an expedited increase in connections as a way for me to mitigate Laura's understanding. Unfortunately, the underpinning of Laura's misconceptions towards pretend play within eCoaching did not come until the final session, making it difficult to address. The incremental interventions and supports used to manage Laura's pre-existing knowledge and understanding of pretend play ultimately proved unsuccessful. The conversations connecting new learning in Figure 17 highlight the disconnect between Laura and myself in terms of knowledge and understanding of pretend play.

Within her pre-interview, Laura did not directly share a goal she had for Mae's pretend play stating she had "none." In terms of play, Laura spoke to addressing the social-emotional skills of confidence and independence in Mae. Laura also wanted Mae to feel "that she could

come to me and I won't yell at her if something is not working, or she is asking a question." Without a direct connection to pretend play goals in Laura's pre-interview, a relation to "independence" was incorporated into eCoaching to apply those ideas to pretend play and develop Laura's knowledge and understanding. Those ideas lent themselves to modeling, questions, and positive reinforcement as we tried to establish a line of goals related to pretend play, which became present in session four. The trajectory of eCoaching is outlined in Table 20. By her post-interview, Laura was still unable to describe a pretend play-based goal she had for Mae. Instead, Laura shared that she hoped to create more of a "yes space" for Mae speaking to an idea of child-led play grounded in Mae's interest while not specifically citing pretend play.

Table 20

Trajectory of Coaching Goals for Laura and Mae

Session	Goal Set	Laura's Facilitation Topic	Mae's Behavior Topic
1	When playing with Mae, Laura will encourage her participation and thinking by asking questions instead of directly giving her the answer when possible.	Questioning	Verbalizations
2	When Mae is playing, Laura will spend the first few minutes playing alongside her daughter and using modeling and questions to encourage independent thinking and problem-solving.	Model Questioning	Problem Solving
3	Laura will continue to model and prompt Mae's play. At the end of the play session, the mom will discuss with Mae something that she did well related to perseverance and independence.	Model Prompt Positive Reinforcement	Independence
4	When working with Mae, Laura will look for ways that Mae's interest in crafts can also involve a pretend play scenario.	Prompt	Sequences Verbalizations
5	Laura will help Mae act out a pretend play scenario of her interest from a movie or book. Laura will continue to use modeling and questions to support the retelling and sequence of this play.	Prompt Modeling Questions	Sequences Verbalizations AAA
6	When engaging in pretend play with Mae, Laura will continue to use questions, narrations, and processing time, to target areas of need for Mae's social-emotional development. These include assigning roles, emotions, compromise, and what to do if you do not get your way.	Questioning Modeling Prompts Wait time	AAA Verbalizations Compromise

Note. AAA = assigning absent attributes.

Mother's Facilitation of Play

In terms of pretend play, Laura saw her role as an observer and tokened Mae's grandfather as the primary pretend play partner for her daughter. In the moments when Laura was pretend playing with Mae, there were indications that Laura was utilizing her role as an observer to facilitate 'good-fit' interactions that involved taking Mae's lead in play. When conflicts did arise, Laura was quicker to find an avenue towards a resolution throughout eCoaching. However, the open-ended structure of the Trawick-Smith and Dziurgot (2010)

‘goodness-of-fit model’ was difficult for Laura to internalize as she desired more direct and tangible supports.

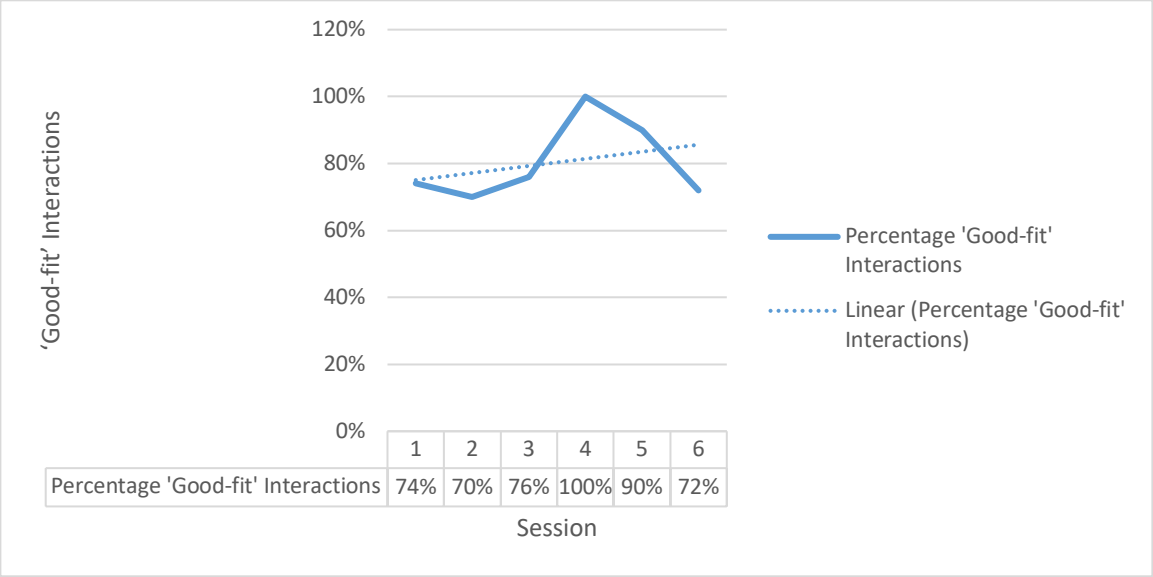
Before eCoaching, Laura found herself in a mainly monitoring role of Mae’s play as she was multi-tasking in her work and caretaker role. The focus mentioned in this monitoring role revolved around Mae not “making a mess.” When Laura was engaged with Mae, it was often to troubleshoot a conflict that Laura saw as supporting Mae’s independence and understanding of emotions. Laura shared that typically her interactions involved trying to “give [Mae] an understanding of what is happening in front of her so she can eventually do that on her own.” In supporting Mae’s emotional development, Laura shared an instance where she used the prompt, “I know you are probably sad right now because she doesn’t want to play with you,” followed by choices of how Mae could elect to resolve her feelings. Not outlined in either of these scenarios shared by Laura were observation and cues gathered from Mae’s experiences. It was not until session four that Laura’s actions shifted to following Mae’s lead in the session as a product of pretend play. Laura shared her evolution towards observation during a post-interview. Laura reflected that she had “become a little bit more observant on what Mae likes to do and what she doesn’t.” Laura remarked on making time daily to play alongside Mae. “This is a moment we decided we are going to play, and I trust mom has proven nothing is going to interrupt us,” speaking to Laura’s ability to focus entirely on Mae. Laura also noted that “when I am there and involved, [Mae] is more focused.” Unfortunately, pretend play was not central to these facilitation goals and still resided in the background of how Laura played with Mae.

Observations allowed Laura to demonstrate efficiency in her ability to resolve the needs expressed by Mae during play. In previous observations outside of pretend play, Laura would not use the practice of observation to adjust her support, leading to directly completing a task for

Mae or increased frustration on the part of Mae. The shift towards purposeful observation was instrumental in the presence of 'good-fit' interactions (see Figure 18). For example, in eCoaching observation four, Laura extended Mae's thinking by asking her to spot the difference between the two sheets of stickers used on bracelets. Mae looked at the stickers but was unable to come up with a response. Laura then held the two sheets side-by-side, where Mae eventually remarked that one was "sparkly." The following interaction highlights an area where Laura observed an extension to learning (i.e., comparing and contrasting) that could be added to their play. The scaffold aided Mae without giving her the answer or invoking frustration that would disrupt the play. Again, in eCoaching observation five, the pair were being "food testers," and Laura posed the question, "how important is it that they have real blueberries or fake blueberries?" Mae looked up at her mom without a response. Laura proceeded to rephrase the question, "do you want real or fake blueberries?" Mae responded to this new prompt. These instances were more representative of supports during pretend play within sessions four and five. The tendency to directly complete a task or provide "knowledge" for Mae resurfaced during session six when playing a board game. Laura reflected on this idea in the post-interview. Laura shared that eCoaching "helped me to identify some of the vocabulary and some of the things that I say that are good to do. That I do not realize that I am saying. That are profitable or not profitable."

Figure 18

'Good-fit' Interactions During Laura and Mae's Play



In the moments when Laura and Mae were able to engage in a pretend play activity during eCoaching, Laura was more likely to engage in 'good-fit' interactions. Within eCoaching sessions, one through three, Mae elected to engage in a game-with-rules or craft. These tasks were outside the zone of proximal development for what Mae could do with support. During these tasks, Mae required a high level of support leading to an influx of "much need" child behaviors in terms of Mae's task completion. An initial reduction of play needs occurred in session two, where an easier craft is selected and goes back up in session three with a craft that requires Laura's instruction. The lowest level of need is experienced in session four when Mae incorporates an independent level craft into "jewelry store" pretend play. During this session, Mae demonstrated three instances of 'much need' and 11 instances of 'some need.' Continuing in pretend play of "food tester" during session five, there was an increase in 'no need' interactions demonstrating access to a task in Mae's zone of proximal development. The final session again goes back to playing a game with rules, and the needs of play again flip where Mae

presented 14 instances of ‘much need’ and 12 instances of ‘some need.’ The changes in Mae’s behaviors based on the activity are important to note because they are correlated with the response her Mom provides during play.

Generally, Laura’s ability to engage in ‘good-fit’ interactions with Mae during play increased moderately throughout eCoaching. The “jewelry store” play interactions yielded 100% ‘good-fit’ interactions, which means that when Mae expressed a need in play, Laura successfully resolved that her daughter’s play need 100% of the time (session four). Within session four, Laura was also able to provide more ideas for extending Mae’s thinking during pretend play. For example, while “shopping,” Laura asked how much an item costs, leading to an exchange of money involving imagining absent objects (i.e., invisible money). The exchange also led to Mae vocalizing a “buy one get one” sale. The influx of extended-play ideas through ’no need – acceptance’ interactions between Laura and Mae speak to greater opportunities for Laura’s facilitation during these instances. Within pretend play in session five, ‘good-fit’ interactions reduced but remained above where they were in session three. When a game-with-rules was once again introduced by session six, ‘good-fit’ interactions regressed to below their initial levels. The regression of ‘good-fit’ interactions and increase of ‘much need’ child behaviors advocates for the influence of Laura and Mae’s activity topic during play and ‘good-fit’ interactions.

The presence of ‘good-fit’ interactions within pretend play also ushered in Laura’s opportunity to take Mae’s lead in play. While Laura held the “knowledge” during games and crafts activities, Mae constructed the “knowledge” during pretend play. For example, in both sessions four and five, Mae was the one to set the characters for the scene. When engaging with Laura as a “food tester,” Mae stated, “call me ‘Sally’” as a prompt to take on an alternate identity

in the play. Within pretend play, Mae took the lead in expressing imaginary elements. By contrast, Laura demonstrated more comfort with playing games or doing crafts.

To follow Mae's lead, Laura often resisted her impulse to control the play throughout eCoaching. Laura shared in the fifth debrief conversation, "I can't respond too quickly because then she takes on my expression. I have learned that it is okay to have silence. That is hard for me." These opportunities to take Mae's led were represented with a greater frequency in pretend play due to the reduction of "much need" behaviors in Mae, meaning there were more "low stakes" concepts Laura could take a secondary role in continuing the activity. For example, when purchasing a bracelet at the "jewelry store," Mae said it would cost "ten cents." Laura clarified, "cents or dollars?" and again, "the coins?" Mae insisted on "cents." Laura proceeded to take Mae's lead and exclaimed, "okay, that is a deal!" as opposed to clarifying a bracelet should cost more. While pretend play was not observed in session six; Laura remarked on pretend play activities outside eCoaching that had occurred. Laura shared, "we let her lead it…she just wants to lead everything." Laura further shared this can be difficult when Mae wants to role-play a television show her parents are less familiar with. During these scenarios, Mae will exclaim, "that is not the way that you are supposed to say it." These examples highlight the strengths and challenges experienced by Laura when facilitating pretend play with Mae.

In terms of the eCoaching process, Laura shared that it provided a "sense of accountability." However, Laura also expressed a disconnect with the open-ended format of eCoaching. Ultimately, Laura shared that she wanted more direct instruction in items like if-then scenarios or lists of specific supports. Laura also wished to elicit negative responses during sessions to apply ideas for intervention in the moment. Both within and throughout eCoaching, it was difficult for Laura to make cross-content connections between facilitation and pretend play.

For this reason, the key takeaways for Laura revolved around the appreciation of one-on-one time with Mae and the importance of following Mae's lead in what she called a "yes space." It would have been beneficial for Laura to have more direct instruction on what pretend play was and the ability for me to model more directly that pretend play to aid her cross-content connections.

Child Play Behaviors

Mae was heavily reliant on others during play. This reliance lent itself to an openness towards play facilitation; however, the inability for pretend play to be observed consistently during eCoaching influenced the amount of growth that could be directly attributed to Mae. Despite the disconnect in pretend-based play, Mae demonstrated instances of pretend play behaviors during observations, proving she was capable of this level of play. Mae did also demonstrate an increase in overall play behaviors throughout eCoaching. Additionally, initial levels of growth observed during eCoaching seemed to remain in a post-observation video that was weeks removed from the final eCoaching session indicating the potential of maintenance.

Laura shared in her pre-interview that Mae did not like to engage in play independently relative to experiences seen in her younger son. Laura shared that Mae preferred "assistance" where she could "interact and be goofy" with someone. To achieve this engagement with others, Laura shared Mae will play with "literally anyone who wants to play with her." Within a debrief in session two, Laura conveyed:

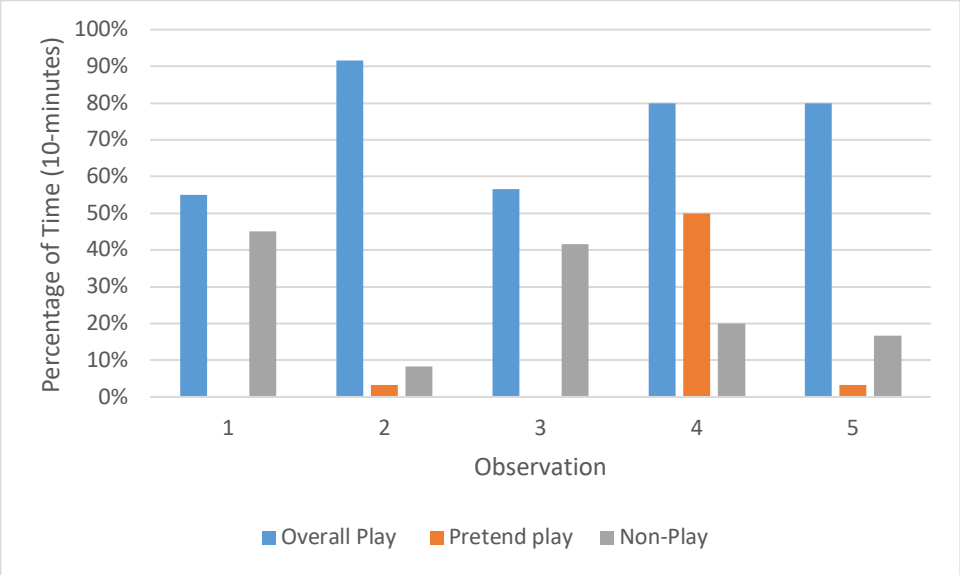
> She is more willing to go through her activity if I am involved in it. She is likely to continue playing. Whereas if I dismiss her and I am like, 'go play by yourself' or something like that, she will stop playing. Whereas if I am playing with her, she will engage for a longer period of time.

The one-on-one play was a particular preference of Mae. However, Laura shared that Mae can often become overstimulated in these one-on-one interactions, which Laura attributed to increased attention. To calm Mae down in these moments, Laura shared, “we would have to hold her and have eye contact to have her actually chill.” In her post-interview, Laura shared that she felt Mae’s demeanor had shifted to being “calmer and more trusting” during one-on-one play.

Laura’s participation in eCoaching did influence the presence of increased play behaviors. Figure 19 demonstrates an increased presence of play behaviors during child-based observations (Observations two and four). The number of intervals that consisted of pretend play is called out in Figure 19. Following the eCoaching session four, pretend play was accounted for in Mae’s fourth observation. Observation two was equally representative of a high presence of play intervals where Mae and Laura played go-fish together. While 12 weeks removed from the last eCoaching session, the final observation maintained some of that stamina for play through the game of Twister™. In her post-interview, Laura reflected that it was “harder for me to send 10-minute videos for some reason.” This barrier may have been related to Mae’s need for interaction to sustain 10 minutes of independent play. Consequently, Mae’s relied on a play partner, meaning that Laura was present for all observations, either directly playing (observations two and four) or indirectly facilitating (observations one, three, and five). Laura mentioned some independent pretend play with Mae in her post-interview, but still a preferred play partner in her Grandfather.

Figure 19

Mae's Play Behaviors on the Play Observation Scale (POS-A)



While specific pretend play behaviors were difficult to produce with Mae, Laura verbalized pretend play behaviors she saw Mae engage in during the day. When playing "school," Mae was able to imagine absent objects (i.e., students) and employ object substitution (i.e., a blanket as a backpack). I observed pretend play behaviors during activities that utilized 'games with rules', but they were often short-lived. For example, in eCoaching session two, Mae waved the "wand" object in the air and exclaimed, "bippity boppity boo!" This object substitution and verbalization were not connected to the play activity at the time. Object substitution was again represented in a post-observation video shared by Laura; Mae again used object substitution when she grabbed a box and claimed it was a trophy for their Twister™ game. These instances indicate that Mae was capable to pretend play behaviors. Mae's observed pretend play behaviors are outlined in Table 21.

Table 21

Mae's Instances of Pretend Play Behaviors

Observation	1+	2*	3+	4*	5+
AAA	0	1	0	30	0
OS	0	0	0	0	2
Sequences	0	0	0	30	0
Verbalizations	0	0	0	21	0
Vocabulary	0	0	0	5	2

Note. * = mom engaging in play; + = mom present during play; AAA= assigning absent attributes; OS = object substitution. Observations lasted 10-minutes made up of 60 10-second intervals.

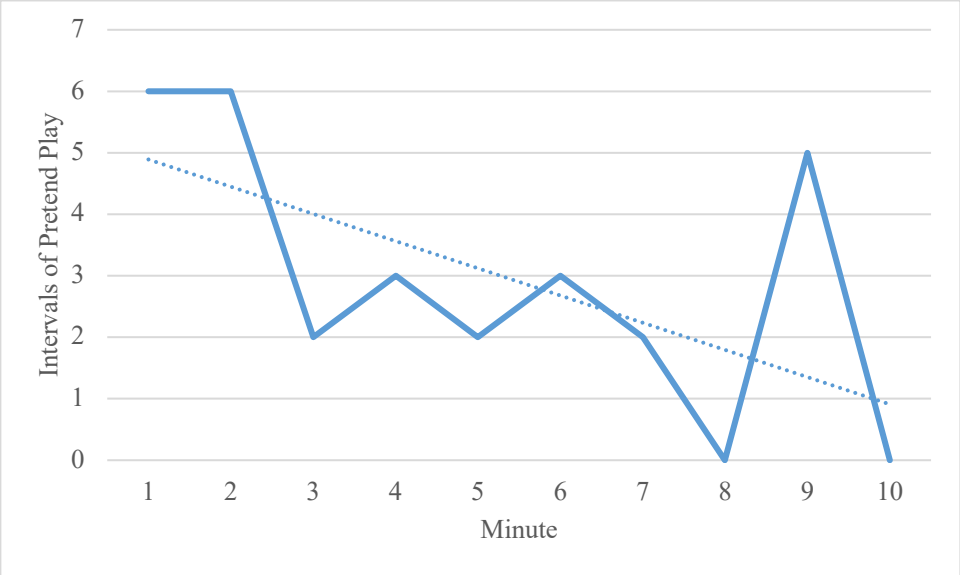
Following the direct approach to promoting pretend play in session four, Mae began to engage in longer pretend play sequences. When the idea to play "jewelry store" was suggested by myself, Mae exhibited excitement and immediately agreed to the scenario. Mae engaged her mom through the play scenario and even led moments of the play regarding character names and dialogue. In the next eCoaching session, Mae again engaged in a pretend play scenario with her mom related to being a "food tester." Similarly, in this scenario, Mae took a lead role. For example, when her mom called her "ma'am," Mae responded, "not ma'am, Sally," expressing her desire to take on a character name. During dialogue with her mom, Mae could also incorporate vocabulary related to the pretend play scenario (e.g., tasty, freezing).

Pretend play also lent itself to sustained play behaviors for Mae. Within the fourth observation, Mae demonstrated engagement play for 63% of play intervals (eight minutes), with 32% of intervals (five minutes) consisting pretend play. Engagement is defined in intervals in which Mae actively participates in actions related to Smilansky's (1968) play behaviors. Ultimately the pretend play sequence was disjointed and progressively dissolved until minute

nine, where they resurfaced when her mom began asking “food taster” questions again (see Figure 20). Moments when pretend play was not occurring were frequently represented by conflict with her mother (e.g., not wanting to sit in a chair) or exploratory behaviors that did not connect to the “food tester” role (e.g., looking at her mom’s phone). In her post-interview and the final eCoaching debrief, Laura mentioned that Mae was pretend playing more with individuals other than her Grandfather. However, I could not confirm these behaviors, and the 10-minute post-video shared was again not pretend play-based.

Figure 20

Mae’s Intervals of Pretend Play in eCoaching Session Five



As mentioned, the post-video shared was 12 weeks removed from the final eCoaching session, making it hard to connect to the intervention itself (observation five in Figure 19). However, the video does show that Mae was able to maintain her engagement in play and directly incorporate an object substitution (i.e., trophy) into the Twister game in a way that demonstrated a direct connection to the task at hand. This use of the “trophy” was also a behavior Laura acknowledged within the play instead of the “wand” action introduced in session

two, which was ignored. Within this observation, Mae was able to engage in play 83% of the time (nine minutes). This example contrasts with her pre-observation, where represented play accounted for 55% of the time (five minutes, 50 seconds).

Conclusion

In the end, eCoaching was praised as a positive experience by Laura even without direct attainment of pretend play-based goals. The encouragement to play alongside her daughter allowed Laura to enhance her observation skills and attune to her child's interests and behaviors during play. Through eCoaching, Laura seemed to latch onto Mae's interest in craft-based play, making it hard for eCoaching conversations to focus on topics outside those behaviors. Without the ability to directly observe pretend play between Laura and Mae, it was challenging to bridge an understanding of pretend play for Laura. The reliance on Laura's observations outside eCoaching relied heavily on the perspective of pretend play that I was unable to align with directly during eCoaching conversations.

Despite this, Laura was able to grow in her ability to facilitate play with her daughter. Eventually, Laura and I could brainstorm a way to capitalize on Mae's interest in crafts and pretend play. By session four, Laura was both participating and describing more interactions of pretend play in Mae. Laura also increased her ability to facilitate 'good-fit' interactions with Mae, which were more present during pretend play scenarios. Even with the success of facilitation based on decisions, Laura still felt the need for more direct and circumstantial strategies based in the moment. The push for generalizing skills, such as questioning and modeling, may have been a stretch for Laura during eCoaching.

Finally, through eCoaching, Mae demonstrated an increase in her ability to sustain play behaviors. The engagement was particularly high when the play activity was in Mae's zone of

proximal development. Pretend play during these moments of engagement also led to the presence of sequences and vocabulary in play. One of Laura's biggest takeaway was the value expressed by Mae in the opportunity to play with her mom even for 10-minutes. This play between Mae and Laura became a part of their daily routine. The daily practice of deliberate play may have led to Mae's play engagement and Laura's enhanced observation skills.

Case 4: Rebecca and Amelia

Mother and Child Background

Rebecca was a young single mother co-parenting three-and-a-half-year-old Amelia with her daughter's dad. Rebecca worked full-time as a social worker, and Amelia split time between her parent's houses. Rebecca received support from her parents, whom she lived with while raising Amelia until this last year. As a younger mom, Rebecca related most closely with her national Mom's Facebook™ group. Rebecca shared that parenting encouragement was easier with individuals "closer to being in my generation." Citing that things are a "little bit different now," than when her parents were raising her. While engaging in eCoaching, Rebecca hoped to grow her understanding of play, mentioning that eCoaching was "more for me than [Amelia]." Rebecca desired to know how she could be better involved with Amelia during play and avoid "leading" her. Rebecca was looking to learn more "tools" and different "tricks" to engage with her daughter.

Amelia was an only child from a culturally diverse family. Amelia spoke three languages (i.e., Spanish, Estonian, and English), with her home language being English. Rebecca described Amelia as "funny, sweet, silly, and smart." Rebecca also remarked on Amelia's tendency to be "sassy" and willing to tell you if she does not like something. Rebecca noted that Amelia tended to shut down if an activity did not go her way. Amelia also frequently struggled to incorporate

other's ideas into her play. By contrast, Rebecca remarked that Amelia's immersion in a co-parenting family had made her "adaptable." Rebecca had seen evidence of this adaptability in Amelia's ability to transition between her parents' houses and amid COVID-19.

Amelia attended a full-time preschool where she played with children her age, but she typically played by herself or with adults outside of school. Even at the playground, Rebecca noticed that Amelia gravitated towards older children. Amelia was open to all types of play but particularly loved pretend play. Her favorite activities at Rebecca's house included playing with her kitchen set, barn animal set, and geometric blocks. Rebecca noticed Amelia begin to emerge herself in pretend play and even incorporate ideas influenced by the media she consumed (e.g., Scooby-Doo™). One type of play Amelia had struggled with was games-with-rules. Rebecca reminisced on playing Candyland™ and observing Amelia struggle with the structure of a rule-based game. Rebecca noted no developmental concerns for Amelia.

Mother's Understanding of Play

In developing her understanding of pretend play, Rebecca leveraged her personality traits and experiences. Rebecca had experiences with a wide range of children (birth to 18) through her involvement as a social worker, she desired a more comprehensive understanding of her daughter's age group. While initially an anchor for learning, Rebecca eventually began to astutely observe Amelia's play and utilize her newly acquired knowledge of pretend play in early childhood to account for the development of social-emotional learning outcomes she had for Amelia. This learning trajectory eventually led to goal setting for both herself and Amelia when engaging in pretend play post eCoaching.

Even before eCoaching, Rebecca expressed high regard for play and particularly open-ended play. One way Rebecca supported these ideals was through her selection of toys for

Amelia. “I don’t want [the toy] to tell you what to do,” she shared in her pre-interview. Rebecca expressed an appreciation for how play lent itself to problem-solving with peers, learning to take-turn, and be “socially appropriate.” Rebecca felt that Amelia’s open-ended block materials at home promoted a similar level of problem-solving and creativity. Rebecca remarked how the generic peg people in Amelia’s toy collection could lend themselves to various roles (e.g., teacher, sister, Grandma). In her post-interview, Rebecca added in the influence of play, particularly pretend play, to support Amelia’s “vocabulary” and “speaking ability.”

As a social worker, Rebecca was inherently comfortable with asking open-ended questions of Amelia during pretend play. Within a debrief conversation, Rebecca directly recalled a lecture during her time as an undergrad. When reflecting on the role of questioning with Amelia, Rebecca shared, “…there has just been a lot of work on that during my career…it has just flowed into this. I can’t not do it!” However, Rebecca noted that she did not feel equipped for questioning one-on-one and with children of her daughter’s developmental age.

To bridge this understanding, Rebecca continuously drew on her preexisting knowledge as a social worker and her personality traits as a mother. In reflecting on her current knowledge base during session three, Rebecca remarked, “You get a lot of knowledge, but you need a lot of practical knowledge.” Rebecca used coaching to develop a more practical application of her existing knowledge and apply it to pretend play. For example, when promoted to reflect on a line of questioning used in pretend play with Amelia, Rebecca noted, “I know that she has already decided it, but I feel like I need to ask before I say.” This realization spoke to Rebecca’s internalization that in pretend play, much of the thinking was occurring in Amelia’s head, and questioning provided a way for Rebecca to open Amelia up to group play and avoid assumptions that may upend her play.

Leading into sessions five and six, Rebecca began incorporating her personality into how she used pretend play questions. When working to develop Amelia's group play, Rebecca noted that she had discovered a new way to prompt in session six. She referenced this prompting as a way to break Amelia's grasp on control as an attempt "to kind of be, not a meanie, but kind of push her." The "push" incorporated prompts that would encourage Amelia to consider other players' ideas and needs. This reflection highlighted Rebecca's own self-described, sassy personality as she developed her knowledge and incorporation into Amelia's pretend play.

Initially, I took ownership of guiding the conversations within eCoaching debriefs in order to connect pretend play to goals for Rebecca and Amelia. Over time, modeling and gradual release allowed Rebecca to have more of a voice in the debrief conversations around her observations in play with Amelia. Two areas that Rebecca communicated around in her final two sessions and post-interview with independence were group play and sequences in pretend play. Rebecca became instrumental in sharing observations she had made throughout the week. Rebecca shared a particular evolution she was noticing in Amelia's play. Within session six, Rebecca noted:

> She started giving little personalities and stories to play. Whereas before, it wasn't really. It was just like, 'oh, I have a doll to carry around.' But she would not really do much with it. Whereas now she has her Bitty Baby™, and before she would carry it around or push it in its stroller for a little bit. But now she wants to change its clothes for bed; now we are going somewhere, so we have to put on a nice outfit…so starting to… not like an attention span but kind of like that.

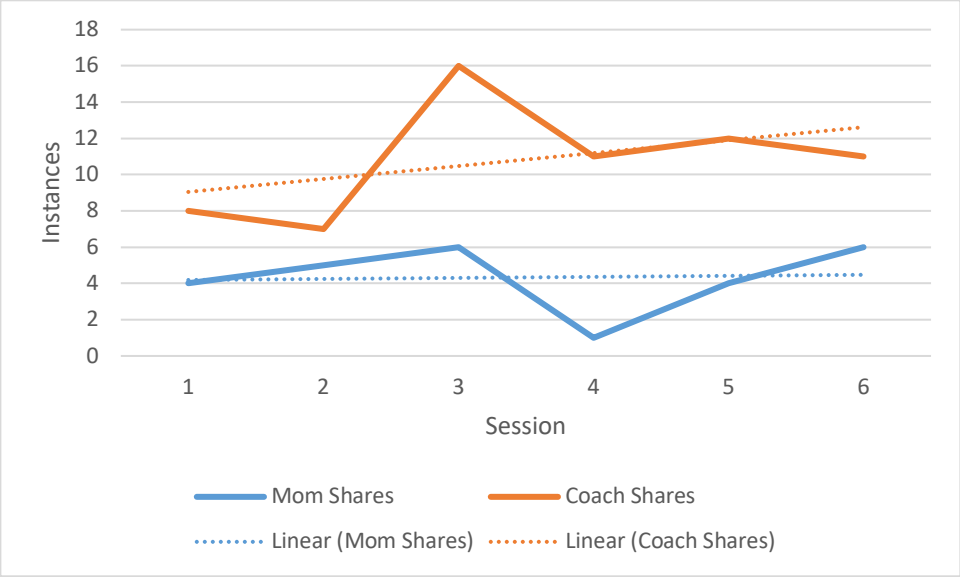
Through continued conversations, a connection to pretend play sequences was made and Rebecca was able to apply this terminology as part of her knowledge and understanding of

pretend play being observed in Amelia's daily behaviors. Rebecca related this to a social-emotional concern she shared in terms of an increase in group play behaviors. This understanding was further reinforced in the debrief of session five, where Rebecca reflected on an instance that occurred during the 10-minute observation. Amelia wanted the characters to go to bed, and Rebecca pressed on Amelia's need for control by stating that her character was "not tired." Rebecca shared in her post-interview that playing as a group during pretend play supported Amelia in "learning how to deal with other people's ideas besides herself."

Rebecca's evolution of sharing of observational evidence and facilitation ideas are highlighted in Figure 21. The variability in sessions three, four, and five may be related to a shift in coaching focus and debriefing format. Within session four, conflicts arose with having Amelia present during the debrief. The decision was made to adjust to a debrief the following morning. Additionally, the initial focus on questioning and modeling underwent a shift as Rebecca mastered initial skills and Amelia displayed new needs in pretend play. In session four, Rebecca and I started focusing on Amelia's need for pretend play to be done her way and targeted instances that lead to frustration when Amelia played with her mom. Instances of reflection and observational evidence resumed to previous levels as this trajectory of eCoaching took hold in session six in a way that was at or above where it was at its peak in session three.

Figure 21

Rebecca's Sharing During eCoaching Debrief Conversations



As Rebecca grew in her knowledge and understanding of pretend play, she also developed the confidence and ability to set Amelia's goals based on her observational data. In sessions one and two, I was responsible for modeling this process and setting a facilitation goal. When Rebecca was prompted around setting a goal in sessions three through five, she indicated a level of uncertainty. This hesitancy was evidenced by statements such as, "I don't know I am so bad at this." However, by session six, Rebecca came up with two facilitation goals based on her observation of Amelia's play and her understanding of pretend play elements discussed in previous debriefs. Those two goals related to developing sustained group play and pretend play sequences with Amelia. Rebecca even shared that she had bought Amelia more dolls, Barbies™, and animal figures to encourage some of those character sequences.

Rebecca also shared that she wanted to continue to push Amelia's abilities to incorporate other's ideas into play through some facilitation strategies explored in eCoaching. Rebecca directly connected this to the developmental goals she had for Amelia when she reflected, "it is

better if mom pushes in. You know she can push back towards mom versus a playmate at school. Where if she pushes back [on me], I will not take it personally, but a four-year-old might." This interaction within session six demonstrated an increased understanding of Rebecca's part regarding her locus of control in observing a need and setting a goal for her daughter.

Moving beyond eCoaching, Rebecca also shared in her post-interview that following COVID-19 restrictions and the shift towards greater access to peers for group play, she hoped to continue to evolve her influence on Amelia's play. Rebecca shared that she does not intend to interrupt Amelia's play with others but instead be observant of her play and the larger goals for her daughter's interactions with others. Those ideas and skills are reflected in Table 22 as trajectory goals set between Rebecca and me during eCoaching.

Table 22

Trajectory of Coaching Goals for Rebecca and Amelia

Session	Goal Set	Rebecca's Facilitation Topic	Amelia's Behavior Topic
1	Rebecca will try follow-up questions with Amelia during play to gather more information about her plans and ideas for play.	Questioning	Verbalizations
2	Rebecca will support Amelia's higher-level pretend play skills by looking for opportunities to encourage the use of emotions or feelings in her play.	Model Questioning	AAA
3	In conjunction with questioning, Rebecca will use facilitation questions to narrate what she sees the child doing and throw out ideas that may extend her play ideas.	Questioning Prompt	AAA OS IOA Sequences
4	When Rebecca is playing with Amelia, she will try to connect pretend play scenarios to her child's real-life experiences. Rebecca will then use questions to prompt Amelia to elaborate on what she knows about those experiences to support their play.	Questioning Prompt	AAA OS IOA Sequences
5	When Rebecca is playing with Amelia, she will provide a follow-up idea to a "no" response that the child gives when the pretend play scenarios are not going as planned.	Prompt	Group Play
6	When playing with Amelia, Rebecca will look for ways that she can support social and pretend play interactions through a combination of questions, models, and problem-solving. Currently, mom will focus on supporting child's group play skills and longer/more complex sequences in pretend play.	Questioning Modeling Prompts	Group Play Sequences

Note. AAA = assigning absent attributes; OS = object substitution; IAO = imagining absent objects.

Mother's Facilitation of Play

Throughout eCoaching, Rebecca's role in Amelia's play transitioned from an inherently passive role to more active involvement. Rebecca identified this evolution in addition to observations in a shift from parallel to group play with Amelia. Rebecca was able to use these group play interactions to increase her facilitation of 'good-fit' interactions with Amelia and facilitate play behaviors that addressed the social-emotional needs she identified for Amelia.

When asked to describe her role in playing with Amelia during her pre-interview, Rebecca identified it as "more passive," stating that her main interactions occurred through questioning. "I will ask her questions a lot. And I will try to do follow-up questions to see if I can get maybe a story or something," shared Rebecca. Many of these interactions stemmed from Rebecca's need to multi-task with chores or work while Amelia played. Rebecca mentioned, "I will jump in and out to where sometimes she will ask me to play," but her role remained mainly on the outskirts of play with the utilization of questions.

In her post-interview, Rebecca continued to express the need to multi-task. She added the lens of being an observer of Amelia while she was multi-tasking. This shift reveals more active verbiage in terms of her role in Amelia's play. When reflecting on her role in Amelia's pretend play in her post-interview, Rebecca expressed how her role had evolved to "being more of a participant versus observer now" by making "an effort to understanding what is going on and how to properly communicate with her play-wise." Even in those moments where she was multi-tasking, Rebecca specifically mentioned observing the utilization of emotions in Amelia's play and facilitating those ideas more through play.

During Amelia's pretend play, Rebecca noted that "[Amelia] won't ask me to pretend play with her." Rebecca attributed this to Amelia's need to control the characters and scenarios of the pretend play worlds she created. If Rebecca was invited into pretend play, it served more as a prop for Amelia in things like serving Rebecca "food" from her kitchen set or using Rebecca's knowledge to help her start a play topic (e.g., building something with blocks). Through observations during eCoaching sessions one through three, Rebecca's roles remained primarily parallel. Rebecca and Amelia would share materials, but they would build their structures or use individual figures (e.g., animals or cars). The separation of roles was further

seen in Rebecca's use of "I" language when playing alongside Amelia. For example, when using blocks to make a "home" for animal figures, Rebecca stated, "*I* think *I* am going to…let *me* think..." as she was building a structure separate from Amelia's structure. Amelia similarly mirrored this "I" language. In the same session, when moving her figures within the structures, Amelia stated, "now *I* will put them back in their house." Beginning in session four, some cross-over of play began to occur between Amelia and Rebecca. Within this session, Amelia used a figure to "jump" on the "roof" of a block structure; Rebecca grabbed another figure and responded, "what is the noise up there?" to which Amelia responded, "it is just people." These moments eventually led to the observation of collaborative group play in sessions five and six. In session six, Rebecca and Amelia both worked on using blocks to build a "table" for their Barbies™ and used their characters to engage in a pretend play scenario together. The language between Amelia and Rebecca also began to change with the incorporation of "we" language. During the play, Rebecca communicated, "*we* need to make it bigger" when discussing the size of the "bed" created for their Barbie™. Similarly, Amelia added, "*we* need a home too." The shift in language mirrors the evolution of group play that Rebecca was facilitating.

The play facilitation of Rebecca led to group play becoming a preferred method of pretend play requested by Amelia. For example, in her pre-interview, Rebecca shared a story of pretend play Amelia was engaging in during her bath time with rubber ducks. In this play, Amelia refused her mom's engagement in the scenario. By comparison, in session five, Amelia requested her mom engage by handing her a Barbie™ and saying, "you be Barbie™, and I'll be Elsa." Rebecca also expressed this shift in her post-interview, "in a short time, she moved from more parallel to more group play." These incremental shifts throughout eCoaching were an important component of Rebecca's goals for Amelia's social-emotional behaviors during play.

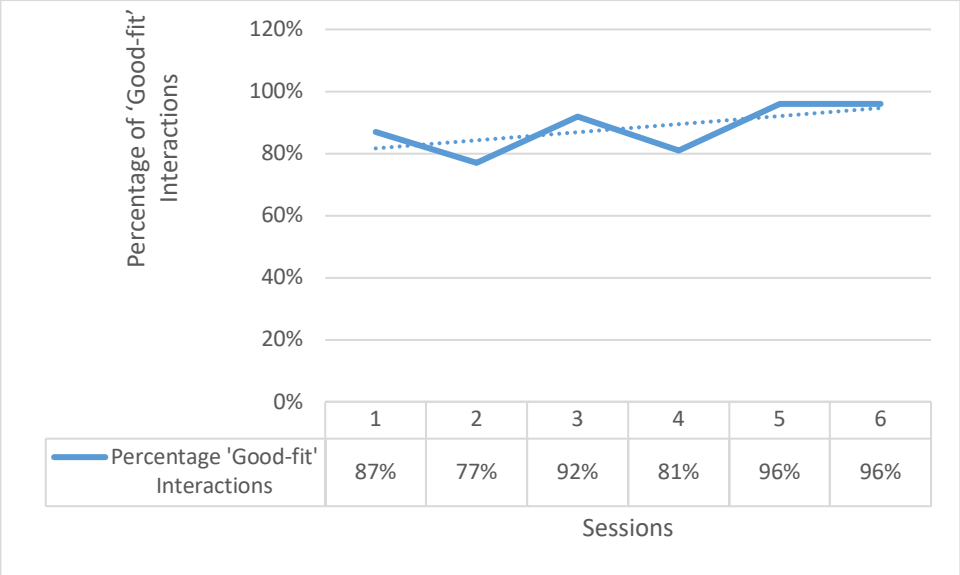
Within her pre-interview and initial eCoaching debrief conversations, Rebecca expressed concern with Amelia's ability to become upset during play, particularly when the play was not going how she wanted. For example, within the initial eCoaching observation, Rebecca began playing alongside Amelia and adding blocks to her "house" structure. Immediately, Amelia responded, "no, no, not like that!" Interactions like this occurred five times within the 10-minute observation. Within these interactions, Amelia expressed a need for knowledge aimed at her mom understanding her pretend play ideas. Rebecca's initial reactions were to engage in Amelia's play directly. Throughout eCoaching, Rebecca recognized Amelia's needs for knowledge in group pretend play and utilized several question stems to elicit a common understanding. For example, in the observation within session two, Rebecca began to play with Amelia by soliciting information through the prompt, "what have we got going on today?" This prompt allowed Amelia to share her existing ideas in the pretend scenario and avoided assumptions on the part of Rebecca. Rebecca expanded to her prompting strategies in session three when her play actions led Amelia to say, "that is not how you do it!" Instead of withdrawing from group play, Rebecca responded, "you show me how to do it instead of withdrawing from group play." This prompt provided an opportunity for Amelia to communicate her idea and allowed the play to continue in a way that both individuals could be involved.

The facilitation of communication strategies to solicit knowledge and understanding from a play partner increased the occurrence of 'good-fit' interactions between Amelia and Rebecca (see Figure 22). Rebecca's 'good-fit' interactions ranged from 77% to 96%. The dip in the trajectory that occurred in session four resulted from engagement-based prompting that occurred as Amelia was distracted by the television during her play with Rebecca. Through eCoaching, Rebecca understood that many of Amelia's frustration behaviors came from a gap in

communication of her ideas within pretend play. As a result, Rebecca was able to leverage her role as a facilitator to prompt Amelia and resolve instances of knowledge barriers in her daughter's pretend play.

Figure 22

'Good-fit' Interactions During Rebecca and Amelia's Play



As 'good-fit' interactions increased, Rebecca was able to use prompting to elicit knowledge from Amelia. Rebecca began to use group play to press on her daughter's need for control in play and support more collaborative behaviors in play. Beginning in eCoaching session five, Rebecca and I discussed utilizing opportunities during pretend play to support Amelia in navigating conflicts in terms of pretend play ideas. Within the fifth eCoaching observation, Rebecca responded to Amelia's expression that it was "bedtime" for the characters. Using her Barbie™ character, Rebecca responded, "I'm not tired," and that her character did not want to go to bed. Amelia responded to this exchange with frustration and exclaimed, "stop!" Rebecca proceeded to abandon this prompt to detour Amelia's control of the pretend play scenario. After brainstorming some alternative responses to these moments of resistance,

Rebecca attempted additional prompts within a similar scenario in session six. Again, playing with Barbies™, Rebecca's character asked Amelia's character if she could "eat." Amelia responded, "no," but instead of abandoning the interaction, Rebecca facilitated an additional suggestion by stating, "maybe a snack?" Amelia again declined this deviation in her pretend play scenario by stating, "no snack!" Rebecca was not deterred and followed up by asking for "water," which Amelia also rejected. From there, Rebecca changed her facilitation approach and used her character to lament, "I am going to have to go find some water for me. I will go find something," to position herself as a co-player in the scenario. Immediately, Amelia invited her mother's suggestion by grabbing an object to hand to her mom's character and consequently expressing, "oh! This can be her bottle." Rebecca's character accepted this "water bottle" object and praised Amelia's play behavior by responding, "good job." Pushes like the one displayed in this scenario served as an important opportunity to facilitate Rebecca's cooperation goal. In her post-interview, Rebecca reflected on her role in facilitating these opportunities with Amelia through play. Rebecca stated, "I mentioned before she was really not willing to compromise much. And now I can kind of push her a little bit and she is able to do so." In connection to pretend play's role in these moments of compromise, Rebecca noted:

> When she does pretend play, she is having to learn how to deal with other people's ideas besides herself. And if in pretend play with others, she has to deal with the story maybe not going quite in the direction she wants it to go. So, for [Amelia], being a little bit more flexible. Being more flexible in her play.

Amelia's growth in the social-emotional goals outlined by Rebecca was resonant of her changes as a facilitator during play and shifted towards an active role in play with her daughter.

Additionally, Rebecca could connect her personality to her facilitation of pretend play in a way that was nothing "fancy or filly." Rebecca acknowledges how the eCoaching model felt "tailor-made" for her personality. Rebecca shared that I, as a coach, served as a "guide in the jungle of parenting." While acknowledging my ability to pick up on ideas she may not have initially been attuned to, Rebecca also felt like the overall learning process was still "led" by her. For Rebecca, relationship and conversation with the coach were a valuable piece of her learning. These feelings were evidenced by her reflection of feeling like an "oddball" in her friend group without kids and older parents at her daughter's school. Rebecca had observed coaching models accessed by individuals she serviced in her profession, but this was the first time she had an opportunity to access coaching. She saw eCoaching as a way to access the learning she lacked in her current social circles. She praised the ideas and tools provided in her while noting the changes seen in herself and Amelia. "It never felt like this is something you have to do, but hey, 'here is an idea.' And I always kind of took it and rolled with it, and we always ended up getting something!" shared Rebecca. In her final debrief, Rebecca shared how a facilitation practice she used with Amelia in the car around "taking turns" with the music transferred to play. This exchange led to Rebecca's observation and facilitation experiences as she began to process additional goals related to sequences and problem-solving with Amelia post-eCoaching.

Child's Play Behaviors

While Amelia demonstrated a high presence of independent pretend play behaviors, incorporating her mother into that play led to an increase in the specific pretend play behaviors Those behaviors related to imagining absent objects, vocabulary, and extended pretend play sequences. Additionally, the willingness to engage in group play, as previously mentioned,

decreased instances of frustration and ultimately increased cooperation when playing with her mother.

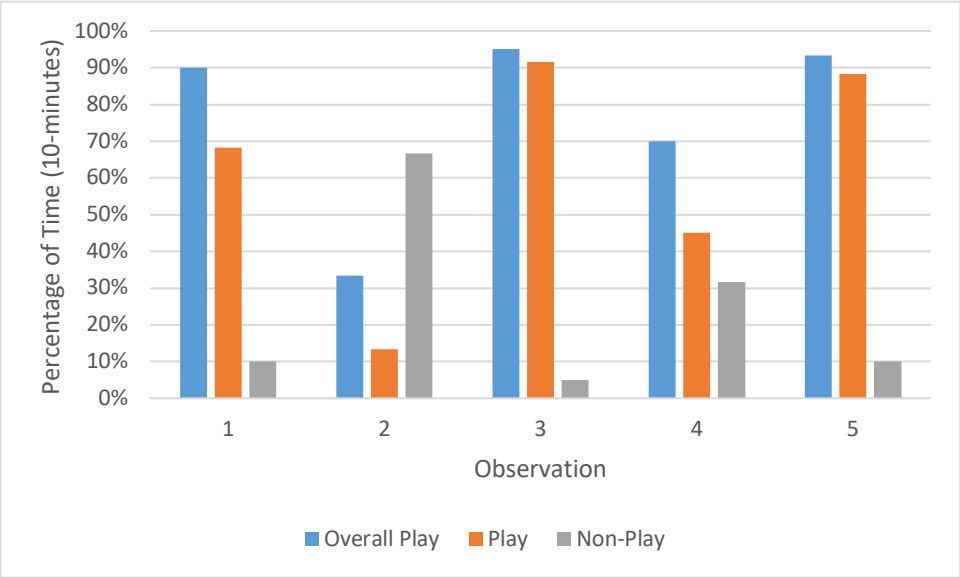
Before eCoaching, Amelia independently engaged in pretend play, most typically through her block materials. Rebecca and I observed that Amelia would build a scene using blocks (e.g., hotel, house, nature park) and interact in that scene with her wooden block figures, which were assigned roles. These behaviors demonstrated object substitution and assigning absent attributes (roles). However, the concepts of higher levels of pretend play behaviors, imagining absent objects and assigning absent attributes (emotions), had not yet been observed by Rebecca.

Amelia demonstrated a natural affinity towards pretend play and was content playing independently. When eCoaching began, Rebecca pushed into playing with Amelia and there was an initial decrease in her previously observed pretend play behaviors (see Figure 23). Observation one captured Amelia's independent play, whereas observation two captured Amelia's behavior in her mom's presence. Of the 60 observation intervals (10-minutes), most of Amelia's time was spent engaging in non-play behaviors during this second observation. This decline was aligned to an increased presence of onlooker behaviors as Amelia became interested in what her mom was doing during their parallel play. These parallel interactions and onlooking often elicited frustration in Amelia, who disagreed with her mom's play actions. For example, when building their house block structure for pretend play in the first eCoaching observation, Rebecca stated that she would make the building "taller." Amelia responded, "no, no, not like that!" and expressed her vision by exclaiming, "you can make it like this." This interaction highlights an onlooker behavior that led to feelings of frustration in Amelia with her mom's insertion into her pretend play and an underlying need for control of the play situation. Onlooker behaviors also lent themselves to a greater focus on what was going on around Amelia during

play compared to earlier observations. For example, during session two, Rebecca created a ramp to use while playing with car figures. Amelia observed her mom's play and narrated, "it is going to go down the slide. I want to try that pink one." In this instance, Amelia's onlooking created an opportunity for a cross-over into play with her mom for a brief instance.

Figure 23

Amelia's Play Behaviors on the Play Observation Scale (POS-A)



Eventually, Amelia's pretend play behaviors resumed as the pair entered more group play interactions beginning in eCoaching session four. In Figure 23, the fourth observation took place during eCoaching session five. Compared to the last child observation with Rebecca present (observation two), there was an increase in the ratio of play behaviors. The fifth observation was intended to be independent, but at this point in eCoaching, Amelia desired to play alongside her mom and requested her presence. However, Rebecca's incorporation in this final child observation aided in demonstrating a return to pre-eCoaching play behaviors observed in the first observation of Amelia playing independently.

During session five of eCoaching, the transition from onlooking to group play is highlighted in a cooperative building activity between Amelia and Rebecca. Rebecca and Amelia were building a house out of blocks for their Frozen™ figures. Rebecca used "rainbow blocks" to make the house bigger, and Amelia responded that she was "going to move her stairs over so that the block home can be bigger." The following example highlights how cooperation also led to more overall play behaviors in Amelia, as she engaged alongside Rebecca. In her post-interview, Rebecca echoed this sentiment, stating that at the beginning of eCoaching, "it was [Amelia's] way or the highway, and there was really no room for someone else. Now she is more collaborative. She is more willing to compromise and go with it." While the child-based observations did not account for social play behaviors, Amelia's cooperation and collaborative play progression are evidenced through the increase in play behaviors observed.

Amelia, rise in play behaviors with her mom during eCoaching in conjunction with targeted goals also contributed to incorporating longer and more elaborate pretend play sequences. In her pre-observation, Amelia moved in and out of two pretend play sequences. One lasted nine intervals (one minute, 30 seconds) involving "school children," and the other lasting 16 intervals (two minutes, four seconds) involving a "family and Grandparents." The two sequences were disconnected from one another and lasted 25 intervals (four minutes and 10 seconds). In her final observation, Amelia self-initiated a sequence that spanned 49 intervals (eight minutes, 50 seconds). In this sequence, Amelia narrated a scenario between a "mom" and "daughter" Barbie™ figure. Amelia did utilize her mom to play one of the figures but was instrumental in developing the play sequence.

Sequences were also present in the times when Amelia was playing with her mom during an eCoaching session. However, these instances often overlapped pretend play building with

object substitution before or during sequence play. For example, in session three, Amelia and Rebecca used blocks to build animal habitats and then engaged in a scene using those blocks and figures (i.e., pigs jumping in a "muddy puddle."). In a third observation, Amelia began independently playing with play-doh and cookie cutters and evolved the play into a sequence where she was a baker and her mom was buying "cookies." Rebecca spoke to this change in play behaviors in her post-interview, citing that she now felt like Amelia was creating "whole scenarios" that were more "in-depth." Speaking of these sequences, Rebecca saw them as Amelia's way of creating a "more three-dimensional world." An evolution of Amelia's use of sequences in pretend play is outlined in Table 23. Observation one was independent play, two and four involved Rebecca on the floor engaged with Amelia in eCoaching. Three and five were led by Amelia, who elected to incorporate Rebecca, who was nearby.

Table 23

Amelia's Instances of Pretend Play Behaviors

Observations	**1**	**2***	**3^{+}**	**4***	**5^{+}**
FP	0	8	0	25	51
Sequences	25	3	54	11	49
AAA	22	3	39	11	46
IOA	0	0	3	0	1
Vocabulary	2	0	19	0	7

Note. FP = Functional play; AAA = Assigning absent attributes; IOA = Imagining absent objects; * = observations for which Rebecca was present; $^{+}$ = observation where Amelia requested Rebecca's participation off camera. Observations lasted 10-minutes made up of 60 10-second intervals.

In addition to pretend play sequences, Amelia also began to demonstrate instances of various behaviors that made up the pretend play taxonomy categories including: functional play,

assigning absent attributes (emotions), imagining absent objects, and vocabulary in pretend play (See Table 23). While Amelia demonstrated instances of assigning absent attributes in her pre-observation, these behaviors were limited to the assignment of roles (e.g., brother, sister, mom). After Rebecca noticed more "character-based language" in Amelia, we created a goal related to emotions to build on Amelia's existing knowledge of assigning absent attributes. In observations four and five, ideas related to characters "crying" and being "sleepy" were observed. These instances help showcase the growth in pretend play behaviors occurring throughout eCoaching.

Amelia also began to add figures to her block play which increased the presence of functional play. For example, her Barbie would "sleep" on a "bed" made of blocks. In initial observations, Amelia exhibited no instances of imagining absent objects until the mid-point of coaching within observation three. For instance, when playing "bakery", Amelia imagined an exchange of "money" with her mom. During her final observation, Amelia created a fictional space to serve as the mom's "office."

Similarly, Amelia increased her use of theme-based vocabulary during pretend play, specifically in observations three and four. The most vocabulary was observed when Amelia was playing bakery and used words such as "customer" and "dollars." Descriptive words were added in observation five (e.g., squishy, emergency) but revolved less around a theme and more to communicate her imaginary world. Amelia's utilization of imagining absent attributes and vocabulary in pretend play observation are highlighted in Table 23. The incorporation of imagining absent objects and vocabulary in pretend play will further lend itself to the creation of elaborate pretend play sequences for Amelia.

Conclusion

Overall, Rebecca's innate ability to question allowed her to gather information to better incorporate herself into Amelia's pretend play. Furthermore, Rebecca could use this skill as a launching off point as she transitioned from a passive to a more active role in Amelia's pretend play. Through eCoaching, Rebecca wanted to target Amelia's ability to cooperate, involve others in play, and use herself once again as a catalyst for this learning. Rebecca and I successfully connected these two areas and outlined the process that served as a framework.

Ultimately, eCoaching provided an opportunity for Rebecca to develop her confidence in her ability to observe her daughter and use play to facilitate learning related to specified areas. While setting goals for herself was not initially easy for Rebecca, by the final session, she confidently vocalized several sequencing and group play goals that she hoped to continue with Amelia. Rebecca was also able to connect the observation and problem-solving process used in eCoaching to outline her thoughts around these goals. As her coach, I praised these skills and reinforced Rebecca's confidence as a young mother.

Rebecca recognized that Amelia was drawn to pretend play naturally. She consequently leveraged this medium of play to target social-emotional learning, group play, and communication goals for Amelia. Rebecca's participation in eCoaching ultimately impacted Amelia's pretend play behaviors in a relatively short period. In addition to increasing her ability for pretend play sequences, vocabulary, and assigning absent attributes (emotions), Amelia also demonstrated new skills related to imagining absent objects and incorporating functional play.

Even as eCoaching ended, Rebecca was already thinking about how she could continue to facilitate more elaboration and creativity in Amelia's pretend play by potentially supporting the creating a Barbie™ dollhouse to capitalize on the recent incorporation of this interest. This

exchange continues to highlight Rebecca's appreciation for the value of facilitating pretend play opportunities for her daughter.

Cross-Case Findings

When looking at cross-case findings, Kristin and Shannon were parenting a son with an Individual Education Plan (IEP). Both sons had a speech-language delay, and Kristin's son Harris also had a developmental delay. Laura and Rebecca were both mothers to girls, with no identified developmental concerns. Dyads were examined collectively to unearth patterns, insights, or concepts seen across participants and dyad groups. Discrepant evidence and negative cases were examined in relation to each research question to accent any findings.

Mothers' Understanding of Play

Across cases, prior knowledge and background experiences influenced the mother's new learning related to pretend play during eCoaching. Throughout eCoaching, each mother showed an increased ability to share evidence of their knowledge and expand on pretend play ideas during debrief conversations. The ability to share observational evidence during debriefs led to an increased understanding of what pretend play could look like with their child and the role of pretend play in learning. Finally, mothers expressed an increased understanding of many benefits afforded by pretend play in their child following eCoaching.

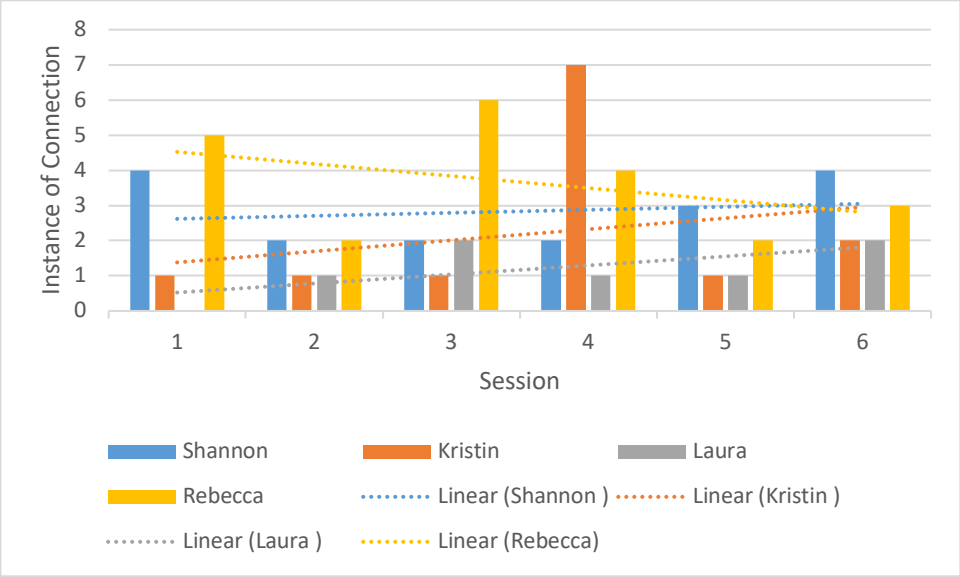
All mothers cited sources of information of which they relied on when it came to parenting their children. Kristin, Laura, and Rebecca specifically mentioned social media accounts, whereas Shannon gravitated towards books. Shannon and Kristin, the two mothers of a son with an IEP, highlighted a tendency to reach out to peers with children of a similar age. Neither Laura nor Rebecca mentioned the influence of peers, but Rebecca specifically talked about the lack of support in her peer groups. All mothers had mixed responses when it came to

utilizing their own families' advice related to parenting. While mothers said they could go to their family for parenting advice, they were often not a primary source of influence.

During eCoaching, a primary strategy for building knowledge was the mother's ability to connect to their background knowledge, experiences, and child. Figure 24 shows the instances of a "connection" made during eCoaching debrief conversations and a trajectory of these instances over time. Over six sessions, Rebecca made the most connections (n = 22), followed by Shannon (n = 17), Kristin (n = 13), and Laura (n = 7). Variability depending on the topic of the debrief conversation was also present. All mothers increased their trajectories apart from Rebecca. Kristin and Shannon both had backgrounds in education and used their knowledge of pedagogy to connect pretend play concepts to their son's during eCoaching. Shannon specifically did this through the 'goodness-of-fit' model (Trawick-Smith & Dziurgot, 2010) and Kristin when applying Vygotsky's zone of proximal development (Vygotsky, 1930-1935/1778). Laura and Rebecca did not have a background in educator-specific pedagogy. Still, Rebecca connected to her role as a social worker when it came to the strategic observation of her daughter and the use of questioning during play. Laura lacked direct background knowledge in educational practices and demonstrated the least connections during eCoaching debriefs (see Figure 24).

Figure 24

Mothers' Use of Connections to Develop Knowledge and Understanding



Throughout eCoaching, mothers also increased their active participation in debrief conversations by sharing specific pretend play observations they had made either inside or outside an eCoaching session. These instances of "sharing" demonstrate mothers' ability to apply their knowledge and understanding of pretend play to their children. Table 24 outlines the cases of "sharing" shown in each mother. Kristin and Shannon, the two mothers of children with an IEP, exhibited the most instances of sharing and were the only two participants to draw on data they observed in the eCoaching session specifically. Laura and Rebecca had less background knowledge, and their observations were frequently linked to instances outside the 10-minutes of eCoaching observation. Collectively, each participating mother showed increased examples of "sharing" from their initial to final debrief conversation. Figure 25 shows the instances of sharing done by myself overlapped with mothers' trajectory of sharing. The figure highlights mothers' ability to engage in debrief conversations by citing observational data to inform

eCoaching goals. Shannon was the only mother to meet my level of sharing in her final eCoaching debrief session.

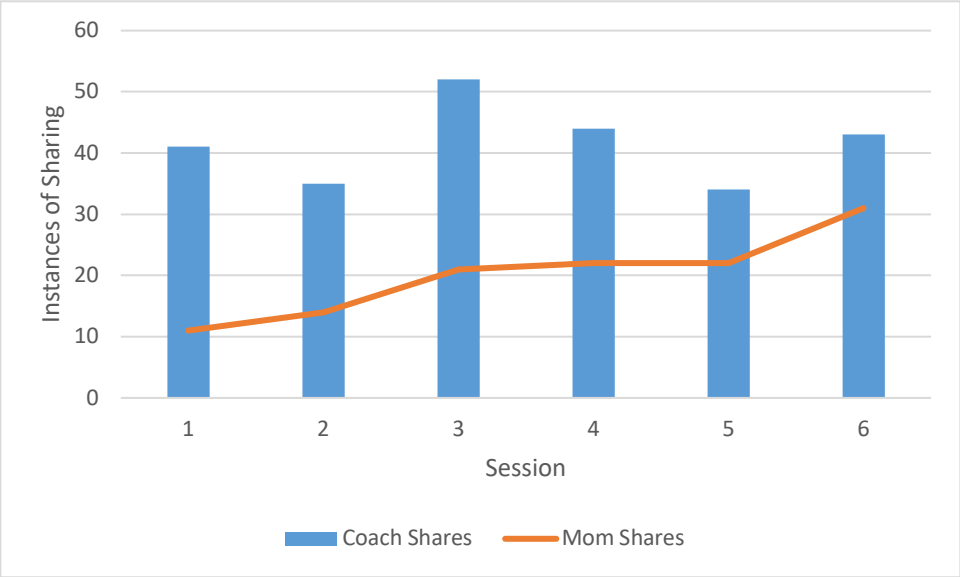
Table 24

Mothers' Use of Sharing to Demonstrate Knowledge and Understanding

Session	1	2	3	4	5	6	Total
Shannon	2	3	6	8	7	5	**31**
Kristin	2	0	5	10	7	13	**37**
Laura	3	6	4	3	4	6	**26**
Rebecca	4	5	6	1	4	6	**26**

Figure 25

Mothers' Use of Sharing to Demonstrate Knowledge and Understanding

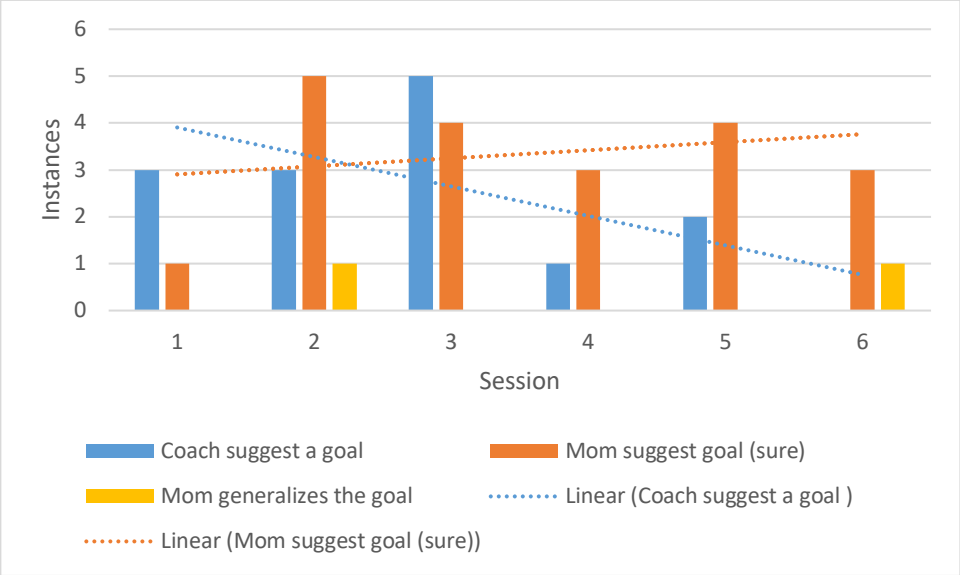


The increased level of "sharing" highlights growth in intentional observations and the use of data to inform practice in all mothers. "Sharing" on the part of mothers was an important component of eCoaching and directly related to establishing eCoaching goals for implementation

(Knight et al., 2015). However, mothers' "sharing" of targeted information during the debrief was not connected to their ability to set their own goals confidently. Shannon demonstrated the highest "sharing" levels and a consistent ability to set goals for herself with limited redirection from myself. On the other hand, Laura had low levels of "sharing" and was also consistent in setting goals. However, Laura's goals were often redirected by me to align with data or pretend play. Kristin and Rebecca were both slower to self-identify goals during eCoaching. For Kristin, this self-assurance came in session four, and for Rebecca, it was not until session six. A collective look at the mothers' participation in goal setting during eCoaching is highlighted in Figure 26. The trajectory lines indicate an increased presence of the mothers taking ownership of the goal-setting process and a decrease in my influence as the coach. The only mother that showed an ability to generalize the goal set during eCoaching to other behaviors or types of play was Kristin. In the final eCoaching session, Kristin, Shannon, and Rebecca all indicated specific pretend play goals they intended to implement beyond the six eCoaching sessions. Laura was unable to communicate a pretend play-based goal in her final session.

Figure 26

Mothers' Use of Goal Setting to Demonstrate Knowledge and Understanding



Additionally, during eCoaching, mothers expanded their understanding of pretend play and its benefits in their child's development. All mothers expressed the elaboration in understanding what pretend play "could look like" for their child. An expansion of ideas was directly related to individual goals and behaviors seen in each mother-child dyad. For Kristin, she began to see opportunities for pretend play that evolved beyond fighting behaviors. Shannon gravitated towards using her son's natural interest in play to incorporate academic opportunities. Both Rebecca and Laura discussed the ability to expand and develop pretend play scenarios, where Rebecca added the lens of problem-solving to pretend play with her daughter.

Additionally, mothers evolved their understanding of skills attributed to pretend play throughout eCoaching. Kristin and Shannon, who supported their son with an IEP, highlighted pretend play's ability to support vocabulary. Language and various communication ideas were highlighted by all participants in either the post-interview or debrief conversations.

The mother of two daughters, Laura and Rebecca, conveyed a social-emotional focus on play in their pre-interview. For Rebecca, these ideas remained as she added the idea of interacting with peers to a social-emotional benefit of pretend play. Laura was the only participant to alter her ideas around the benefits of play completely (see Table 25). Compared to the other mothers, Laura identified fewer benefits of play. Finally, Kristin, Shannon, and Rebecca added specific benefits to academics within their understanding of the play.

Table 25

Mothers' Understanding of Skills Associated with Play Prior to and After eCoaching

	Prior to eCoaching	After eCoaching
Shannon	Interacting with peers Independence Creativity Imitation of real-life	Interacting with peers Imitation of real-life *Conversation *Vocabulary *Writing *Pre-academic skills *Fine motor skills *Problem-solving *Planning skills
Kristin	Interacting with peers Speaking and Language Communication Social Skills Turn-taking Sharing Conflict-resolution Peer problem-solving Creativity Knowledge of the world Problem-solving Emotional Management	Interacting with peers Language Development Social Skills Turn-taking Independence Problem-solving *Vocabulary *Knowledge of emotions *Empathy *Emotional Development *New academic skills *Patience
Laura	Boundaries Appropriate behaviors Interacting with peers	*Creativity *Exploration of scenarios *"Yes space" *Communication *Vocabulary
Rebecca	Creativity Imagination Problem-solving Independence Social Skills Turn taking Socially appropriate behaviors Peer problem-solving	Social Skills Independence Social Skills *Academic skills *Speaking ability *Vocabulary *Flexibility *Interacting with peers

Note. * = mentioned benefits that differ from pre-interview.

Mothers' Facilitation of Play

As eCoaching continued, mothers progressed in their efficiency of recognizing their child's play needs and attending to that need appropriately. Efficiency in resolving conflict

demonstrated a moderate increase in mothers' 'good-fit' interactions with their children during play. Increased ratios of 'good-fit' interactions were particularly associated interactions that involved pretend play. Ultimately, the experiences of eCoaching transitioned mothers' towards developing their role as a strategic observers and intentional play partners for their children during play.

The goal of play facilitation during eCoaching was to observe child behaviors and respond appropriately to a demonstrated need with the intention of supporting independence or extending a child's play behaviors. Within Trawick-Smith and Dziurgot's (2010) model, an interaction was deemed a 'good-fit' if it appropriately addresses the need a child expressed. Based on Trawick-Smith and Dziurgot's (2010) definitions, the most common expressions of need across children were the need for *thinking/constructing knowledge*, *task-completion/performance*, *engagement*, and *adult contact*. See Table 26 for a breakdown of behaviors represented in each dyad and across comparison groups. *Thinking/ constructing knowledge* was most closely related to pretend play activities. Instances of *thinking/ constructing knowledge* between mothers and children often relied on a request for pretend play participation based on the child's ideas or an appeal for knowledge, often in the form of a question around a specific idea. For example, in session two, when playing "restaurant" with a cash register, Harris asked his mom what certain elements of the cash register were (i.e., drawer, counters). In session five, Amelia informed her mom of a need around their play by insisting that the characters were "not sleeping because it is not nighttime." *Task completion/performance* needs were most closely associated with games or craft-based activities. Within these interactions, children often needed direct assistance to complete an action. For example, in session three, Mae needed her mom's help finding the hole in a bead to sting it on a necklace. All children demonstrated similar levels of need and type

except Mae, who had a significantly greater overall need in terms of *task completion/performance* directly aligned to her participation in play that involved games and crafts. Resolving the conflicts expressed by their child required mothers to identify the need and facilitate an interaction that would resolve the need their child was presenting. Within the expressed needs of *thinking/ constructing knowledge,* children often vocalized their desires as leaders of the play activity. Whereas in *task completion/performance,* children often relied heavily on their mother to guide them each step of the way. For example, when engaging in gameplay activities, mothers cued tasks such as when or how to take a turn.

Table 26

Child Needs During eCoaching Observations with Mothers

Dyads & Groups	Shannon & Nick	Kristin & Harris	Laura & Mae	Rebecca & Amelia	IEP	No IEP	Collective
TCK	31	39	38	32	70	70	140
TCP	30	9	60	23	39	83	122
Engagement	4	12	12	14	16	26	42
Adult Contact	9	3	13	13	12	26	38
Social Participation	0	1	0	0	1	0	1
Social Conflict	0	1	4	0	1	4	5
Rules/Routines	1	3	5	0	4	5	9
Overall Need	**75**	**68**	**132**	**82**	**143**	**214**	**357**

Note. TCK = Thinking/Constructing Knowledge; TCP = Task-completion/Performance.

Over time, mothers increased their ability and efficiency in promoting 'good-fit' interactions with their children during play through an increased ability to attune to areas of need. Laura was the only mother to regress in her 'good-fit' interactions during the sixth eCoaching observation (see Table 27). The regression may have been due to a change in play

activity from pretend play to ‘games with rules.’ Despite this regression by Laura in the final observation, her ‘good-fit’ interactions’ trajectory remained positive (see Figure 27). Kristin and Shannon started and concluded eCoaching with the highest percentage of ‘good-fit’ interactions. Kristin and Shannon were also the two mothers with educational pedagogy backgrounds and supporting sons with an IEP. Rebecca demonstrated a lower percentage of ‘good-fit’ interactions in her first observation but could meet Shannon’s levels by her final observation. Kristin, who started with the highest percentage of ‘good-fit’ interactions, was the only mother to achieve 100% ‘good-fit’ interactions in her final two eCoaching observations. The ratio of ‘good-fit’ to ‘poor-fit’ interactions was higher in pretend play. A decrease in overall instances of need by children during pretend play compounded with supports that aligned more closely with children’s zones of proximal development all contributed to outcomes of ‘good-fit’ interactions.

When examining the mothers’ facilitation behaviors in the context of the play activity, mothers were generally more successful at achieving ‘good-fit’ interactions when the play activity related to pretend play behaviors. Activities that encouraged pretend play was based on the materials present (e.g., figures, functional play materials) and the child’s primary play behavior. The observations that focused on pretend play are indicated in Table 27. Across mothers, play not utilizing the lens of pretend play resulted in an average of 80% ‘good-fit’ interactions compared to 95% when pretend play was the focus.

Table 27

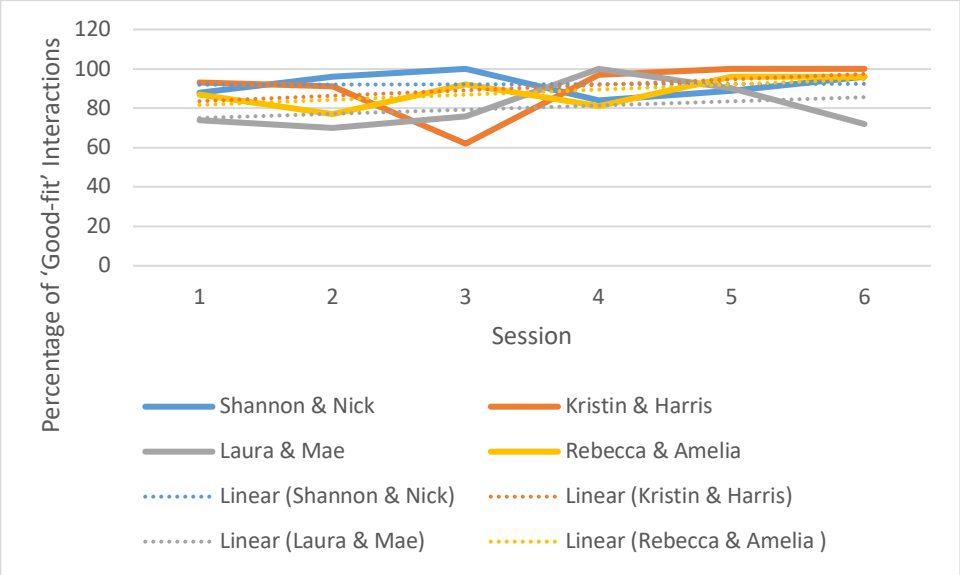
Percentage of 'Good-fit' Interactions Between Mothers and Their Child

eCoaching Observation	1	2	3	4	5	6
Shannon & Nick	88	96	100*	84	89*	96*
Kristin & Harris	93	91*	62	97*	100*	100*
Laura & Mae	74	70	76	100*	90*	72
Rebecca & Amelia	87*	77	92*	81	96*	96*

Note. * = Observation where pretend play was the primary activity and play behavior.

Figure 27

Percentage of 'Good-fit' Interactions Between Mothers and Their Children



Within eCoaching, all mothers experienced unique barriers in the entry to their child's pretend play, as evidenced by the initial inconsistencies of pretend play-focused eCoaching observations. Across the first and second eCoaching observations, pretend play-focused interactions represented only 25% of observations. However, mother-child interactions in pretend play increased by the fifth (100%) and sixth session (75%). Often children defaulted to a desire for play that involved 'games with rules' or 'construction.' Mothers, like Shannon and

Laura, reflected that pretend play was not a normal occurrence in terms of interactions they engaged in with their child. Even Rebecca's daughter, who was keen to pretend play, established a barrier in how she wanted her mom to interact during that pretend play. These barriers help explain the trajectory of pretend play and 'good-fit' interactions as play involving 'games with rules' involved greater levels of "need" for children.

The ability to take on a more intentional role with their child during play became an area of growth identified by mothers following eCoaching. In all mothers' pre-interviews, they discussed having a limited role in their child's play. All mothers shared a tendency to "multi-task" while their children played. "Multi-tasking" typically included cooking, cleaning, or taking care of younger siblings. In their post-interview, all mothers still expressed the need to "multi-task" and also indicated specific ways they intended to continue to facilitate and support their child's play more directly following eCoaching. Laura and Rebecca referenced their role in being more observant of their child during play to attend to observed needs and interests. Rebecca and Laura intended to continue one-on-one play sessions with their child outside of eCoaching as both dyads had come to cherish the time. For Kristin and Shannon, they referenced being more "intentional" during play with their sons. Kristin shared that she became "more intentional with what I am trying to get out of him during play." Shannon shared the desire to "seamlessly jump in and add an element" to expand her son's play. Kristin and Shannon's statements highlight a more facilitation-based role occurring on the outskirts of their son's play instead of the direct interactions described by Laura and Rebecca.

Children's Play Behaviors

Observations of children during and outside of eCoaching revealed trends in pretend play based on materials. A variety of pretend play behaviors presented in children over eCoaching.

Pretend play behaviors in object substitution, assigning absent attributes, imagining absent attributes, and sequences were represented in participating children with the least amount of growth occurring in Laura's daughter, Mae. The language-based change was particularly noticeable in children with speech-language delays, Nick and Harris. An unexpected area identified by all mothers was the admiration expressed by their child in the time spent playing with their mother because of participation in eCoaching.

Across children, pretend play behaviors during eCoaching incorporated figures (e.g., Barbie™, animals, superheroes). Figures were present for 80% of child observations (n = 15) and resulted in pretend play behaviors 100% of the time during these observations. Children also elected to incorporate blocks into their pretend play. Blocks were a way to create structures in which figures could interact. Blocks were present in 45% of total child-based observations (n = 9). Both Shannon and Rebecca touched on the utilization of blocks as a medium for pretend play. Amelia's sharing during play was "fifty-fifty" between blocks and items associated with those built structures. While the two children with IEPs utilized figures and blocks in pretend play, Nick also incorporated more scenario-based sciences (e.g., military, office). Mae showed an interest in crafts and struggled to incorporate pretend play. Mae's inability to connect craft materials and pretend play was not seen as a barrier for Amelia. In the two observations where Amelia used craft materials (e.g., play-doh™, dot paint), she also incorporated pretend play. With the play-doh™ she made "cookies" at a "bakery." With the dot paint, she used her Barbie™ as the individual painting. Harris and Nick did not gravitate towards craft materials in their play. Play materials influenced pretend play behaviors and created variances in observed behaviors (See Table 28 and 29). Despite the variances per observation, Amelia, Mae, and Nick demonstrated moderate positive trajectories in the presence of pretend play behaviors throughout

eCoaching (see Figure 28). Harris's pretend play trajectory decreased slightly but expressed less variance than his peers.

Table 29

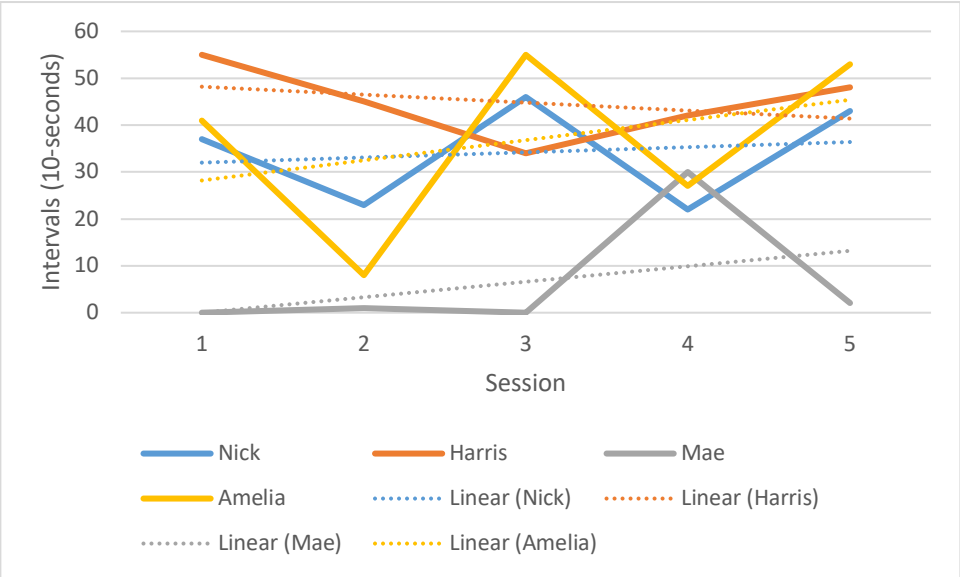
Collective Play Behaviors on the Play Observation Scale (POS-A)

	All Dyads				
Observation	**1**	**2***	**3**	**4***	**5**
Pretend Play Behaviors	133	74	148	153	149
Verbalizations	62	68	97	98	104
Vocabulary	4	21	25	15	28
Functional Play	61	28	46	31	84
AAA	25	55	72	91	127
IAO	11	24	3	24	3
OS	63	23	55	74	10
Sequences	63	45	131	87	134

Note. * = data that was collected during mother and child interactions within eCoaching.

Figure 28

Instances of Pretend Play Behaviors in Children Using the Play Observation Scale (POS-A)



When examining the pretend play behaviors displayed within these observations, children showed increases in behaviors related to Barton and Wolery's (2008) pretend play taxonomy. Each child's pretend behaviors based on observation are outlined in Table 28, indicating when the child's mother was directly participating or invited to participate in the play's outskirts. All children increased the presence of assigning absent attribute (AAA) behaviors in pre-, mid-, and post- observations (see Figure 29), with Harris not previously demonstrating AAA in his pre-observation. Both Nick and Amelia demonstrated the ability to AAA before eCoaching. Nick's AAA interval behaviors went from 5% to 72%. Amelia began with 36% AAA behaviors and progressed to 77% in her final observation. The use of roles was the main type of AAA used by both Nick and Amelia. By their post-observation, both were using more emotions within their AAA behaviors. While Mae demonstrated 30 intervals of AAA during an eCoaching-based observation, her mother's inability to capture pretend play outside of an eCoaching session influenced the ability to analyze trends over time.

Figure 29

Intervals of Assigning Absent Attributes (AAA) on the Play Observation Scale (POS-A)

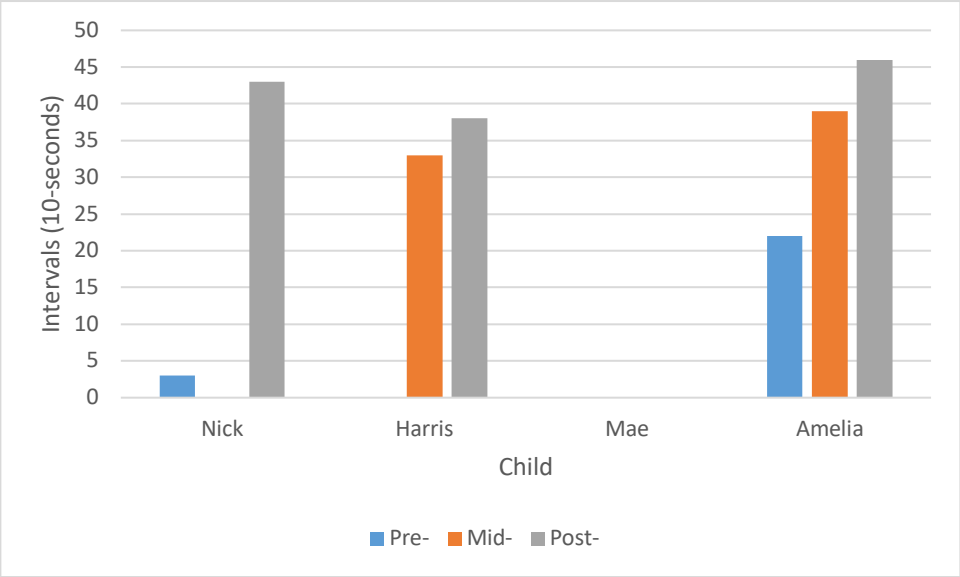


Table 28

Child Play Behaviors on the Play Observation Scale (POS-A)

Individual & Groups	Nick					Harris					Mae					Amelia				
Observations	**1**	**2***	**3**	**4***	**5***	**1**	**2***	**3**	**4***	**5**	**1^{+}**	**2***	**3^{+}**	**4***	**5^{+}**	**1**	**2***	**3^{+}**	**4***	**5^{+}**
Pretend Play Behaviors	37	40	59	54	46	55	45	34	42	48	0	1	0	30	2	41	8	55	27	53
Verbalizations	16	23	31	21	41	7	39	21	29	12	0	1	0	21	2	39	5	45	27	49
Vocabulary	2	8	5	5	16	0	13	1	5	3	0	0	0	5	2	2	0	19	0	7
Functional Play	10	19	45	6	1	51	0	1	0	32	0	1	0	0	0	0	8	0	25	51
AAA	3	9	0	15	43	0	42	33	35	38	0	1	0	30	0	22	3	39	11	46
IAO	11	0	0	22	2	0	24	0	2	0	0	0	0	0	2	0	0	3	0	1
OS	24	23	0	14	1	0	0	0	38	0	0	0	0	0	0	39	0	55	22	7
Sequences	31	0	44	8	42	7	42	33	38	43	0	0	0	30	0	25	3	54	11	49

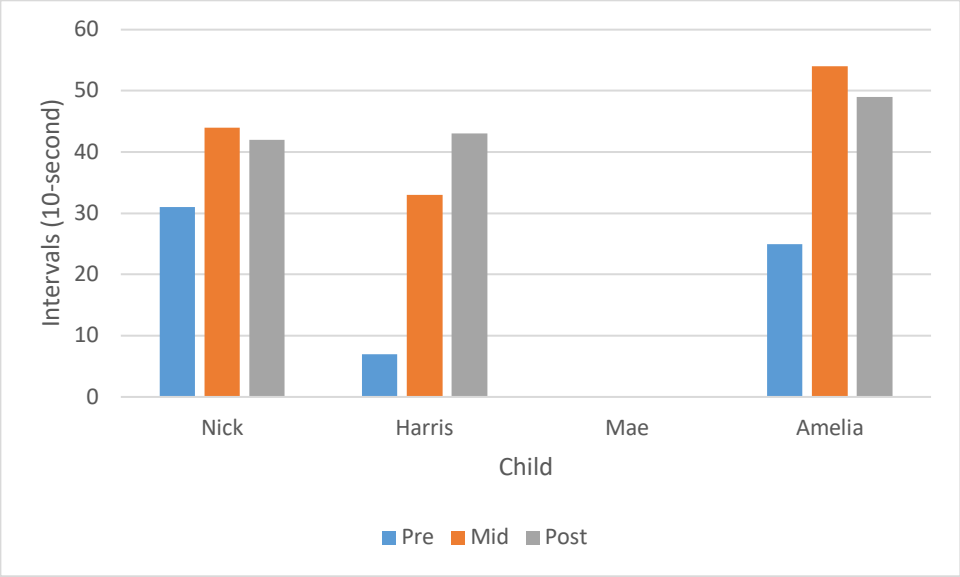
Note. * = Observations in which the child was playing independently; $^{+}$ = Observations in which the mother was playing directly with the child

No changes were seen related to Imagining Absent Attributes (IAO) across participants. The ability to observe IAO behaviors may be attributed to the tendency of imagining people, places, or things that occurred primarily in the child's head and would not come to an outsider's attention unless verbalized. For this reason, IOA was particularly present when children were playing with their mothers but less present during independent play. Consequently, growth trajectories related to IAO were unable to be highlighted. Similarly, children did not demonstrate changes in their object substitution behaviors (OS), and OS was not associated with the presence of a child's mother. However, OS was observed when blocks were incorporated into a child's pretend play, accounting for 139 of all OS intervals compared to 86 of OS intervals where blocks were not present.

Throughout eCoaching, children showed moderate growth in utilizing sequences in their pretend play, with a major shift occurring in Harris, a child with a speech-language and developmental delay. Intervals of pretend play with sequences taken from children's pre-, mid-, and post- observations are expressed in Figure 30. The ability to determine Mae's pretend play sequences' growth was limited by the lack of pretend play observations available.

Figure 30

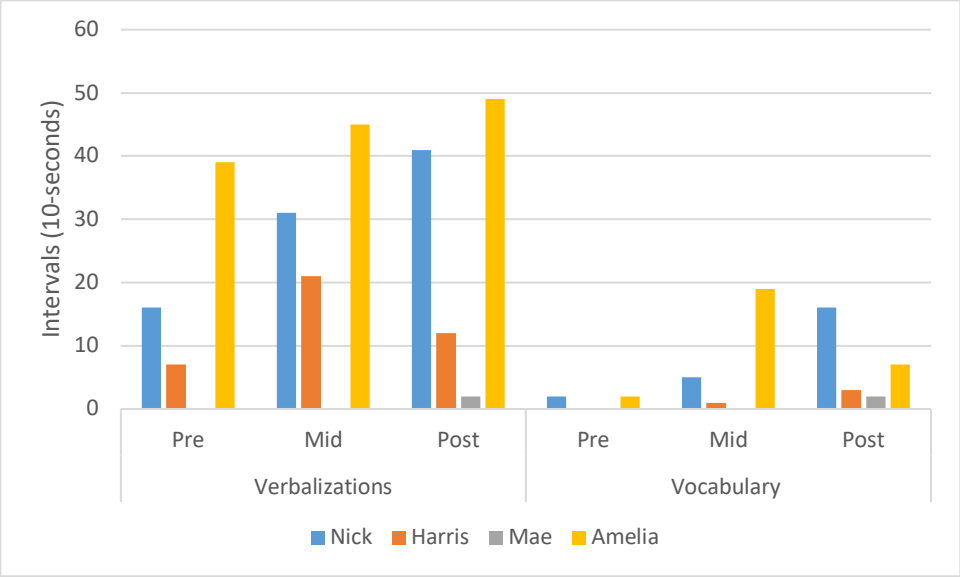
Children's Pretend Play Sequences on the Play Observation Scale (POS-A)



The last element covered in Barton & Wolery's (2008) pretend play taxonomy is the use of language. All children showed varied increases in their verbalizations and vocabulary within pretend play throughout eCoaching. From pre- to post-observations, all children increased their verbalizations and use of vocabulary during pretend play (see Figure 31). Harris and Nick's mothers identified increases in vocabulary in their son through their informal observations during their post-interview. In terms of vocabulary, while both Nick and Harris showed growth over time, Harris's use of vocabulary was more pronounced in his mother's presence and was less evident than Nick's growth over time (see Figure 31). While Laura struggled to capture Mae's pretend play on a video, Mae did show an instance of a pretend play behavior in her post-observation that utilized a verbalization of vocabulary. During her final observation, Mae introduced a "trophy" into the game. However, this isolated behavior was not enough to draw any inferences.

Figure 31

Children's Pretend Play Verbalizations and Vocabulary on the Play Observation Scale (POS-A)



Before and after eCoaching, all mothers spoke of the admiration their child had expressed in the time spent playing together. Shannon shared, "[Nick] would cherish the times, and so did I. I think I'll probably incorporate a couple more sessions of times during the week where I could sit down and intentionally play with him more than I did before." Kristin echoed this, stating, "Harris thought it was fun!" The benefit of one-on-one play with her daughter was a major takeaway of eCoaching for Laura, who intended to make it a routine in their family structure. The evolution of children's affinity in having their mothers as a play partners was highlighted in post-observation videos intending to capture independent play. All children found ways to incorporate their moms into their play. Incorporation came through children highlighting what they were doing or directly insisting on joining the play. While mothers were encouraged to capture "independent" play, their child's desires often lent themselves to more direct engagement than previously experienced in the initial observation.

eCoaching Intervention

When asked to reflect on their perceptions of eCoaching, all mothers valued the experience and learning achieved through eCoaching showing variable content-based growth in their self-identified learning and facilitation skills in terms of pretend play. All mothers praised the coach-mother relationship component of eCoaching and were generally satisfied with the process. Laura, who demonstrated the least amount of change in knowledge, understanding, and facilitation of pretend play, also contributed specific suggestions for how eCoaching could have better met her needs. Table 30 outlines the mothers' ratings of various components of eCoaching on a five-point Likert scale that was provided during their post-interview.

Collectively, before eCoaching, the average rating for prior "understanding of the facilitation" of pretend play was 3.5 out of 5. After eCoaching, all mothers indicated that their "understanding of the facilitation" of pretend play was "excellent" (5 out of 5). Laura and Rebecca indicated their prior understanding was "acceptable," while Kristin and Shannon indicated their prior understanding as "good." Kristin and Shannon supported a son with an IEP who also had prior experience in educational pedagogy. When it came to rating their ability to "apply concepts to an actual problem or situation" around pretend play, again, all participants demonstrated growth related to their prior abilities following eCoaching. However, for this item, comparison groups did not share the same level of previous knowledge. Kristin and Rebecca indicated an "acceptable" rating, while Shannon and Laura indicated their ability as "good." Following eCoaching, all mothers, except Rebecca, indicated progress in their ability with a rating of 5 out of 5. Rebecca progressed but to the level of 4 out of 5. As Rebecca

Table 30

Mothers' Self-Assessment Likert Scale Ratings Following eCoaching

Dyads and Categories	Shannon	Kristin	Laura	Rebecca	Collective Average
Content*	**4.7**	**5**	**4.3**	**4.7**	**4.7**
The coach covered the topics in sufficient detail.	4	5	3	5	4.3
My understanding of the facilitation of pretend play with my child PRIOR to eCoaching.	4	4	3	3	3.5
My understanding of the facilitation of pretend play with my child AFTER to eCoaching.	5	5	5	5	5
My ability to apply concepts to an actual problem or situation in the area of pretend play facilitation with my child PRIOR to eCoaching.	4	3	4	3	3.5
My ability to apply concepts to an actual problem or situation in the area of pretend play facilitation with my child AFTER to eCoaching.	5	5	5	4	4.8
Working Relationship	**5**	**5**	**5**	**5**	**5**
The coach and I trust one another.	5	5	5	5	5
The coach was approachable.	5	5	5	5	5
The coach showed a sincere desire to understand my family and support my child.	5	5	5	5	5
eCoaching Process	**5**	**5**	**4**	**5**	**4.8**
The provided support that matched the needs of my family.	5	5	5	5	5
The coach provided me with practical and useful feedback and strategies.	5	5	3	5	4.5
Investment	**5**	**4.5**	**5**	**5**	**4.9**
The time spent working with the coach was effective and productive.	5	5	5	5	5
I would recommend eCoaching to another caregiver.	5	4	5	5	4.8
Benefits of eCoaching	**4.5**	**5**	**5**	**5**	**4.9**
My child benefited from my work with the coach.	4	5	5	5	4.8
The coach had a positive impact on my child's play behaviors.	5	5	5	5	5

Note. Items adapted from professional development evaluation survey (Allen and Nimon, 2007) and Coach-Teacher Alliance measures (Johnson et al., 2016); * = before eCoaching scores were not included in the average; scores were on a 5-point Likert scale (1 = very poor; 2 = poor, 3 = acceptable; 4 = good; 5 = excellent).

exhibited the most hesitancy at setting her own goal during eCoaching, this may have factored into a lower rating in this area. Shannon shared that observation and debrief conversations were a valued component of her learning. Shannon stated in her post-interview, "I liked to have Amanda watch while we played and then report back. It was interesting that she was able to pick up on stuff I was not. That I had not really been thinking about." Likewise, Rebecca shared, "[Amanda] would pick out things that maybe I didn't notice or that I would not have thought to question. Or probably would not have thought about at all." Mothers were variable in their feelings that the eCoaching "covered topics in sufficient detail" with an average rating of 4.25 out of 5. Laura, who indicated a rating of 3 out of 5, elaborated by sharing the lack of topics discussed outside of pretend play and a desire to discuss additional sub-topics (e.g., focusing on supporting child behaviors with losing a board game).

The relationship between a coach and coachee is an important component of coaching (Dunst & Trivette, 2009), and for that reason was added to the coaching framework used in eCoaching. All mothers indicated an "excellent" rating on the three components associated with relationship (i.e., trust, approachability, and demonstrating a sincere desire to understand the mother's family and child). In her post-interview, Rebecca expressed:

> [Amanda] kind of got my personality as kind of sassy, kind of sarcastic…she is able to pick up on that…When she is talking to me about all sorts of things, it sounds like she is talking to me and not a student or a sponsor… she is not presenting to a board. She is just talking to me.

When speaking of the relational piece within eCoaching, Shannon shared, "I think it was just good to feel like you had somebody else on your side to give you advice and feedback." Both Kristin and Shannon, stay-at-home mothers, and Rebecca, a single mother, indicated often

feeling isolated in their roles as mothers and saw eCoaching as a way to support their development as a parent.

Within the process of eCoaching, all mothers felt like the support provided "matched the needs" of their families. Incorporating an individual family lens was another key component of "learning" within Knight and colleague's (2015) framework as it intended to capitalize on the coachee's strengths and values. Considerations of individual families and mothers were seen when working with Laura to provide "positive reinforcement" during play. Laura and I worked together to make the practice feel natural to her parenting style, which valued not overly praising. Similarly, an intervention was adjusted to meet the needs of Kristin's family routines and structures. Instead of scripting play directly before play, Kristin and Harris engaged in a discussion during their morning walk. In her post-interview, Rebecca shared, "the format itself was good" and added that eCoaching felt "led" by her, with myself serving as a "guide." Kristin, Shannon, and Rebecca felt eCoaching provided them with "useful feedback and strategies." Laura, on the other hand, mentioned wanting more explicit reminders before the observation, such as "remember today, try your best to focus on 'so-and-so.'"

While all mothers would recommend eCoaching to a fellow caregiver, Kristin mentioned that some individuals might struggle with the coaching process. Additionally, Laura shared that if eCoaching involved a cost, caregivers on a limited budget may "be hesitant and will just figure it out on their own." Ultimately all four mothers found the time spent in eCoaching as productive and valued the level of accountability eCoaching provided. Laura shared, "It provided a sense of accountability that I think we all need at one point…I think the accountability helps." While most moms found eCoaching to benefit themselves, Kristin, Laura, and Rebecca gave high marks to the benefits seen in their child. Shannon rated the benefits to her son Nick as slightly

lower while emphasizing herself as the "greater beneficiary." Ultimately, mothers' overall feeling towards eCoaching was extremely positive.

Conclusion

When looking at the outcomes of the mothers' understanding, knowledge, and facilitation of pretend play, there were some overlaps across comparison groups and the collective sample, with Laura often remaining an outlier. In comparing the dyads of children with an IEP, there were occasional overlaps in data among variables. Still, overall, the unique attributes of these two dyads influenced overall outcomes. Many of the outcomes seen in mothers due to eCoaching were influenced by prior experiences and knowledge. The needs and personalities of both mothers and their children influenced their major take-aways and growth in terms of facilitation. Changes in understanding and facilitation were seen in mothers' post-interview self-assessment. Ultimately, all mothers evolved in their knowledge of pretend play and facilitation of play with their children.

As with the mothers' outcomes in this study, child-based results were unique to the individual child. They varied depending on the type of data provided by the mother or observed during eCoaching. Nevertheless, growth in verbalizations, sequences, and assigning absent attributes stood out across participants, with Laura's daughter, Mae, being an outlier due to reduced data. In their post-interview, mothers described themselves as achieving the greatest benefits of eCoaching. Mothers could also identify specific ways their child's play behaviors had developed as well. In the end, all mothers praised the eCoaching experience and process while highlighting an added value in the time spent playing with their child one-on-one.

V: Discussion

The purpose of this study was to examine the influence of family-centered eCoaching on participating mothers' knowledge, understanding, and facilitation of pretend play while seeking to support their preschool child's play behaviors. Four mothers of preschool-aged children participated in eCoaching. Two mothers had sons with an IEP receiving services for speech-language delays, and two mothers had girls without an IEP. Four findings emerged in mother-child dyad's behaviors during the implementation of eCoaching: (a) mothers developed a deeper knowledge of pretend play, which they used to increase their self-efficacy during eCoaching, (b) mothers built their pretend play understanding by observing their child's needs during play and used these observations to discuss potential learning goals to support targeted areas of interest, (c) mothers increased their ability to responsively attend to the play needs of their child through 'good-fit' interactions, and (d) increased interactions with their mothers developed children's play behaviors in ways that aligned to the dimensions of pretend play and were unique to a child's needs and interests. When looking across dyads of mothers engaging a child with or without an IEP, variances in outcomes and play behaviors were unique. The children and mothers themselves demonstrated varying levels of needs and interest. The following chapter presents an in-depth discussion of these findings, study limitations, recommendations for future research, and implications for practice.

Knowledge and Understanding of Play

Outcomes related to enhanced knowledge and understanding of pretend play by way of eCoaching reflect the principles of adult learning and family-centered practices. Through eCoaching debriefs and post-interview conversations, mothers developed an enhanced understanding of the benefits of pretend play and the application of skills required for purposeful

goal setting. The trajectory of growth was linked to the mothers' background knowledge and experiences.

Prior Knowledge as a Grounds for the Development of Knowledge and Understanding

Generally, the three mothers with prior knowledge and background experiences in areas related to eCoaching exhibited an enhanced understanding of pretend play. Particularly, the two mothers of sons with an IEP who had backgrounds in education were able to draw on their existing knowledge to enhance their understanding of pretend play as a means of support for their children. The utilization of existing knowledge is an essential element of adult learning principles as it allows for new information to be more assessable (Collins, 2004; Donovan et al., 1999). From the beginning, Shannon and Kristin's prior experiences as educators provided a foundational level of knowledge that Showers et al. (1987) found as a requirement for coaching "buy-in." Their literature review involved coaching classroom teachers, but the principles of adult learning also ring true for this study. As a social worker, Rebecca shared a similar background knowledge through her work with children, and she used this to support her development of knowledge in eCoaching.

Laura, who demonstrated the least amount of growth in knowledge and understanding, did not share the same frame of reference seen in her peers within the study. Other virtual coaching frameworks have addressed gaps in knowledge through upfront direct instruction (i.e., modules, group learning) before moving into a coaching framework (Mast et al., 2014; McDuffie et al., 2013; McDuffie et al., 2016; Meadan et al., 2016; Souander et al., 2016; Wade et al., 2009; Wainer & Ingersoll, 2015). In addition to prior knowledge, Laura required and requested more direct support during eCoaching. Laura specifically asked for opportunities to "role-play." Virtual coaching has provided role-play support from a distance in using 'bug-in-ear" devices

where the coach has direct communication and provides immediate feedback with the coachee (Horn et al., 2021, Mast et al., 2014). While direct support was provided for Laura during session four, frequent feedback through a "bug-in-ear" device may have provided her with more opportunities to experience elements of learning associated with eCoaching and pretend play firsthand.

Developed Understanding of Benefits of Pretend Play within Child-based Context

Literature has cited multiple ways pretend play can support a young child's learning—these learning areas mirror participating mothers' responses associated with their child following eCoaching. As supported by play literature, the benefits of pretend play mentioned by mothers included: language and communication (Kızıldere et al., 2020; Mills et al., 2014), vocabulary acquisition (Van Oers & Duijkers, 2013; Hutagalung et al., 2020), social competence (Nicolopoulou et al., 2015), self-regulation skills (Elias & Berk, 2002, Taylor & Boyer, 2020), and emergent literacy skills (Nicolopoulou et al., 2015). The social restrictions associated with COVID-19 may have made mothers particularly attuned to the social benefits of play during eCoaching. Through eCoaching, mothers often became "stand-ins" for what pretend play with a peer may involve. Following eCoaching, mothers enhanced understanding of the benefits of pretend play reflected those outlined by Barton (2016) in terms of peer dialogue, social problem-solving, and sharing. Mothers' specific subsets of skills were often individualized and aligned to their child. These nuances align with previous literature that highlights mothers' tendencies to focus on their perceived play-based academic learning value and the frequency of their child's engagement in particular play activities (Fisher et al., 2008).

Aspects of language development were a particularly specific draw for mothers. The impact of pretend play on language is consistent across research (Lillard et al., 2013). Higher

levels of communication have been linked to increased levels of pretend play among children (Pizzo & Bruce, 2010). This idea held true for Harris, who demonstrated both a developmental and speech delay as part of his IEP. Harris displayed less complex pretend play behaviors than Nick, who had a speech delay, and variances were seen in these two children's verbalizations during play. Harris's delays in language fostered his mother's desire to infuse language-based goals when playing with Harris. While all mothers mentioned the benefits of language in their developed understanding of pretend play, the two mothers of sons with an IEP more frequently infused language-based topics into their eCoaching debrief conversations (e.g., sentence structures, annunciation). Rush and Shelden (2020) suggest that effective coaching account for existing programs of intervention. These mothers included experiences with speech-language providers that naturally evolved into their eCoaching experience.

Increased Ownership in Purposeful Application and Goal Setting Among Mothers

A central aim of the family-centered practices, as described by Knoche et al. (2012), is for mothers to demonstrate competence and confidence in recognizing their child's developmental needs and interest. From this knowledge, mothers can then develop relevant learning outcomes in everyday activities. One of the main ways mothers showed this skill was through goal identification within the eCoaching debrief framework. Over time, mothers were more vocal in sharing ideas and data to inform progress on their child's current goals and inform future goals. One instrumental way mothers influenced goal setting was by identifying a child's interests that formed the basis for goal setting. By their final debrief session, mothers indicated specific ways to incorporate their learning into daily routines with an eye towards the continued development of skills initiated through eCoaching. As the only mother with a background in

early childhood education and experience with instructional coaching, Kristin generalized during eCoaching by applying skills to various routines and settings.

Family-centered practices also seek to build confidence in an individual's utilization or development of skills, interests, and abilities (Knoche et al., 2012). Mothers exhibited confidence in their abilities by providing a voice in what goals they would set for themselves and how they could adjust strategies to meet their family's needs. Adult learning principles were accounted for in the mothers' ability to exhibit self-direction and relevancy in outcomes for themselves and their child (Collins, 2004). Specifically, the orientation of pretend play goals towards language concerns was most frequently seen in the mothers of sons with an IEP. Furthermore, mothers extended the observation and facilitation component to play outside eCoaching, where they were more likely to encounter a real-life in-the-moment interaction of pretend play. Rush and Shelden (2020) discuss the importance of joint planning of real-life activities as essential to coaching in early childhood. The ability to utilize skills and capabilities outside a 10-minute observation speaks to the mothers' enhanced confidence in applying concepts and ideas.

Facilitation of Pretend Play

Prior research has indicated that the play interest and the behaviors of children with and without disabilities are as unique as children themselves (Passmore & Hughes, 2020). The same individuality appeared in dyads of mothers and children in this study. Consequently, mothers were instrumental in how they viewed the outcomes and benefits of pretend play in the context of their child and how they planned to target their support during eCoaching. Despite the variances among dyads, all mothers increased their ability to respond to their child with 'good-fit' interactions during play as they progressed through eCoaching.

Increased 'Good-fit' Interactions in Mothers' Play Facilitation with their Child

Utilizing the integrated responsiveness model, mothers increased their ability to facilitate 'good-fit' interactions with their child during play with a positive trajectory throughout eCoaching. Previously, play interactions have been examined in educators working with preschool-age children (Trawick-Smith & Breen, 2010; Trawick-Smith & Dziurgot, 2010; Trawick-Smith et al., 2016). This study investigated applying the integrated responsiveness model in mothers of preschool-age children in a home setting. Findings in this study do link to previous literature exploring similar responsiveness models applied to parents. These studies found parents to be instinctively perceptive towards their child's play needs with the ability to adapt where required (Fiese, 1990; Haight & Miller, 1993). The mothers of sons with an IEP were the only two mothers to eventually engage in play composed of 100% 'good-fit' interactions. They were also the only two mothers with a background in education and may have been more attuned to responding to needs within play. The link between advanced degrees in education and increased 'good-fit' interactions mirrors the finding by Trawick-Smith and Dziurgot (2010) in educators. The mothers of daughters (without an IEP) also experienced growth in their ratio of 'good-fit' interactions during coaching. The trajectory of change in these two mothers in terms of 'good-fit' was more pronounced as they experienced a lower percentage of 'good-fit' interaction at the onset of eCoaching. Incorporating the integrated responsiveness model of play in eCoaching adds to previous exploratory research related to preschool educators. Specifically, mothers can increase their abilities to facilitate 'good-fit' interactions during play with the support of eCoaching.

Additionally, the ratio of 'good-fit' interactions varied depending on the type of play a child was engaging in. Pretend play activities yielded higher ratios of 'good-fit' interactions

between mothers and their child. As ‘good-fit’ interactions relate closely to the work of Vygotsky (1930–1935/1978), these activities may lend themselves to mother-led interactions in a child’s zone of proximal development. Activities such as 'games-with rules,' as opposed to pretend play, feature increased play complexity and have been deemed “introductory” for children ages four and five (Rubin et al., 1978; Smilansky, 1968). During pretend play, children demonstrated a greater frequency of the need for *thinking/constructing knowledge*, which required less mother-led support. When given support during pretend play, children more quickly resolved a demonstrated need. Prior literature on the integrated responsiveness model of play has not made comparisons in the play activities or isolated pretend play as a variable.

Benefits of Pretend Play in the Mothers’ Facilitation of Learning Outcomes

The mothers’ engagement in pretend play during eCoaching allowed for incorporating skills less representative of other forms of play (e.g., assigning absent attributes, object substitution). Barton and Wolery (2008) attributed the learning of various pretend play behaviors in children with disabilities (26 months – 10 years) across multiple interventions. The utilization of adult prompting, a strategy frequented by mothers in eCoaching, has increased preschool-age children with disabilities’ abilities related to pretend play sequences (Barton et al., 2019; Lifter et al., 2005; Stahmer, 1995; Thorp et al., 1995), assigning absent attributes (Kim et al., 1989; Stahmer, 1995), and vocabulary (Kim et al., 1989). Similarly, the mothers’ engagement in eCoaching promoted the use of various discrete pretend play behaviors, particularly their facilitation of assigning absent attributes, sequences, and vocabulary throughout eCoaching sessions. The medium of pretend play allowed mothers to expand ideas related to emotions and complex story sequences. The areas of emotions and sequencing in pretend play were frequently highlighted as areas of need for children by mothers and infused into eCoaching goals. Barton

(2016) found pretend play as relevant to social opportunities. For this reason, mothers also voiced interest in the facilitation of social problem-solving and the sharing of ideas in play.

During pretend play opportunities with their child, mothers successfully elicited increased verbalizations and vocabulary from their child. Pretend play's influence on expressive and receptive language development is supported by prior research (Kızıldere et al., 2020; Lewis et al., 2000). These behaviors' increased presence aligns with what Fein (1981) saw as required communication necessary to develop shared knowledge of non-literal actions inherent to pretend play. Furthermore, in pretend play facilitation, both children and mothers relied on communication to offer alternative ideas in the play (Bruner, 1972). The creation of this shared knowledge through communication is what Hakkarainen et al. (2013) deemed a "joint play narrative." The utilization of a "joint play narrative" was inherently present in mother-child pretend play interactions. Narratives, particularly within contextualized pretend play opportunities during parent-child interactions, have been supported in previous literature as rich opportunities for higher-order thinking talk, specifically in children 4 to 5 years of age (Frausel et al., 2021). Through Ginsburg et al. (2007), the American Academy of Pediatrics highlighted that less verbal children are more likely to express themselves through a playful context. When playing alongside their mothers, more verbalizations were seen, particularly in the two children with a speech delay.Within verbalizations, vocabulary growth was most pronounced in the children with a speech delay, with Harris demonstrating the most change. The enhancements for vocabulary through play support previous literature (Hutagalung et al., 2020; Roskos et al., 2010), and Lillard and colleagues (2013) have positioned pretending as a preceding skill in language development.

Facilitation of Individualized and Targeted Support for Children During Pretend Play

Throughout eCoaching, mothers facilitated play with their children in ways that aligned with their values, beliefs, and personality. Within debriefs, mothers reflected on their parenting styles and aspirations to co-collaborate on facilitating the best play with their child through the lens of effective play practices. The mothers' affinity also influenced facilitated interactions towards academic, communication, or social support. The individualized nature of the mothers' facilitation exemplifies an essential component of family-based support (Knoche et al., 2012). As mothers began to capitalize on their skills and apply ideas beyond eCoaching, they deepened their overall self-efficacy. Self-efficacy is an outcome shared in Ogourtsova's (2019) review of health-based coaching in children with disabilities and an essential outcome in the process of family-based coaching (Rush & Shelden, 2020).

The mothers of children with a speech delay discussed their role in play as being more intentional and active. In contrast, the mother of girls with no known disability saw their role as primarily observational and retrospective to the specific play session. Both viewpoints consider the idea of scaffolded play in a way that aims to encourage learning and exploration through adult guidance directed by the child (Hirsh-Pasek et al., 2009). Mothers' feelings of increased responsiveness align with outcomes found in Kemp and Turnbull's (2014) literature review of coaching within early childhood intervention. Through eCoaching, mothers felt more equipped to identify, facilitate, and support behaviors of specific interest to their child through play.

Child Play Behaviors

While children were not the focus of this study, they were an important fixture in the eCoaching, and the support provided by mothers fed off children's natural play inclinations. Throughout eCoaching, children showed growth in their utilization of complex pretend play

behaviors and language during play. The absence or presence of their mother during play influenced the manifestation of these dimensions within pretend play. Ultimately, children expressed admiration for the opportunity afforded by eCoaching to play with their mother as expressed by their mothers during debrief and post-interview conversations.

Promotion of Pretend Play Behaviors in Children during eCoaching

Throughout eCoaching, children who frequented pretend play activities showed changes in their ability to incorporate object substitutions, assigning absent attributes, and sequences into their pretend play (Saral & Ulke-Kurkcuoglu, 2020). Harris, the child with a speech and developmental delay, experienced the most growth in these areas in terms of independent and facilitated play with his mother. Discrepancies in complex pretend play behaviors for children with developmental delays have been discussed in the literature (Kasari et al., 2013; Lifter et al., 2011a) and held for the one student in this study as well. The primary intervention strategies used by Harris's mother support previous literature related to pretend play prompting interventions in students with a developmental delay (Barton et al., 2019; Kim et al.,1989). Except for Mae, who lacked data in pretend play, all children experienced mild to moderate increases in object substitutions, assigning absent attributes, and sequences connected to their mother's participation in eCoaching.

Promotion of Language in Children during eCoaching

The language of the three children with pretend play data (Nick, Harris, and Amelia) also saw gradual changes. Saral and Ulke-Kurkcuoglu (2020) connected substantial increases in verbalizations with pretend play prompting interventions utilized with children with ASD. Findings from the following study extend to children with speech and developmental delays. The changes to verbalizations and vocabulary during pretend play align with Barton and Wolery's

(2008) literature review. Their review found a growth in children's verbalizations as their participation in various pretend play interventions developed their play skills. Lifter and Bloom (1989) highlighted the connection between language and pretend play, noting language and pretend play skills emerging concurrently. Children with disabilities often demonstrate decreased levels of play (Lifter et al., 2011a) and receptive communication (American Psychiatric Association, 2013), which may explain Harris's more gradual growth in language compared to Amelia (without an IEP) and Nick (with an IEP in SLD). Initially, Harris also demonstrated less complex pretend play when compared to Amelia and Nick.

Additionally, children's language was more present in pretend play with their mother. Escalations in language were potentially due to increased questioning, modeling, and inherent communication around non-literal behaviors when children played alongside their mothers. In a study of teachers, Meacham et al. (2014) found a similar phenomenon of questioning (open/closed) during pretend play that led to increased language and language modeling in preschool-aged children. Similar studies of pretend play interventions saw increased language complexity among preschool children (Kızıldere et al., 2020). Furthermore, as previously discussed, the communication necessary to engage in pretend play concepts and shared understanding make increased communication between play pairs an inherent byproduct of social pretend play (Bruner, 1972; Fein, 1981).

Child Expressed Admiration for Play with their Mother

An unintended child-based outcome during eCoaching was the children's expressed admiration for time spent playing with their mothers. Without promoting, all mothers described their child's joy and excitement in the 10-minute playtime with their mother during eCoaching. All mothers discussed the intention to continue one-on-one playtime with their child in various

ways following eCoaching. The American Pediatric Association has noted a decrease in parent-child play in recent years (Ginsburg, 2007). It recommends parents introduce playtime with their child at any length of time that fits into the demands of a parent's schedule. This study exemplifies the outcomes of just 10-minutes. However, the barriers of consistent pretend play in one dyad (Laura and Mae) may speak to the importance pretend play-based activities and goals aligned with the focus of eCoaching.

eCoaching as a Means of Learning and Support for Mothers

Overall, eCoaching was praised by mothers as individualized and personalized to their needs as a parent. Much of the foundation for these feelings related to the relationship mothers had formed with me during coaching.

Influences of Relationship in the Process of eCoaching

Mothers identified the supportive relationship between them and me as a valuable component of the encouragement provided during eCoaching. Mothers felt that I was responsive to their child's needs, and our collaborative work established a sense of trust. Mothers also noted my ability to express interest in their child and provide supports aligned with their personal beliefs. Connections between the idea of relationship-building and eCoaching outcomes align to the premise that coaches should take on a professional and emotionally supportive role (Bloom et al., 2005). Gardiner and Weisling (2020) describe this dual role as a way of maintaining focus on professional coach-based knowledge and recognizing the importance of holistic supports that involve relationship, trust, and rapport. Crane (2007) explains how trusting relationships lend themselves to connections and sharing within coaching. These concepts of coach-based relationship building were also seen within eCoaching.

The expression of relational trust and participatory responsiveness experienced by mothers during eCoaching aligns with the two types of "help giving" that Dunst and Trivette (2009) saw as contributing factors to capacity building in family-centered practices. On the part of a coach, interpersonal skills are also identified as vital contributing factors in terms of family-based outcomes (Dunst & Espe-Sherwindt, 2016). These ideas of relational support were present in eCoaching as well and expressed in the mothers' post-interviews.

Individualized Nature of eCoaching Model

All mothers experienced individualized support through the goals set and discussion topics during eCoaching. Collins' (2004) principles of adult learning aligned with mothers in this study. Mothers expressed: (1) connection to life experiences and prior learning, (2) facilitation of self-directed learning, (3) application to values and interest, and (4) opportunities for sharing during their eCoaching experience. The connections shared by mothers fit into previously reviewed coaching literature that associates adult learning methods with positive outcomes for a wide range of individuals involved in coaching (Trivette et al., 2009). Flexibility in the coaching debrief framework allowed for varied instruction models to meet individual mothers' needs (e.g., visuals, discussion, direct instruction). Some direct instruction was necessary for one dyad (Laura and Mae) during the 10-minute observation. The limited flexibility within the observation component of the eCoaching cycle may have hindered Laura's ability to make connections to pretend play. Laura specifically mentioned ways her learning would have benefited from differentiated support within the observation component of eCoaching. While the structure of the debrief framework was sufficient for most mothers, Laura's experiences highlight the need for flexibility towards adult learning principles in all areas of eCoaching cycle.

Personal Learning and Benefits of eCoaching

The benefits to mothers and children who participated in eCoaching support previous early childhood coaching research (Fettig & Barton, 2014; Miller-Kuhaneck & Watling, 2018; Ogourtsova et al., 2019). The present study also adds to the literature through mothers' feelings that they were the greater beneficiaries of eCoaching as they learned to engage in the play with their child (Allen & Huff, 2014; Dunst et al., 2007). All mothers discussed social media and resources they consumed to develop their parenting skills. By their post-interview, mothers expressed value in the opportunity to apply their learning with their child during eCoaching and receive child-targeted feedback. Desimone and Pak (2006) have discussed coaching as a form of professional development for teachers with similar importance placed on application practices. Desimone and Pak discuss "active learning" as opportunities to practice and receive feedback in one's work. This study supports a similar idea, specifically in terms of "active learning" related to mothers supporting their child's learning at home.

Study Limitations

While this multiple case study provided rich descriptions of numerous variables that underscore the influence of eCoaching as support for family-centered practices regarding the facilitation of pretend play in caregivers of preschool children both with and without disabilities, limitations do exist. A small sample size, variations in pretend play data collected across participants, the influence of reactivity due to video collections, researcher engagement as a "participant-observer," and the influences of a global pandemic contribute to the limitations of this study.

Creating a rich description of data and collect multiple forms of data on dyads in a real-life setting makes it difficult to generalize findings across the field (Yin, 2017). Furthermore, two

mothers in the IEP dyad group had experience as teachers, and one had experience in early childhood. These mothers' background knowledge may have influenced their eCoaching outcomes related to knowledge, understanding, and facilitation. Furthermore, all dyads participated in eCoaching during the COVID-19 pandemic. Research has indicated that caregivers have experienced decreased mental health and worsening behavior from their child (Patrick et al., 2020) because of COVID-19. Specifically, caregivers of children with a disability report an increased burden and resulting stress when supporting their child's needs, particularly due to school closures (Cluver et al., 2020; Weaver & Swank, 2021). Consequently, mother and children's everyday routines may not resemble individuals engaging in eCoaching removed from the extraordinary times of a global pandemic.

My engagement in coaching mothers, collecting data, and analyzing data create limitations associated with being a "participant observer." Participation as an observer adds a threat of bias (Becker, 1967) and unintended influence during eCoaching interactions (Bogdewic, 1999). Additionally, eCoaching relied on video data collection of mothers and children, which increased the possibility of "reactivity" due to the researcher's influence on participants (Maxwell, 2013). Mothers and children were aware that they were being observed during a 10-minute play session even though my camera was turned off and muted. For this reason, video collection and my presence may have influenced mother and child behaviors and reduced more natural interactions. This phenomenon was noted by children frequently looking at or becoming distracted by the camera in the initial sessions. Mothers also expressed that it was not until session three that they reduced their feelings of performance anxiety. These feelings on the part of mothers and children had the potential to influence the data gathered.

Finally, observations relied on the selection of play that interested the child. This open-ended selection created inconsistencies in pretend play observations across dyads and within an individual dyad. Allowing children to select topics of interest contradicts child-based observations where a similar topic, such as “house play,” is encouraged. More consistency across observation topics may have made the trajectory of growth in mothers and children more distinct. Additionally, children often selected an activity of play that was not based on a pretend scenario, making it difficult to collect consistent data. The failure to engage in pretend play was particularly true for the dyad of Laura and Mae. For this reason, it was difficult to draw conclusions for this dyad and reduced the data available for the collective case study.

Implications for Research

The findings from this study have implications for future research. This study relied on a limited sample size of participants to provide rich descriptions of each case (Yin, 2017). Replication with larger sample sizes and greater attention to diverse backgrounds would be a natural progression of this study. Specifically, attention should be paid to participants with varied background knowledge as prior experiences influenced eCoaching outcomes. Additionally, comparison dyads were naturally distributed by child gender and a mother’s working status. More distribution across dyads in these demographic areas would aid in generalizations made from pattern matching. Additional demographics not accounted for in this study may also relate to fathers, low-incidence disability categories, and employment status.

Future iterations of eCoaching should also seek to understand the relationship and influence of caregivers on children’s self-directed play ideas or how a caregiver’s presence may inherently change a child’s play. Studies of eCoaching would benefit from an expanded look into individual variables associated with the eCoaching cycle. Specifically, outcomes of those

mothers who played with their children without eCoaching support versus those receiving support could speak to specific outcomes related to one-on-one play and support through eCoaching. The investigation of individualized learning strategies could infuse aspects of direct instruction in terms of online module learning (Mast et al., 2014; Sourander et al., 2016), initial professional development (McDuffie et al., 2013; McDuffie, 2016; Meadan et al., 2016; Wade et al., 2009), and "bug-in-ear" technology (Mast et al., 2014). Issues seen in the investigation of coaching of caregivers related to technology issues and remote viewing (Lerman et al., 2020) were not present in the following study. However, issues with child and child behavior in terms of pretend play behavior could be mediated by virtual coaching solutions outlined by Lerman et al. (2020) in their suggestion of sharing guidelines before to coaching. Guidelines of pretend play activities could be outlined to support increased consistency of eCoaching observations and video collection among participants.

The influence of individualized support and adult learning was an integral factor in eCoaching outcomes. Future studies should seek additional information on participants' beliefs and values to inform eCoaching supports and outcomes. For example, pre-interview questions should seek detailed information on how participants define play and pretend play. The elusive nature of a shared definition in terms of play in research (Dockett et al., 2013) and across cultures (Göncü & Gauvain, 2012; Rogoff & Angelillo, 2002) is common. Particularly, the discrepancies in pretend play elements, such as functional play, have been unearthed (Sidhu et al., 2020). Understanding how caregivers define play and pretend play could allow eCoaching to be more responsive to participants existing knowledge and avoid the misconceptions seen in Laura's experience. Additionally, providing flexible learning structures to the eCoaching observation component could allow the infusion of adult learning concepts across the eCoaching

cycle. The following incorporations would enrich the understanding of individualized decision-making that could guide outcomes within the eCoaching intervention.

Furthermore, to mitigate the potential influences related to my role as a "participant observer," future studies should consider utilizing multiple researchers to differentiate the roles of data collection and analysis from those associated with eCoaching. A study designed to use a researcher as a complete observer would reduce potential bias and allow data collection to extend to the coach responsible for eCoaching. The incorporation of additional researchers would also allow for other comparison variables and investigate specific coaching techniques. Research could also utilize a "train the trainer" model, where educators are responsible for learning eCoaching procedures and applying methods to caregivers within their school communities. Future research that incorporates variances in design would continue to add to the literature on eCoaching and aid in scaling up research on eCoaching.

Implications for Practice

The findings of this study contribute to the literature on play-based eCoaching as a viable method of support for caregivers (Kemp & Turnbull, 2014; Miller-Kahaneck & Watling et al., 2018; Ogourtosova et al., 2019), and particularly mothers. Mothers in this study praised the opportunities eCoaching provided to apply their learning to their children. As a medium of play-based support, pretend play has the potential to address multiple areas of academic, social, and developmental learning domains while still following a child's natural interest. Early childhood educators and service providers may benefit from using an eCoaching structure focused on pretend play to facilitate family partnerships across several learning domains.

This study also supports the idea that individualized values, beliefs, and definitions contribute to pretend play across mothers. Early educators should exercise restraint towards

assumptions of how play is conceptualized for individual families and children. For this reason, implementors of eCoaching should pay particular attention to caregivers' background knowledge and experiences. Additionally, individuals should recognize that families may have varying interests and technological comfort when implementing eCoaching. Those seeking to implement eCoaching should also ensure that caregivers have adequate time to apply their learning, ask questions, and share their own experiences.

Another important feature seen in this study is the impact of individuated goals and strategies based on family interests and needs. The ability to tap into this level of support requires providers and educators to build trust and relationships with caregivers for eCoaching. An additional relational component was added to Knight and colleagues' (2015) framework, and adult learning principles (Collin, 2004; Donovan et al., 1999) were applied to the eCoaching debrief framework. The following study highlights how any of the same principles applied to educator coaching models may also overlap in the coaching of families in terms of adult learning principles (Collins, 2004; Donovan et al., 1999), applied learning (Desimone & Pak, 2017), and personalized learning and feedback (Knight et al., 2015). Many individuals in the community and school organizations are experienced in coaching educators. As eCoaching requires responsive instruction, these same individuals could lend their skills to family-based eCoaching.

Conclusion

The variation seen in mothers during eCoaching practices depends on multiple factors (e.g., background experiences, personality, interest, beliefs). These variances factored into the learning and outcomes seen in dyads during eCoaching. While some similarities arose for students with disabilities, all children demonstrated a range of needs that benefited from their mother's participation in eCoaching. Mothers felt satisfied with the eCoaching model and saw it

as beneficial to their role as a parent. The benefits of eCoaching extended to the children of these mothers as well, as they honed their skills in observation and responsive interactions during play. This study showcases that eCoaching in the home setting is ideal for mothers wishing to support their child in various behaviors (e.g., language, social-emotional, academic) through involvement in pretend play.

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APPENDIX A

Approval Notice
Amendment – Expedited Review
UIC Amendment # 1

November 2, 2020

Amanda Passmore
Special Education

RE: **Protocol # 2020-1328**
"A Multi-Case Study of Caregiver eCoaching to Promote Pretend Play Behaviors in Preschool Children"

Dear Dr. Passmore:

PIs who wish to begin or resume research involving activities that have been placed on temporary hold by the University due to the COVID-19 pandemic (i.e., non-therapeutic, in-person research) must complete a COVID-19 Human Subjects Research Restart Worksheet for an assessment of their studies prior to resuming or initiating the research.

Please refer to the Human Subjects Research Restart page on the OVCR website for additional information.

The research restart is being managed by the Office of the Vice Chancellor for Research (OVCR) and the UIC Center for Clinical and Translational Sciences (CCTS). Questions about the campus research restart may be directed to research@uic.edu.

Your application was reviewed and approved on November 2, 2020. The amendment to your research may now be implemented.

Please note the following information about your approved amendment:

Amendment Approval Date: November 2, 2020
Amendment:
Summary: UIC Amendment #1 dated and accepted via OPRS Live on October 29, 2020 is an investigator-initiated amendment to add Veronica Kang and Sarah Deangelo as key research personnel (Appendix P included).
Approved Subject Enrollment #: 20
Performance Sites: UIC
Sponsor: None
Institutional Proposal (IP) #: Not applicable

Please be sure to:

→ Use your research protocol number (2020-1328) on any documents or correspondence with the IRB concerning your research protocol.

→ Review and comply with the policies of the UIC Human Subjects Protection Program (HSPP) and the guidance ***Investigator Responsibilities***.

Please note that the IRB has the right to ask further questions, seek additional information, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact the OPRS at (312) 996-1711 or me at (312) 355-0816. Please send any correspondence about this protocol to OPRS via OPRS Live.

Sincerely,

Alison Santiago, MSW, MJ
Assistant Director, IRB # 2
Office for the Protection of Research Subjects

cc: Marie Tejero Hughes (Faculty Advisor)
Norma Lopez-Reyna, Special Education, M/C 147

APPENDIX B

Participant Permission and Consent Form

APPROVAL
PROTOCOL #: 2020-1328
STARTS 10/26/2020 ---- EXPIRES 10/26/2021
UIC UNIVERSITY OF ILLINOIS AT CHICAGO INSTITUTIONAL REVIEW BOARD

University of Illinois at Chicago (UIC)
Research Information, Parent/Guardian Consent and Consent for Participation in Social, Behavioral, or Educational Research
A Multi-Case Study of Caregiver eCoaching to Promote Pretend Play Behaviors in Preschool Children

Principal Investigator/Researcher Name and Title: Amanda Passmore, Doctoral Candidate
Faculty Advisor Name and Title: Marie Tejero Hughes, PhD
Department and Institution: Department of Special Education, College of Education at University of Illinois at Chicago
Address and Contact Information: 1040 W Harrison St, Chicago, IL 60607, [redacted]

About this research study
You and your child are being asked to participate in a research study. Research studies answer important questions that might help change or improve the way we do things in the future. The following study seeks to examine how virtual eCoaching can support family-centered practices as it relates to the facilitation of dramatic play, in parents/caregivers of preschool children.

Taking part in this study is voluntary
You and your child's participation in this research study is voluntary. You may choose to not take part in this study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty or loss of benefits to which you are entitled and will not affect your relationship with the University of Illinois at Chicago (UIC).

This consent form will give you information about the research study to help you decide whether you want to participate. Please read this form and ask any questions you have before agreeing to be in the study.

You are being asked to participate in this research study because you are a parent/caregiver of a child between the ages of 3 – 5; the primary language spoken in your home is English; and you have access to internet and technology that allows for video conferencing.

A total of 8 participants (4 parent/caregivers and their 3 – 5 year-old child) will be enrolled in this research study. The parents/caregivers will be made up of 2 having a child with a disability and 2 having a child without a disability.

Note: This research includes subjects who are minors who are not able to consent for themselves.

Important Information
This information gives you an overview of the research. More information about these topics may be found in the pages that follow.

WHY IS THIS STUDY BEING DONE?	We want to explore how virtual eCoaching can support parents/caregivers in supporting dramatic play, in their preschool children.
WHAT WILL I BE ASKED TO DO DURING THE STUDY?	You will be asked to provide permission for your child to be observed/video recorded as a part of coaching. All video observations of your child will be conducted in your presence or while you are interacting with your child. The researcher will not be interacting with your child. First, you will be asked to participate in an audio-recorded pre-interview. During this time, you will also be asked to work with the researcher to provide a 10-minute video-recorded observations of your child. Next, you and your child will participate in 6 virtual coaching sessions. Coaching sessions will occur over Zoom Video Conferencing and consist of a 10-minute video-recorded observation of play between you and your child and a video-recorded debrief conversation with the yourself and the coach. Throughout the 6 coaching sessions, you will work with the researcher to provide a three 10-minute video recorded observations of your child. At the end of 6 coaching sessions, you will participate in an audio-recorded post-interview. During this time, you will also be asked to provide a 10-minute video-recorded observations of your child.
HOW MUCH TIME WILL I SPEND ON THE STUDY?	The pre-interview will take 60-minutes and the post-interview will take 90-minutes. Eleven observations of your child will occur at scheduled points throughout the study. Five observations will be of independent child play. The other 6 observations will involve parent/caregiver interactions during play. All observations will last 10 – minutes each. Coaching sessions will not exceed 60 minutes and include the 10-minute video-recorded observation (parent/caregiver and child interaction) followed by a 30-minute coaching conversation (parent/caregiver only). Six coaching sessions will occur in the

	study with at least 5 days between each session. Total parent/caregiver time commitment in the study will be between 10 - 12 hours. Total child time commitment will be 1 hour and 50 minutes. There will be not direct interaction between the researcher and your child in this study. Time enrolled in the study for you and your child will not exceed 3 months. All interviews, observations, and coaching sessions will be scheduled for dates and times that work for your schedule.
ARE THERE ANY BENEFITS TO TAKING PART IN THE STUDY?	Being in this research study will not benefit you and/or your child directly. We hope that your participation in the study may benefit other people in the future by helping us learn more about virtual eCoaching as a way to support parents/caregivers of preschool children.
WHAT ARE THE MAIN RISKS OF THE STUDY?	The primary risks presented by this research study for you and your child are breaches of privacy (others outside of the study may find out you are a subject) and/or confidentiality (others outside of the study may find out what you did, said, or information that was collected about you during the study).
DO I HAVE OTHER OPTIONS BESIDES TAKING PART IN THE STUDY?	This research study is not designed to provide treatment or therapy, and you have the option to decide not to take part at all or you may stop your participation at any time without any consequences.
QUESTIONS ABOUT THE STUDY?	For questions, concerns, or complaints about the study, please contact Amanda Passmore at [redacted] or email at [redacted] You may also contact Marie Tejero Hughes at [redacted] or email at [redacted] If you have questions about your rights as a study subject; including questions, concerns, complaints, or if you feel you have not been treated according to the description in this form; or to offer input you may call the UIC Office for the Protection of Research Subjects (OPRS) at 312-996-1711 or 1-866-789-6215 (toll-free) or e-mail OPRS at uicirb@uic.edu.

Please review the rest of this document for details about these topics and additional things you should know before making a decision about whether to participate in this research. Please also feel free to ask the researchers questions at any time.

During this study, Amanda Passmore and her research team will collect the following information about you for the purposes of this research:

Pre- and post- interviews will be audio recorded and transcribed. These interviews are intended to learn more about your feelings around your knowledge and support of specific play behaviors in your child. During the pre-interview you will also provide demographic information related to yourself and your child.

Five video-recorded observations of your child will also be collected. These observations will provide information on child specific play behaviors throughout the study.

Six video-recorded observations of play interactions between you and your child will be collected as a way to describe parent/caregiver and child play behaviors.

Coaching conversations (30-min) will be video-recorded and transcribed to explore parents/caregivers feeling, knowledge, or ideas around play and coaching. The researcher will also maintain a coaching log to summarize key points of the coaching conversations that occur with you.

Video and audio-recorded data will be destroyed following data analysis.

To be eligible for this study you and your child must:

1. Identify as the primary caregiver a child 3 to 5 years old.
2. Your child does not qualify for kindergarten based on your state's requirements for the Fall 2020 school year.
3. The primary language spoken with your child at home is English.
4. You have access to internet at your home address.
5. You have access to technology that allows video conferencing (web camera and microphone).
6. You have access to a device that allows for visual and audio video recording capability (e.g., smart phone, laptop, tablet).
7. If you are participating as a parent/caregiver of a child with a disability, your child has a disability label of developmental delay, Autism, communication disorder, or mild cognitive disability on their Individual Education Plan (IEP).

What will happen with my information used in this study?

Your identifiable private information collected for this research study will not be used for future research studies or shared with other researchers for future research.

What about privacy and confidentiality?

Efforts will be made to keep your personal information confidential; however, we cannot guarantee absolute confidentiality. In general, information about you, or provided by you, during the research study, will not be disclosed to others without your written permission. However, laws and state university rules might require us to tell certain people about you. For example, study information which identifies you and the consent form signed by you may be looked at and/or copied for quality assurance and data analysis by:

- Representatives of the university committee and office that reviews and approves research studies, the Institutional Review Board (IRB) and Office for the Protection of Research Subjects.
- Other representatives of the State and University responsible for ethical, regulatory, or financial oversight of research.
- Government Regulatory Agencies, such as the Office for Human Research Protections (OHRP).

A possible risk of the study is that your participation in the study or information about you might become known to individuals outside the study. Your personal information, interviews, observations, coaching conversations, and notes will be coded and stored on a secure, password protected, online file sharing program to prevent access by unauthorized personnel.
All video-recorded data will be encrypted on Zoom Video Conferencing and immediately deleted from the Zoom Video Conferencing platform upon transferring to the secure, password protected, online file sharing program. All video-recorded data will be double password protected to prevent access by unauthorized personnel.

The master list linking participant identifiers (names and/or addresses) to identification numbers will be stored separately from data. This master list will be password protected and destroyed after data collection has been completed.

During the study, videos and audio recordings will be collected. Once data analysis is completed video- and audio recordings will be destroyed. When the results of the study are published or discussed in conferences, no one will know that you were in the study.

Please remember that there is an exception to protecting subject privacy and confidentiality if child, elder, and/or disabled adult abuse or neglect of an identifiable individual, or the threat of imminent self-harm or harm to others is disclosed. If such information is disclosed, the researchers may be obligated to inform the appropriate authorities.

What are the costs for participating in this research?
There are no costs to you for participating in this research.

Will I be reimbursed for any of my expenses or paid for my participation in this research?
You will receive $200 in digital VISA gift cards in 3 increments throughout the study. You will receive a $25 digital VISA gift card after the completion of your pre-interview. A $100 digital gift card will be provided following your completion in all 6 coaching sessions. Finally, after your completion of the post-interview, you will receive a digital VISA gift card for $75. If you do not finish the study, you will be compensated in the amount associated with the parts of the study completed. Partial payment will not be provided within any of the 3 increments. If you complete the study, you will receive a total of $200 in digital VISA gift cards. You will receive your payment within 30 days of your completion of the pre-interview, post-interview, and 6th coaching session. We may need to collect your social security number or Taxpayer Identification Number (TIN) in order to issue your compensation and for tax reporting purposes to the United States Internal Revenue Service (IRS).

Can I withdraw or be removed from the study?
If you decide to participate, you have the right to withdraw your consent and leave the study at any time without penalty.

The researchers also have the right to stop your participation in this study without your consent if they believe it is in your best interests.

If you choose to no longer be in the study and you do not want any of your information to be used, contact the researcher: Amanda Passmore at (979) 415-4771 or email at apassm2@uic.edu.

Remember:
You and your child's participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

Signature of Subject

I have read the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I also agree for my child to participate in this study. I will be given a copy of this form.

Your signature below indicates that you agree to both participating in and are providing permission to collect data about your child in this study. You signature also verifies that you are the legal guardian/custodial parent of the child for whom you are providing permission.

_____
Printed Name of Minor

_____ _____
Signature of Parent/Guardian Date of Signature

_____
Printed Name of Parent/Guardian

_____

_____ _____
Signature of Person Obtaining Consent Date (must be same as subject's)

_____
Printed Name of Person Obtaining Consent

APPENDIX C

Pre- eCoaching Interview Protocol

Prior to beginning interview:

Say, *"The interview will take about 60-90 minutes during which time I will be recording our conversation, but this recording will be destroyed once a written copy of the interview has been completed. If at any point if you would like to pause the interview and schedule the rest for another day that we can do so. All the information you provide is confidential and any identifying information will not be shared with others. As you answer each question, please do not use school names, teacher names, or provide information that would allow others to be able to identify you or the individual. Should you use your child or family members name in the interview they will be given a pseudonym for a name during the transcription of the interview. Ultimately, all data will be de-identified, or made anonymous, during transcription of your interview should you accidently say a name. Additionally, a master list linking your name will be stored separately and destroyed once all data is gathered. A pseudonym will be assigned to you as a participant and the pseudonym will be used for data analysis, not your name or the name of anyone in your family."*

"The purpose of the interview is to gain an understanding of how you engage in pretend play with your child and to learn a little more about your background which will be useful when we begin eCoaching."

Say, "*Do you have any questions before we begin?"*
(Respond to any questions)

Say, "*If you have no further questions then the interview will begin now.*"

If at any point in the question series, further information is needed for clarification or more detail would be helpful for understanding, participant will be prompted.

Possible Prompts:

- "Hmm, would you tell me more about that please?"
- "Can you elaborate on what you mean by _____?"
- "Would you mind giving an example of that?"
- "Let me be sure that I am hearing you correctly,..." (restate in your own words what you heard, then... Say, "Is that correct?"

Family Dynamics:
Say, "*I am now going to ask you some general questions about your family and (child).*"

1. Tell me about your family.
    a. Who lives in the home?
    b. What is your relation to (child)?
    c. Tell me about your extended family?
    d. Are there other children in the family?
    e. Where does (child) fall in the birth order?

2. Who takes care of (child)?
    a. Who do you talk to or go to for parenting advice?

3. What are your strengths as a caregiver?

4. Is there anything else you think I should know about your family or your role as a caregiver?

Information on Child
Say, "*I am now going to ask you some questions about (child).*

5. Start by telling me about (child)
    a. How old is (child)?
    b. How would you describe (child's) personality?
    c. What are some things that (child) likes?
    d. What are things that (child) dislikes?
    e. What are (child's) strengths?

6. Does your child attend any community programing outside the home that support their learning?
    a. Does (child) currently attend childcare and/or preschool?
    b. Has (child) attended childcare and/or preschool in the past?
    c. Have any of these changed as a result of COVID-19?

7. What have been some significant life events for (child)?
    a. Do you have any developmental concerns?
    b. Has (child) been evaluated for developmental delays? Has the (child) received any interventions in these areas?

    For caregivers who identified their child as having a disability in recruitment:
    c. Does (child) currently have an individual education plan (IEP)?
    d. When was (child) diagnosis?
    e. What is the (child's) diagnosis?
    f. What type of supports are a part of (child's) IEP.
    g. Has (child) ever had an individual family service plan (IFSP)?

8. Is there anything else you think I should know about (child)?

Home Play Questions:
Say, "*I am now going to ask you some questions specifically related to (child's) play and play activities (child) engages in at home.*"

9. What role do you see play having on (child's) development (e.g., academic, social emotional, independence)?

a. What benefits has play had on your (child's) development?

b. What impact has COVID-19 had on (child's) play?

10. Do you have any specific goals for (child's) learning during play?

a. If so, what are these goals?

b. How do you facilitate these goals for learning?

11. How would you describe (child's) interests during play?

a. What activities does (child) engage in?

b. How would you describe (child's) demeanor during play?

c. Who does (child) play with? Do they have a preference in a play partner (e.g., adult, sibling, friend)?

d. How would you describe (child's) independence during play? Can they play alone? Do they require assistance, if so, what assistance is provided?

12. What opportunities does (child) have to play during a typical day?

a. When does play take place?

b. Where does play take place?

c. Who is (child) playing with?

d. What is (child) playing with?

e. Would you see these opportunities as structured, unstructured, or both?

13. What are you typically doing while (child) is playing?

a. How do you see your role in (child's) play?

b. What is the role of any other individual's mentioned who play with the child?

14. Thinking of other children or siblings you have observed playing, tell me about differences you have noticed in how children play?

Pretend Play Questions:
Say, "*The next questions relate specifically to pretend play. Pretend play involves a child's use of imagination during play activities or scenarios.*"

15. How does (child) engage in pretend play during a typical day?
   a. What does (child's) pretend play typically look like?
   b. Who does (child) engage with during these pretend play instances? Or does (child) pretend play alone?
   c. Does (child) incorporate any materials (real or imaginary) into their pretend play?
   d. Can you describe a recent pretend play interaction you observed your child engaging in?

16. What role does pretend play have in the developmental or learning goals you previously mentioned for (child)?
   a. Do you have any specific goals related to pretend play for (child)?

17. The focus on eCoaching will be on play and specifically pretend play behaviors. Is there anything else you would like to share as it relates to this topic that we have not covered?

Coaching Questions:
Say, "*Finally, I would like to end the interview asking you about your experiences with coaching.*"

18. Have you ever engaged in coaching, either professionally or personally?
   a. If yes…
      i. Can you describe your previous experience with coaching?

19. What do you hope to get out of coaching in the coming months?

Caregiver Demographic Questions:
Say, "*I am now going to ask you some demographic questions. You can choose to not answer a question by saying pass.*"

20. What gender does you identify as?
   a. What does (child) identify as?

21. What race do you identify as?
   a. What race does (child) identify as?

22. Do you currently hold full-time or part-time employment?
   a. What is your current job(s)?

23. What is your highest-level of degree earned (e.g. high school diploma, GRE, associates, undergraduate, masters, doctorate)?

a. What is that degree(s) in?

Conclusion of Interview:

Say, "Thank you for taking the time to talk with me. I will contact you to do a member check of your responses. This is the conclusion of the interview. Thank you so much for your time.

APPENDIX D

Post- eCoaching Interview Protocol

Prior to beginning interview:

Say, "*The interview will take about 60 minutes during which time I will be recording our conversation, but this recording will be destroyed once a written copy of the interview has been completed. All the information you provide is confidential and any identifying information will not be shared with others. As you answer each question, please do not use teacher names, school names, or provide information that would allow others to be able to identify you or the individual. Your child's name will be given a pseudonym and this is the name that will be used in the interview transcript. All data will be de-identified, or made anonymous, during transcription of your interview should you accidently say a name. Additionally, a master list linking your name will be stored separately and destroyed once all data is gathered. A pseudonym will be assigned to you as a participant and the pseudonym will be used for data analysis, not your name."*

"The purpose of the interview is to gain an understanding of your practices as it relates to facilitating pretend play for your child following eCoaching and your experiences working with a coach over the past couple of months."

Say, "*Do you have any questions before we begin?"*
(Respond to any questions)

Say, "*If you have no further questions then the interview will begin now.*"

If at any point in the question series, further information is needed for clarification or more detail would be helpful for understanding, participant will be prompted.

Possible Prompts:

- "Hmm, would you tell me more about that please?"
- "Can you elaborate on what you mean by _____?"
- "Would you mind giving an example of that?"
- "Let me be sure that I am hearing you correctly..." (restate in your own words what you heard, then... Say, "Is that correct?"

Family Dynamics:
Say, "*I am now going to ask you some general questions about your family and (child).*"

1. Have there been any changes your family dynamics since the first interview?
    a. If so, what have those changes been?

2. What have been some significant life events for (child)?
    a. For children with an IEP: Have there been any changes to (child's) IEP or services since the first interview?

Home Play Questions:
Say, "*I am now going to ask you some questions specifically related to (child's) play and play activities (child) engages in at home.*"

3. What role do you see play having on (child's) development (e.g., academic, social emotional, independence)?
    a. What benefits has play had on your (child's) development?

4. What role does pretend play have in the development of your (child)?

5. How would you describe (child's) interest during play?
    a. What activities does (child) engage in?
    b. How would you describe (child's) demeanor during play?
    c. Who does (child) play with? Do they have a preference in a play partner (e.g., adult, sibling, friend)?
    d. How would you describe (child's) independence during play? Can they play alone? Do they require assistance, if so, what type assistance is provided?

6. What opportunities does (child) have to play during a typical day?
    a. When does play take place?
    b. Where does play take place?
    c. Who is (child) playing with?
    d. What is (child) playing with?
    e. Would you see these opportunities as structured, unstructured, or both?

Play Facilitation Questions:
Say, "*Now I would like to ask you some question about how you facilitate play and specifically pretend play with (child).*"

7. What are you typically doing while (child) is playing?

a. How do you see your role in (child's) play?

b. What is the role of any other individual's mentioned who play with the child?

8. As a result of eCoaching, have you made any changes how you play with (child)?
a. If so, what have those changes been?
b. If so, how do you feel like those changes have impacted (child's) development?
c. If not, why?

9. Tell me how you will continue to use the knowledge and skills highlighted through coaching with (child-or siblings)?
a. Do you think the use of this knowledge and these skills will look different in the future (e.g., normal activity resume, preschool building reopens)? If so, how? If not, why?

Pretend Play Questions:

10. Do you feel like the role of pretend play in (child's) development has changed over the course of eCoaching? Why or why not?

11. Has (child's) pretend play behaviors changed as a result of eCoaching?
a. If so, how?
b. Can you provide an example of one of these changes you have observed?
c. What do you feel has influenced the changes your highlighted?

eCoaching Questions:
Say, "*Finally, I would like to end the interview asking you about your experiences with eCoaching.*"

12. What was your experience working with a coach?

13. What was your general reaction to the eCoaching format?

14. How did the coach support your knowledge related to play facilitation and pretend play?

15. What impact did eCoaching have on your daily interactions with (child)?

16. Would you share aspects of your learning related to play facilitation, dramatic play, or data with other caregivers? Why or why not?
a. Would you recommend eCoaching to a fellow caregiver? Why or why not?

eCoaching Evaluation Ratings
Say, "*The following section will be a little different. I am going to pose a question and would like you to provide a rating 1-5. 1: being poor and 5 being excellent.*"

Participant Reactions to Content

17. The coach covered the topics in *sufficient detail*.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

18. My *understanding* of the facilitation of dramatic play with my child

a. PRIOR to eCoaching

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

b. AFTER eCoaching

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

19. My ability to *apply concepts* to an actual problem or situation in the area of pretend play facilitation with my child

a. PRIOR to eCoaching

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

b. AFTER eCoaching

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

Working Relationship

20. The coach and I trust one another.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

21. The coach was approachable.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

22. The coach showed a sincere desire to understand my family and support my child.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

Coaching Process

23. The coach provided support that matched the needs of my family.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

24. The coach provided me with practical and useful feedback and strategies.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

Investment

25. The time spent working with the coach was effective and productive.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

26. I would recommend eCoaching to another caregiver.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

Benefits of Coaching

27. My child benefited from my work with the coach.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

28. The coach had a positive impact on my child's play behaviors.

Very Poor	Poor	Acceptable	Good	Excellent
1	**2**	**3**	**4**	**5**

Final Question and Summary:

29. The focus on eCoaching was on play and specifically pretend play behaviors. Is there anything else you would like to share as it relates to this topic that we have not covered?

Conclusion of Interview:

Say, "Thank you for taking the time to talk with me. I will contact you to do a member check of your responses. This is the conclusion of the interview. Thank you so much for your time.

APPENDIX E

Coaching Log

Dyad Participant ID: _____ Caregiver Pseudonym _____ Child Pseudonym _____

Debrief Date/Time (start and finish time)	Data Visualization Used	What is going well?	Current concerns or Struggles?	Learning Plan Used (e.g., modeling, role play, resource)	Goal Statement	Next Observation	Next Debrief	Follow-up throughout implementation	Additional Notes

APPENDIX F

Coaching Debrief Fidelity Checklist

Component	Coach Actions	Fidelity
Relationship Building	☐ Time is spent informally connecting with caregiver (e.g., how is your day going?, what did you do this weekend?)	___ / 1
Identify	☐ Coach prompts caregiver on their perceived strengths from observation (e.g., what went well?, how did you feel about…?) ☐ Coach provides a visual representation of data from observation. The data representation may also include previous observation. ☐ The coach and caregiver discuss the data or specific actions from observation. ☐ Child behavior is connected to data. ☐ Coach and caregiver identify a goal related to caregiver facilitation and/or student behavior. ☐ Coach and caregiver identify a strategy connected to the goal set.	___ / 6
Learn	☐ Coach targets learning around selected strategy ☐ Coach actively engages caregiver in method of learning (e.g. modeling, role play, direct instruction, video modeling) ☐ Coach connects learning to previous learning or actions ☐ Coach clarifies and checks for caregiver understanding around strategy ☐ Coach connects learning to set goal ☐ Coach connects learning to caregiver strengths and/or child needs and makes adjustments is needed	___ / 6
Improve	☐ Coach and caregiver set goal related to strategy and data o Goal is impactful to student needs o Goal is reachable in given time o Goal is child focused o Goal connects data to strategy ☐ Coach and caregiver agree on date and time observation ☐ Coach and caregiver agree on date and time for next debrief	___ / 7
	Total	___/20

APPENDIX G

Caregiver Observation Forms

Adapted from Trawick-Smith and Dziurgot (2010)

Minute Start/ End Time	**Child Play Needs** No Need -NN Much Need- MN Some Need – SN Sub-Codes Engagement (E), Task completion/performance (TCP), Thinking/Constructing Knowledge (K), Social Participation (SP), Social Conflict (SC), Rules/ Routines (R), Adult Contact (AC)	**Adult Behavior** Observation – O N- No Interaction Direct – D Indirect – I Sub-Codes Engagement (E), Task completion/performance (TCP), Thinking/Constructing Knowledge (K), Social Participation (SP), Social Conflict (SC), Rules/ Routines (R), Adult Contact (AC)	**Child Play Response** No Need -NN No Need Accept-NN-A No Need Pass – NN-P Much Need- MN Some Need – SN Sub-Codes Engagement (E), Task completion/performance (TCP), Thinking/Constructing Knowledge (K), Social Participation (SP), Social Conflict (SC), Rules/ Routines (R), Adult Contact (AC)
0			
2			
4			
6			
8			
10			

Constructs for Caregiver Observation

Adapted from Trawick-Smith and Dziurgot (2010)

Child Play Needs & Response			
Code	**Child Behavior**	**Example**	**Analysis**
Much need (MN)	Children are in much need of adult play support if they cannot proceed with a task, role enactment, daily routine, or resolution to a problem and/or in which children could without the involvement of an adult.	A child is attempting to open a box of blocks without success. They begin to become visibly upset and gesture to the adult nearby.	"Would this child engage fully in this play activity and/or play safely without adult involvement?"
Some Need (SN)	Children are in some need of adult play support if they can proceed independently, but show difficulty in sustaining attention, accurately solving, or completing problems or tasks, or maintaining positive interactions with adults and materials and in which the behavior could be enhanced, extended, focused, or made more social through involvement of an adult.	A child builds a structure with Lincoln Logs for many seconds. As she places each new piece on her building, she pauses and attempts to count the logs she has included so far. "It's one, two, three ... and...," she says and makes a face showing confusion. She starts over. "One, two, three, four, five, and, and..." She turns to an adult, points to a piece and says, "How many is this one?".	Such behaviors were identified by asking two questions: 1.) "Can this child continue independently with this current activity and play safely, in compliance with rules?" 2.) "Is there a specific way in which this child could benefit from adult involvement?" If researchers answered "yes" to both questions and could specify a way that adult involvement would enhance the activity; it was coded as some need.
No Need (NN)	Children are in no need of adult play support if they can proceed independently at play activities that are sustained, elaborate, and (when peers are present) social and in which adult involvement	Child is playing with baby doll and pretending to feed it. They then rock the baby and sing to the baby before laying it down to cover with a blanket.	Such behaviors were identified by asking two questions: 1.) "Can this child continue independently and safely with this current activity, in compliance with rules?" 2.) "Would

	would clearly not enhance play activities.		this child benefit in a specific way from adult involvement?" A "yes" to the first question and "no" to the second would result in a play interaction being categorized as no need.
No Need - Accept (NN-A)	Occurs after an adult has tried to enhance a child's play and the child accepts that attempt while moving into behaviors characteristic of "No Need (NN)"	The adult provide language around a term of play, "you know what this is called? It is called a hinge." The child responds, "I am going to put a hinge on the door so it can open and close."	Such behaviors were identified by asking two questions: 1.) "Can this child continue independently and safely with this current activity, in compliance with rules?" 2.) "Would this child benefit in a specific way from adult involvement?" A "yes" to the first question and "no" to the second would result in a play interaction being categorized as no need.
No Need-Pass (NN-P)	Occurs after an adult has tried to enhance a child's play and the child passes (does not accept) that attempt while moving into behaviors characteristic of "No Need (NN)." The pass on the adults' attempts does not deter from the child play and ability to sustain a play activity.	The adult provide language around a term of play, "you know what this is called? It is called a hinge." The child continues playing having heard the adult's attempt but chooses to pass on an immediate use of the term "hinge" in their play.	Such behaviors were identified by asking two questions: 1.) "Can this child continue independently and safely with this current activity, in compliance with rules?" 2.) "Would this child benefit in a specific way from adult involvement?" A "yes" to the first question and "no" to the second would result in a play interaction being categorized as no need.

Adult Responses to Play *Caregiver behaviors that were performed in response to children's play needs, could be categorized into four distinct levels of guidance* (Trawick-Smith and Dziurgot, 2010).		
Code	**Adult Behavior**	**Example**
Direct (D)	A response to a play behavior in which an adult ask, demands, physically guides, or in other ways prompts a child to behave in a certain way, and/or in which the adult performs a task for the child.	Instructing a child on what behaviors to perform in play Assigning roles or play tasks Initiating a completely new play activity or theme. Using praise to manage/influence play Physically moving/settling children or guiding their hands. Giving children exact words to say in a play activity or social interaction Asking didactic questions that interrupt play Giving academic information that is incongruous with play in progress Answering or responding for a child when peers initiate contact. Correcting or redoing a child's play task or problem-solving strategy Quieting or altering behavior the adult perceives to be inappropriate/enforcing rules Taking away play materials Settling a dispute for children Picking up/hugging/stroking a child who is fully engaged in play
Indirect (I)	A response to play behavior in which an adult guides and/or enhances a child's activity, without demanding, directly asking for, or in other ways imposing a specific play action or content, and in which the child is able to remain fully in control of the play.	Suggesting play options Verbally encouraging a child to complete a task independently. Physically getting a play activity started for a child to complete independently. Offering/pointing out materials to use Rearranging or setting up play materials or the environment to enhance play Narrating/describing what a child is doing in play Verbalizing observations about play objects Inquiring/conversing about play Asking questions to help a child solve a problem Asking question to extend a child's thinking or play activities Asking cognitively oriented questions and/or using cognitively oriented language that does not disrupt play Asking questions to determine play needs Suggesting a new solution to try or a new element to play in progress Posing challenges or problems for a child to solve. Giving hints to solve problems Modeling or explaining a task or the use of a material or new play element Answering a child's question/providing requested information. Discussing the meaning of a word Pointing out something and/or focusing a child's attention Playing unobtrusively with a child/ allowing the child to guide adult play Playing parallel to a child Facilitating a conversation/interaction between two or more children. Translating a child's utterances for another child Facilitating independent conflict resolution Offering choices for the solution of a conflict Asking about/pointing out consequences of social behaviors. Encouraging children to express emotions Encouraging a child to join peers in play Redirecting inappropriate behavior Discussing, explaining, answering questions about rules and routines Initiating non-obtrusive, humorous or playful contact with a child. Providing warmth/physical comfort without intrusion Reassuring a child when upset Offering attention, praise, or encouragement without altering or directing play activities Responding to a child's utterances, gestures, or actions. Restating or recasting a child's utterances Inquiring about child's state of mind or well-being Commenting on a child's play accomplishments

Observation (O)	A response to play in which an adult watch the behaviors of a child for at least five seconds without intervening.	Observing play Observing and recording play An adult sit within five feet of a child playing watching for over 15 s, without intervening.
No Interaction (NI)	A response to play in which an adult does not interact, physically or verbally, with the child, and does not watch the child continuously for more than five seconds.	Talking to another adult Monitoring other parts of the classroom Attending to another child Staring off/looking out the window Performing teacher tasks Engaging in play activities when no children are nearby

Play behaviors that were categorized as 'much need' or 'some need' could be further sorted into seven types of need (Trawick-Smith and Dziurgot, 2010)–

All direct and indirect play interactions could be further sorted into the same seven types of support needs -

All observed play needs, direct, and indirect adult responses can be placed into one of these categories and subtypes.

Code	**Child Behavior**	**Example**
Engagement (E)	Behavior in which much or some guidance in needed in becoming involved or maintaining involvement in social or individual play activities.	Watching/staring off/sitting or standing unengaged Showing or expressing difficulty in making a play choice Displaying random or unfocused motor behavior Engaging in silly behavior or noise-making, without clear purpose Waiting for materials or a turn in a center or activity Unengaged waiting for an adult's attention/interaction Playing, but showing frequent distraction Showing difficulty getting an activity started. Showing reluctance to begin or join a play activity Asking for help in becoming involved in a play activity Wandering without settling Asking permission to do an activity that is not currently available
Task completion/performance (TCP)	Play in which guidance is needed in completing tasks and/or using materials in their intended ways.	Actively seeking help in performing or completing a task Showing difficulty and/or frustration in physically manipulating materials. Showing difficulty and/or frustration in using materials in precisely their intended ways. Asking an adult to complete a task or play action for the child Requesting or searching for additional play materials.
Thinking/constructing knowledge (K)	Play in which support is needed in solving cognitive problems, thinking more deeply, symbolizing, and/or acquiring or using new language.	Requesting help in problem solving Failing to notice or attend to important aspects of a problem Showing a need for help in thinking through a solution to a problem Asking an adult to give the right answer or solve a problem for the child Asking questions to get information or assistance in solving a problem. Expressing or showing confusion or puzzlement about a play activity Inaccurately solving a problem Misinterpreting or misnaming elements of a problem or task

		Asking for the names of things Asking for explanations of why a problem-solving approach failed Engaging in simple, repetitive, and/or less mindful play that reflects lower levels of thinking
Social Participation (SP)	Play in which a child appears unable, unwilling, or hesitant to interact with or talk to peers in play when obvious social play opportunities present themselves and/or when peer interaction would contribute to play quality in a clearly identifiable way. (Social play opportunities are defined as situations where peers are playing nearby the child and one of the following is observed: a.) the focus child is watching or in other ways showing interest in peers, b.) one or more peers are watching or in other ways showing obvious interest in the focus child, c.) nearby peers are engaged in lively conversation or play with each other or an adult, but do not include the focus child.)	Listening/watching/showing interest in play without joining in Showing an object to an adult without speaking Failing to capture or maintain attention Failing to respond to peers' verbalizations or initiatives Responding to peers only with simple non-verbal gestures Showing difficulty communicating ideas verbally
Social Conflict (SC)	Play in which a child is unable to resolve a disagreement with a peer or engages in play that is aggressive, otherwise anti-social, and/or threatens positive peer relations.	Engaging in a disagreement over objects or play space Complaining/whining/crying about someone else Showing a facial expression of anger towards other Arguing about play ideas or enactments Engaging in physical aggression toward others Engaging in physical or relational aggression
Rules/routines (R)	Play in which support is needed in following established rules and practices and/or playing less disruptively, excluding aggressive or anti-social acts toward peers	Failing to follow previously established routines Violating previously established home rules Engaging in loud, rough, or unsafe behavior that disrupts others Refusing or ignoring an adult's request or instruction Asking questions/showing confusion about rules and routines

	(categorized under social conflicts).	
Adult Contact (AC)	Play in which a child makes a verbal or physical bid for emotional support from an adult, including requests for nurturance, encouragement, praise, reassurance, or general attention.	Showing a need for soothing during upset and/or separation difficulties Showing physical discomfort or illness Showing play accomplishments to an adult to seek encouragement/feedback/praise Positioning themselves so adults will notice or interact with them. Requesting/initiating warmth and physical contact. Initiating an informal conversation with an adult in order to seek contact Inviting an adult to join play/incorporating an adult into play activities Physically or verbally sharing with an adult something that happened. Offering to help an adult with classroom tasks or routines Initiating humor/silliness with an adult

Example 1:
Child: (*Some Need: Task completion/performance*)
A child is holding a leaf-shaped template and a marker but is not using them.
Adult Responses: (*Indirect: Task completion/performance*)
A teacher sitting across from her takes another template and says to herself (loudly, so the child can hear), "Let's see, I think I'm going to trace my shape." She takes a marker and performs this action as the child watches.
Child: (*No need*)
Child begins to use the marker to trace the leaf

Example 2:
Child: (*No Need*)
A child is building with Legos.
Adult Response: (*Direct: Engagement*)
An adult takes the structure out of the child's hands and removes a section of blocks. "Here, let's change this a little. And let's put this here. That will help you." She adds two new pieces to the structure. "There. It gives more support. See? It looks much better."
Child: (*No Need*)
A child is building with Legos.

Example 3:
Child: (*No Need*)
A child is building with Legos and the structure continue to fall.
Adult Response: (*Direct: Engagement*)
An adult takes the structure out of the child's hands and removes a section of blocks. "Here, let's change this a little. And let's put this here. That will help you." She adds two new pieces to the structure. "There. It gives more support. See? It looks much better."
Child: (*No Need*)
A child is building with Legos using the new structure.

APPENDIX H

Focal Child Observation
Play Observation Scale-Adapted (POS-A)

Adapted from Rubin (2001) to include Barton and Wolery (2008)

Child Name

Date:

Time:

1st Round (0:00-5:00)

Center of Play

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Non-Play	onlooker																														
	unoccupied																														
	transitional																														
	uncodable																														
	out of room																														
Play	Games																														
	Dramatic																														
	Construction																														
	Exploritory																														
	Functional																														
Verbalizations																															
Vocabulary																															
Double Coded	FP																														
	Sub-AAO																														
	Sub- IAO																														
	Sub- OS																														
	Sequence																														
	Seq- FP																														

Vocabulary	**Field Notes**

Name:

Date:

Time:

2nd Round (5:00-10:00)

Center of Play

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Non-Play	onlooker																														
	unoccupied																														
	transitional																														
	uncodable																														
	out of room																														
Play	Games																														
	Dramatic																														
	Construction																														
	Exploritory																														
	Functional																														
Verbalizations																															
Vocabulary																															
Double Coded	FP																														
	Sub-AAO																														
	Sub- IAA																														
	Sub- OS																														
	Sequence																														
	Seq- FP																														

Vocabulary	**Field Notes**

STEP 1: **Primary Codes:** First a coder must decide if a student's behavior is **non-play** or **play**

STEP 3: If the primary code is **dramatic**, identify a **double code** related to the **pretend play taxonomy**

STEP 4: Determine if **vocalizations** or **vocabulary** related to the pretend play is used. Record these vocabulary and vocalizations in the field notes section of the tool.

Pretend Play Code Constructs
Rubin (2001); Barton & Wolery (2008)

Code	Definition	Example
Onlooker	Child is not engaging in pretend play of any kind	Child is transitioning to get toy to start new play or cleaning up The child is talking to an adult The child is engaging in on-looker behavior
Unoccupied	There is a marked absence of focus or intent in the child's behaviors. Generally, this is characterized by 2 types of behaviors (1) the child is staring blankly into space; (2) the child is wandering with no specific purpose, only slightly interested, it at all, in ongoing activities around them. If the child is engaging in a functional activity (e.g. twisting hair, fidgeting with clothes or object), but is not attending to that activity (usually seen through eye contact or purposeful movements), then the child's behavior is coded as unoccupied.	Child is walking around room without clear focus or intent to travel to any specific center, object, or individual. Child is sitting in block center next to peers. Their gaze is at the floor in front of them. Child is sliding a ring back and forth on a rug, but their gaze is focused on wall in front of them.

	If it is judged that the child's mind is on the functional activity, the behavior is coded as "functional."	
Transitional	Child is setting up a new activity or moving from one activity to another. This can involve movement in ones' physical space, setting up materials for an activity or cleaning up materials from a previous activity.	Walking across the room to watch an activity happening at the sand table. Walking to get a drink at the table. Cleaning up blocks by putting them back in a bin to put on the shelf
Uncodable	Uncodable behavior is coded when one of the following occurs: (a) the observer is unable to see what the child is doing (e.g., the child is out of view for an extended period of time or the lights are turned out during an interval); (b) the child leaves the room due to circumstances not in control of their will (e.g. pulled out to talk to teacher, but returns shortly); or (c) the observer or adult enters the play area for a portion of the free play session and blocks view. Child may be in the classroom, but out of view from the observer. Observer should remain at least 3 meters away and to visually see the student they would need to move inside this perimeter. Uncodable should never be coded with any other	Child is inside a camping tent with the door closed with peers. Child is putting art project away.

	coding categories (e/g/ do not double code when the child is "uncodable".	
Out of the room	Out of room is coded when the child leaves the room on their own accord (e.g. child goes to the bathroom) The child is not in the classroom. This could be due to a removal from another staff member, using the bathroom, or getting something from cubby area. Out of room will be considered spending majority of interval outside the threshold of the classroom door.	Child is with an adult using the restroom The child goes to another room to get a toy for a full interval.
Games	The child *accepts* prearranged rules, adjust to them and controls their actions and reactions within the given limits. The child and/or their playmate(s), prior to the onset of the game, may have decided upon these rules. There must be an element of competition either between the focal child and other children, or with themselves.	Child is bouncing a ball on a paddle and trying not to drop the ball. They are counting how many times they can bounce it. When the ball drops, they start over at 1. Child is playing tag with their caregiver. Child and caregiver are playing "go fish."
Dramatic	Any element of pretense play.	The child is pushing a toy car around and making engine and horn noises.

	The child may take on a role of someone else, or may be engaged in a pretend activity (e.g. pouring pretend water into a cup and "drinking" it). The child may also attribute life to an inanimate object (e.g. making a doll or action figure).	The child is pushing a car around the lines on the carpet ("road"). The child is putting on an apron and serving food to a baby doll.
Constructive	The manipulation of objects for the purpose of constructing or creating something. The actions associated with this play are centered on a purpose of some kind. May manifest in teaching another how to do something, which differs from exploration because the child already knows how to perform the task. Reading, or being read to, is considered a constructive activity. This is generally seen in a child inventive reading, leafing through a book, or being read to by an adult. (Construct meaning) *Major distinction between functional and constructive activity concerns the child's goal during play. The goal in this case is to create or construct something.*	Child pouring water in a series of containers for the purpose of filling each container to the same level. Pounding on play-doh with the purpose to make a "pancake" Target child shows another child how the elevator on an action figure activity set raises and lowers. Caregiver is reading a book to student
Exploratory	Focused on the examination of an object for the purpose of obtaining visual information about its specific physical properties.	Child is pushing hands into soapy water and bringing them up out of the water before skimming the bubbles off the surface.

	The child may be examining an object in their hand or across the room. It may also involve a child is listening to a noise or listening for something. This does not include reading of books or other materials. *Different from onlooker behavior because the student is getting visual or auditory information from an object as opposed to an individual.*	Caregiver lays down their artwork and the focal student approached painting to look at it. Student is listening to the caregiver play a guitar from across the room.
Functional	This is an activity that is done simply for the enjoyment of the physical sensation it creates. Generally speaking, the child engages in simple motor activities (e.g. repetitive motor movements with or without objects). These movements are repetitive in nature and are done for enjoyment of the movement without an end goal or focus. Simple repetitive movements with or without objects	Pouring water from one cup to another in the sensory table Jumping on and off a chair Singing or dancing for no dramatic reason or with no given direction Ringing bells or beating on a drum Pounding on play-doh with fist without the intent to make something.
Functional Play with Pretense (FP)	Nonliteral use of actual or miniature objects in the manner in which they were intended without the reality-based outcome	Using a baby bottle toy to feed a doll Driving a toy car on a carpet rug with road outlines
Substitution: Assigning Absent Objects (Sub-AAO)	Assigning dramatic roles or emotions to the self, others, or inanimate objects	Taking on the role of mother or doctor Indicating that the “baby is crying” when referring to doll

Substitution: Imagining Absent Objects (Sub-IAO)	Performing an action as if an object were present in the object's absence	Petting a "dog" that is not physically present. Child appears to be petting air Eating imaginary ice cream
Substitution: Object Substitution (Sub-OS)	Use of one object as if it were a different object	Using a block as a phone during play
Sequences	A series of at least two substitution actions related to same theme or routine.	The child is getting "bread" and pretending to put peanut butter on it to feed to their baby
Sequences: Functional Play with Pretense (Seq-FP)	A series of at least two functional play with pretense actions related to same theme or routine	The child is driving a dump truck. They child loads the truck with blocks then drives it to another area to dump the blocks.
Verbalizations	Identifying specific roles children are acting out; assigning attributes to themselves; or planning, mapping, or confirming pretend play behaviors	The child indicates "I am the superhero, and you are the monster." The child indicates "these sticks are going to be the road for my car."
Vocabulary	Verbalizations of terms related to pretend play	The child uses the term "stethoscope" when playing doctor. The child uses the word "villain" when playing superhero games

APPENDIX I

Pretend Play Facilitation Strategies Alignment Table

The following table is intended to serve as a guide for the selection of pretend play facilitation strategies. When considering a strategy, the coach should consider the following:

1. Identified child needs based on observation data
2. The strengths and input provided by the child's caregiver
3. The interest of the child (e.g., play interest, available materials)

The coach should also consider the implementation procedures outlined in previous research when supporting the child and caregiver in the selected strategy.
Definitions for strategies are provided below

Child needs based on observations	**Adult mediated strategies** ***Ordered from least to most invasive***	**Connections to previous pretend intervention literature**
Child is struggling/not engaging in **functional pretense play**	Provide Opportunities through Materials	Colozzi et al. (2008); Kasari et al. (2006); Lifter et al. (2005); & MacDonald et al. (2005)
	Narration	Lifter et al. (2005) & Kasari et al. (2006)
	Positive Reinforcement	Doctoroff (1997); Kasari et al. (2006); Lifter et al. (1993); & Lifter et al, (2005)
	Prompting Hierarchy	Colozzi et al. (2008); Kasari et al. (2006); Kim et al. (1989); & Lifter et al. (2005)
	Adult Modeling	Gmitrova (2013); Ingersoll et al. (2006); Kasari et al. (2006); Kim et al. (1989); & Lifter et al. (2005)
	Least-to-Most Promoting Procedure	Lifter et al. (1993) & Lifter et al. (2005)
	Pivotal Response Training	Stahmer (1995) & Thorp et al. (1995)
	Video Modeling (adult, peer)	MacDonald et al., (2005); Reagon et al. (2006); & Sani-Bozkurt & Ozen (2015)
	Script-based Training	Doctoroff (1997); Goldstein & Cisar (1992); MacDonald et al. (2005); Nevile & Bachor (2002); Taylor & Iacono (2003); & Thibodeau et al. (2016)

Child struggling/not engaging in pretend play with a **sequence of play behaviors**	Narration	Kasari et al. (2006)
	Positive Reinforcement	Kasari et al. (2006)
	Prompting Hierarchy	Kasari et al. (2006) & Kim et al. (1989)
	Adult Modeling	Kasari et al. (2006) & Kim et al. (1989)
	Least-to-Most Promoting Procedure	Lifter et al. (2005)
	Pivotal Response Training	Stahmer (1995) & Thorp et al. (1995)
	Video Modeling (adult, peer)	Reagon et al. (2006) & Sani-Bozkurt & Ozen (2015)
	Script-based Training	Nevile & Bachor (2002)
Child struggling/not engaging in pretend play with **object substitutions**	Narration	Kasari et al. (2006)
	Positive Reinforcement	Kasari et al. (2006)
	Prompting Hierarchy	Kim et al. (1989) & Kasari et al. (2006)
	Adult Modeling	Gmitrova (2013); Ingersoll et al. (2006); Kasari et al. (2006); & Kim et al. (1989)
	Pivotal Response Training	Stahmer (1995) & Thorp et al. (1995)
	Video Modeling (peer)	Reagon et al. (2006)
	Script-based Training	Nevile & Bachor (2002); Sherratt (2002); Taylor & Iacono (2003); & Thibodeau et al. (2016)
Child struggling/not engaging in pretend play by **imaging absent objects**	Narration	Kasari et al. (2006)
	Positive Reinforcement	Kasari et al. (2006)
	Prompting Hierarchy	Kasari et al. (2006) & Kim et al. (1989)
	Adult Modeling	Gmitrova (2013); Ingersoll et al. (2006); Kasari et al. (2006); & Kim et al. (1989)
	Pivotal Response Training	Stahmer (1995) & Thorp et al. (1995)
	Video Modeling (peer)	Reagon et al. (2006)
	Script-based Training	Sherratt (2002); Taylor & Iacono (2003); & Thibodeau et al. (2016)

Child struggling/not engaging in pretend play by **assigning absent attributes**	Narration	Kasari et al. (2006)
	Positive Reinforcement	Kasari et al. (2006)
	Prompting Hierarchy	Kim et al. (1989) & Kasari et al. (2006)
	Least-to-Most Promoting Procedure	Kim et al. (1989)
	Adult Modeling	Gmitrova (2013); Ingersoll et al. (2006); & Kasari et al. (2006)
	Pivotal Response Training	Stahmer (1995)
	Video Modeling (adult)	MacDonald et al. (2005)
	Script-based Training	MacDonald et al. (2005); Sherratt (2002); Taylor & Iacono (2003); & Thibodeau et al. (2016)
Child struggling/not engaging in pretend play **vocalizations**	Positive Reinforcement	Doctoroff (1997)
	Prompting Hierarchy	Kim et al. (1989)
	Adult Modeling	Kim et al. (1989)
	Video Modeling (peer)	Reagon et al. (2006)
	Script Training	Doctoroff (1997) & Goldstein & Cisar (1992)
Child struggling/not engaging in pretend play **vocalizations using vocabulary**	Prompting Hierarchy	Colozzi et al. (2008)
	Pivotal Response Training	Stahmer (1995) & Thorp et al.(1995)
	Play Scripts	Thibodeauet et al. (2016)

Definitions for Pretend Play Strategies

Pretend Play Strategy	Definition
Provide Opportunities through Materials	An object that provided the affordance to engage in a pretend play action (e.g., baby doll, kitchen tools, dress-up materials).
Narration	Descriptive talk that involves a caregiver labeling toys and describing a child's behaviors on objects and play (Lane et al., 2016).
Positive Reinforcement	A positive statement directed toward a child that describes a desirable behavior in specific and observable terms (IRIS Center, 2020).
Prompting Hierarchy	Systematic procedure of guidance that either increases (e.g., verbal direction, physical model, physical guidance) or decreases (e.g., full physical guidance, physical model, verbal direction) guidance until a criterion of correct independent responses is obtained (Collins et al., 2018).
Adult Modeling	Demonstrating desired actions for child.
Least-to-Most Promoting Procedure	Procedure starts with a presentation of the least restrictive prompt (e.g., non-verbal signal) for a child, and the type and intensity of the prompt is changed as needed, gradually skipping to the most restrictive prompt (e.g., physical). Transition between levels of prompt occurs when a child does not respond during the predetermined response time (Ulke-Kurkcuoglua, 2014).
Pivotal Response Training	A structured direct teaching method with adult promoting and reinforcement in a naturalistic setting that follows a child's lead and motivations to obtain set goals (Barton, 2016; Koegel & Koegel, 2019).
Video Modeling	A visual teaching method that occurs by watching a video of someone (adult, peer, self) modeling a correct demonstration if a targeted behavior and then being provided the opportunity to imitate the modeled behavior (Barton, 2016).
Script-based Training	Written and/or visual prompts that initiate or sustain targeted interactions (Barton, 2016).
Play Scripts	Adult collaborate with child to come up with pretend play script and then act it out. Adult can then provide scaffolding when needed (e.g., suggestions, encouragement, questions that promote target behaviors based on the script (Thibodeau et al., 2016).

APPENDIX I WORK CITED

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APPENDIX J

eCoaching Debrief Codebook

Code	Definition	Example
Coach Address Mom Concern	During debriefs conversation, coach directly attends or addresses a concern originally posed by mother. This concern can be related to a child's behavior or concern related to their facilitation of play with a child.	Concern about child's speech articulation or ability to communicate in complete sentences
Agreements	Moments in the debrief where either the coach or the mother expresses verbal agreement with the other.	"I agree, we do not want this to feel unnatural."
Coach Agrees with Mom	Instance when coach agrees with mom	"I agree, I think that he is very good at pretend play sequences."
Mom Agrees with Coach	Instance when mom agrees with coach	"You are right, I think that would be go for him."
Coach connects to Play/Early Childhood Education	Coach connects conversation element to an idea or research associated with play-based learning, early childhood education, or child development in early childhood.	"Child's initial explorations with writing in preschool are often scribbles and eventually shapes that could resemble letters."
Coach Connect to Pretend Play	Coach connects conversation element to an idea or research associated with pretend play or pretend play taxonomy.	"When you introduced that idea, you were supporting her use of emotions. That is associated with assigning absent attributes in pretend play."
Coach Praise	Coach offers a point of behavior specific praise towards the child or mother during a debrief.	"He is really proficient at independent play."
Coach Praises Child Skill	Coach offers a point of behavior specific praise towards the child's behavior.	"She is really good at object substitution when she is playing with blocks."
Coach Praises Mom's Skill	Coach offers a point of behavior specific praise towards the mother's behavior or play facilitation.	"You are really good at asking follow-up questions during play."

Direct Instruction	Coach takes the opportunity in debrief to provide instruction around an element of play-based learning, pretend play, play facilitation, or early childhood education/development.	"This is a model of what writing in early childhood could look like." "When children are engaging in pretend play, we want them to also incorporate sequences. You can think of that as a story with a beginning, middle, and end."
Coach Co-signs	Coach assigns value to mother's statement or idea in the form of agreement between the two parties. This agreement moves the conversation forward or progresses conversation towards a mutually accepted goal.	"I agree, I think that is a great next step to push him in when it comes to pretend play."
Coach Connects	The coach makes a connection to various ideas or topics within present or past conversations. Connections may also be made to present or past observations or goals.	"That really relates to what we were talking about in terms of independence." "I remember you saying that you like to cook, I think that this idea could lend itself to that experience as well."
Coach Expands	Coach takes an idea that is introduced by the mother and adds to the idea through an additional layer of knowledge, facilitation, example, or application.	"Another way I could see you promoting him is through non-verbal cues." "I like that idea, what if you also discussed that after play."
Coach shares and idea	The coach shares an idea of how a goal, behavior, or facilitation action could be enacted during play.	"What if you asked him who the characters were?" "What if you modeled a character's emotions? Like, 'that hurt my feelings, now I am sad.'"
Coach shares from data from observation	The coach shares a specific point of data related to a child's behavior or facilitation of play.	"I noticed when you started using the word habitat, he also began using it to describe the horses home." When you started the pretend play portion of play, the language being used by her increased."
Goal Setting	Collaboratively agreed upon next step between the coach and mother during eCoaching debrief conversation.	"So next time we will focus on asking follow-up questions to promote emotions and feelings in pretend play."
Coach Suggests a Goal	Coach takes lead in setting goal.	
Mom Suggest Goal (sure)	Mom takes the lead in setting goal.	"I would like to try to incorporate planning to get her to develop a more elaborate sequence of pretend play."

Mom Suggest a Goal (unsure)	Mom makes a suggestion of a goal, but suggestion also contains an appeal for approval from the coach or a follow-up question.	"I don't know would it be getting him to say complete sentences?" What do you think?"
Mom generalizes a goal	Mom generalizes goal to other situations or people.	"We could also do that at the part. She like to play dog catcher. Maybe I can incorporate emotions when I am playing with her."
Coach Redirects a Goal	Coach takes a goal initially suggested by mom (sure or unsure) and redirects based on observational data or pretend play focus. This redirect results in a change or variation on the initial goal set by the mom.	"One thing I noticed today is that he really responds to you modeling. What if we started there to see how he responds?"
Mom Concern or Struggle	Mom state a concern or struggle she is experiencing or noticing in her child's behavior or her facilitation of play.	"One thing that I noticed is that she does not like to play independently. I would like for her to have more independence in those times that I cannot play beside her. "
Coach Prompts	Instances where the coach appeals for mother input through a question or prompt.	
Coach Prompts Mom on Facilitation (how)	Coach's prompts are focused on pushing mom to identify how they will facilitate a goal.	"How could you see that looking in you play with (child)?"
Coach Prompts Mom on Identifying Data	Coach prompt encourages the mother to identify evidence based on observations from their own perspective.	"What did he do today that demonstrate the use of object substitution" "Can you identify a moment where you used a prompt to support the use of sequences in her play?"
Coach Prompt Mom on Setting Goal	Coach prompts initiated the mom to share a goal they are thinking about for eCoaching.	"So, what are you thinking would be a good goal for next week?"
Close-ended Question	Coach poses a question with a single word response. This could be an either-or question or "yes" or "no" question.	"Does he ever play with his kitchen set?"
Open-ended Question	Coach poses a question that requires a longer response by the mom. The prompt may encourage reflection, feedback, or discussion.	"What do you feel like what going well during your play with (child) today?"

Wait time	A moment of silence between the coach and mother during debrief. This silence is encouraged by the coach and often comes between an asking an open-ended question and the mother's response.	"What are your thoughts" [followed by 3-10 second pause in conversation].
Coach Positions Mom as Expert	Coach makes a statement or poses a question that centers the mom as an expert in term of knowledge and understanding in the debrief process.	How do you feel like (child) would respond to that? You know him best.
Mom expands idea	Mom takes an idea that is introduced by the coach and adds to the idea through an additional layer of knowledge, facilitation, example, or application.	He like to play restaurant with his brother. We could also make a menu to incorporate writing.
Check for Understanding	Moment within the discussion where the coach or mom make sure they are engaging in a mutual understanding related to knowledge, facilitation, or application.	
Check for Understanding (mom/coach - on same page)	Questions or example is posed to ensure that there is a common understanding around an observation, knowledge, or understanding.	"I noticed she was really wanting mirror what you were building. Did you feel that?"
Check for Understanding (goal)	Questions or examples shared to ensure that the coach and the mom have a mutual understanding on the goal.	"So next time we will focus on asking follow-up questions to promote emotions and feelings in pretend play."
Check for Understanding (mom/coach - role play)	The coach or mom provide examples that serve as a model of how the goal should be enacted or how knowledge related to pretend play. This serves as a way to make sure there is clarify in understanding.	"So, when we think about object substitution that is incorporating objects in the place of actual things. When she is using a block as a piece of cake. Or when she was making cookies with play doh." "A prompt for AAA could be 'who is that character?' 'Is he the leader?'
Coach Summaries Discussion Points	The coach provides a brief overview of topics discussed in current or previous debrief conversations.	"In thinking about supporting her use of assigning absent attributes we discussed modeling, promoting, and questions depending on the play."
Coach Asks Clarifying Question	The coach asks a question to gather more information from a mother as part of an on-going discussion occurring in the debrief.	"Can you tell me more about what you mean by role play?"

Child Participates in Debrief	In addition to being present during the debrief the child may actively answer a question posed by the coach or participate in the conversation occurring between the mom and coach.	The coach asks, "what happen when you modeled that idea for her?" Child responds, "I did it too! That was fun!"
Coach Models with Child Present	The child is present in the debrief and the coach uses the opportunity to model a point of discussion from the debrief with the child.	"What are the animals going to do next?" "Oh no I bet that hurt is feelings?"
Mom Connects	The mom makes a connection to various ideas or topics within present or past conversations. Connections may also be made to present or past observations or goals.	"I feel like I have been working on asking more questions since we began talking." "I noticed that her teacher asks questions with that working."
Mom Shares	The mom shares an idea of how a goal, behavior, or facilitation action could be enacted during play.	"The other day he was playing with his brother and they were using tons of vocabulary related to army behavior."
Mom Cosigns	Mom assigns value to coach's statement or idea in the form of agreement between the two parties. This agreement moves the conversation forward or progresses conversation towards a mutually accepted goal.	"I agree, I think that is a great next step to push him in when it comes to pretend play."
Mom reflects	Mom thinks aloud in a way that reflects on ideas being discussed. This can relate to moments both within or outside the coaching session. Reflections may include connections or sharing of feelings.	"When I was playing, I was wondering if I was supporting him too much. I started feeling him taking more of my lead and I really want him to take more of a lead."
Mom Praises Child	Mom offers a point of behavior specific praise towards the child's behavior.	"He is really good at playing independently."

Curriculum Vita

Amanda H. Passmore

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Education

University of Illinois at Chicago
Ph.D. in Special Education, anticipated Summer 2021
Dissertation: *A Multi-Case Study of Caregiver eCoaching to Promote Pretend Play Behaviors in Preschool Children*

National Louis University- Chicago
M.A. in Special Education (K-12), December 2015

Texas State University- San Marcos
B.S. in Interdisciplinary Studies (Early Childhood - 4th Grade), December 2007

Areas of Specialization
My research interests include supporting young children with and without disabilities through play-based academic, social-emotional, and behavioral supports within inclusive preschool environments.

Certification

Illinois Professional Educator License – Learning and Behavior Specialist, ID: 1935802

Professional Experience and Employment

2017 – Present Project Coordinator, Preparing Leaders in Urban Special Education (PLUS) an Office of Special Education Programming (OSEP) personnel preparation grant University of Illinois at Chicago, Chicago, IL.

Instructional Coaching

2017 – 2018 Instructional Coach - Madison Early Childhood Center, District 205, Elmhurst, IL

2014 – 2017 Instructional Coach - Academy of Urban School Leadership (AUSL), Chicago Public Schools, Chicago, IL

Classroom Teaching

2010 – 2014 Kindergarten – 4th Grade Special Education Teacher - John Foster Dulles School of Excellence, Chicago Public Schools, Chicago, IL

2008 – 2010	3rd Grade Teacher - James Bowie Elementary School, San Marcos Consolidated School District, San Marcos, Texas
2007 – 2008	2nd Grade Teacher - Ball Elementary, Seguin School District, Seguin, Texas
2004 – 2005	Preschool Teacher - Learning Circle, Lake Jackson, Texas

Fellowships and Internships

2020 – 2021	Division of Early Childhood (DEC) Doctoral Internship. Support the work of committees for Research, Recommended Practices, Sub-Committee Support Leadership, and DEC's Consortium for Innovations in Doctoral Excellence (DECIDE).
2019 – 2021	Early Childhood Personnel Center (ECPC)/Division of Early Childhood (DEC) Doctoral Student Leadership Cohort. Selected for membership to support in the work of ECPC resource development and research.
2017 – 2021	Special Education Leaders for Urban Centers of Tomorrow (SELECT) Doctoral Fellowship. Funding of $24,000 yearly through the US Office of Special Education Programs.
2018 – 2019	Teach to Lead. Invited to Teacher Leadership Summit to develop concrete plans to solve local problems in their districts and network with other teachers in the state.

Grants Awarded

Co-Project Coordinator: *Project PEAK (Partnerships of Empowerment, Accessibility, and Knowledge): Connecting and Supporting Families of Students with Disabilities at Swift* (2018-2019) University of Illinois at Chicago, College of Education Community Engagement Grant for $5,000.

Publications

Hughes, M. T., Maggin D., Barcus, C., **Passmore, A.** (2021). Special education teacher leadership: A vital component in enhancing inclusionary practices in schools. In B. S. Zugelder (Ed.), *Empowering formal and informal leadership while maintaining teacher identity.* IGI Global. https://doi.org/10.4018/978-1-7998-6500-1.ch007

Parker-Katz, M. & **Passmore, A. H**. (in process). Supporting all children through universal design and teacher action research. In G. Mindes with M. Newman (Eds.), *Social studies*

for young children: Preschool and primary curriculum anchor. (3rd ed.) Rowman & Littlefield.

Passmore, A. H., & Hughes, M. T. (2020). Exploration of play behaviors in an inclusion preschool setting. *Early Childhood Education Journal*. Advance online publication. https://doi.org/10.1007/s10643-020-01122-9

Passmore, A. H. & Zarate, Z. (2021). Helping families reach their PEAK: Partnerships that help promote family empowerment. *TEACHING Exceptional Children*, 53(*4*), 310-318. https://doi.org/10.1177/0040059920958737

Maggin, D. M., Hughes, M.T., Kumm, S., **Passmore, A.H**., & Scaletta, M. (2020). School administrators' perspectives on special education teacher leadership. *Journal of Special Education Leadership*, *33*(2), 78-89.

Passmore, A. H., Salvador, C., & Dorsey C. (2020). Developing special education teacher leadership. In D. M. Maggin & M. T. Hughes (Eds.), *Developing teacher leaders in special education: An administrator's guide to building inclusive schools*. Routledge.

Zarate, K., **Passmore, A. H.**, & Kiel, L. (2020). Special educators as data experts. In D. M. Maggin & M. T. Hughes (Eds.), *Developing teacher leaders in special education: An administrator's guide to building inclusive schools*. Routledge.

Passmore, A. H. & Tobon, G. (2020). Appendix A: Special Education Resources. In D. M. Maggin & M. T. Hughes (Eds.), *Developing teacher leaders in special education: An administrator's guide to building inclusive schools*. Routledge.

Zarate, K., Maggin, D. M., & **Passmore, A.H.** (2019). Meta-analysis of mindfulness training on Teacher Well-Being. *Psychology in the Schools*. 56(*10*), 1700-1715. http://doi.org/10.1002/pits.22308

Presentations

Passmore, A. H., & Hughes, M. T. (2021, April 9 - 12). *Exploration of Play Behaviors in an Inclusive Preschool Setting* [Conference roundtable session]. American Educational Research Association (AERA) Annual Meeting, Virtual.

Passmore, A. H., & Hughes, M. T. (2021, January 21 - 29). *Supporting play: Exploration of self-guided play behaviors in preschool* [Conference session]. Division of Early Childhood (DEC) Annual Conference, Virtual.

Passmore, A. H., Barcus, C. Hughes, M. T., & Maggin, D. M. (2021, March 3-6). *Building leadership capacity and a research agenda through special education personnel preparation* [Conference session]. Council for Exceptional Children (CEC) Annual Conference, Virtual.

Passmore, A. H., & Hughes, M. T. (2021, March 3-6). *Supporting Children with Disabilities through play-based learning in inclusive early childhood settings* [Conference session]. Council for Exceptional Children (CEC) Annual Conference, Virtual.

Passmore, A. H., & Zarate, K. (2020, July 1-3). *Partnerships of Empowerment, Accessibility, and Knowledge for Families of Students with a Disability* [Poster session]. World Education Research Association (WERA) Annual Conference, Santiago de Compostela, Spain. (Conference canceled)

Zarate, K. & **Passmore, A. H.** (2020, July 1-3). *A Meta-Analysis of Educator Mindfulness Training* [Poster session]. World Education Research Association (WERA) Annual Conference, Santiago de Compostela, Spain. (Conference canceled)

Passmore, A. H., & Zarate, K. (2020, February 5). *Focusing on family empowerment through collaborative workshops and school resource centers* [Conference session]. Council of Exceptional Children (CEC) Annual Conference, Portland, OR.

Passmore, A. H., Barcus, C., & Tobon, G. (2020, February 7). *Leveraging the natural leadership of special educators within schoolwide leadership teams* [Conference session]. Council of Exceptional Children (CEC) Annual Conference, Portland, OR.

Hughes, M., Maggin, D. M., **Passmore, A. H.**, & Kumm, S. (2020, February 6). *Developing special education teacher leaders: Practical methods from administrators and teachers* [Conference session]. Council of Exceptional Children (CEC) Annual Conference, Portland, OR.

Zarate, K., **& Passmore, A. H**. (2020, February 7). *The impact and implementation in mindful practices among teachers: A meta-analysis* [Poster presentation]. Council of Exceptional Children (CEC) Annual Conference, Portland, OR.

Zarate, K., **& Passmore, A. H**. (2019, November 21-22). *Helping families reach their PEAK: partnerships of empowerment, accessibility and knowledge for students with disabilities* [Poster presentation]. National Association for Educating Young Children (NAEYC) Annual Conference, Nashville, TN.

Passmore, A. H. (2019, October 2). *A systematic review of early childhood single-case behavioral interventions in inclusive setting* [Poster presentation]. Division of Early Childhood (DEC) Annual Conference, Dallas, TX.

Maggin, D.M., Hughes, M.T., **Passmore, A. H**., & Kumm, S. (2019, April 9). *Voices from the field: promoting special education leadership* [Paper presentation]. American Educational Research Association (AERA) Annual Meeting, Toronto, Canada.

Barcus, C. & **Passmore, A. H.** (2019, February 2). Effective coaching practices for classrooms with special education populations [Poster presentation]. Council of Exceptional Children (CEC) Annual Conference, Indianapolis, IN.

Passmore, A. H. (2019, February 1). *A review of behavior interventions for the inclusion of students in special education* [Poster presentation]. Council of Exceptional Children (CEC) Annual Conference, Indianapolis, IN.

Passmore, A. H., & Clark, A. (2019, January 31). *Classroom interventions for students with emotional or behavioral challenges in urban settings* [Poster presentation]. Council of Exceptional Children (CEC) Annual Conference, Indianapolis, IN.

Passmore, A. H., & Barcus C. (2018, November 1). *Providing effective coaching to teachers with special education populations* [Conference Session]. Illinois Council of Exceptional Children (ICEC) Fall Convention, Naperville, IL.

Passmore, A. H., Kumm, S., Hughes, M. T., & Maggin, D. M. (2018, November 1). *Promoting special education teacher leadership* [Conference Presentation]. Illinois Council of Exceptional Children (ICEC) Fall Convention, Naperville, IL.

Zarate, K., & **Passmore, A. H.** (2018, November 1). *Educator well-being interventions: Teaching doesn't have to hurt* [Conference presentation]. Illinois Council of Exceptional Children (ICEC) Fall Convention, Naperville, IL.

Passmore, A. H. (2018, November 1*). Inclusion-based behavior interventions for student with disabilities* [Poster presentation]. Illinois Council of Exceptional Children (ICEC) Fall Convention, Naperville, IL.

Zarate, K., & **Passmore, A. H.** (2018, November 1). *The effects of mindfulness interventions on in-service teachers: A meta-analysis* [Poster presentation]. Illinois Council of Exceptional Children (ICEC) Fall Convention, Naperville, IL.

Kumm, S., **Passmore, A. H**., Hughes, M. T., Maggin, D. M. (2018, October 4). *Administrator and teacher perspectives on promoting special education leadership* [Conference presentation]. Illinois Alliance of Administrators of Special Education (IAASE) Fall Conference, Tinley Park, IL.

Clark, A., & **Passmore, A. H.** (2018, October 5-7). *Tier two behavior interventions that promote LRE in urban settings* [Poster presentation]. Annual National Positive Behavior, Interventions and Supports (PBIS) Leadership Forum, Chicago, IL.

Passmore, A. H., Barcus, C., Sidarous, J. (2017, October). *Adapting your mindset to effectively coach classrooms with special education populations* [Conference Presentation]. Illinois Council of Instructional Coaching (ICIC) Annual Conference, Naperville, IL.

Research Experience

A Multi-Case Study of Caregiver eCoaching to Promote Pretend Play Behaviors
Principal Investigator

Management of study in the exploration of eCoaching with caregivers of preschool aged children to facilitate pretend play behaviors in the home setting.

Exploration of Play Behaviors Among Preschool Students in an Inclusive School Setting
Principal Investigator

Observation of 4-year-old students with and without high incidence disabilities in an inclusive preschool setting to explore variances in play behaviors.

Perspectives and Utilization of Special Education High-Leverage Practices
Co-Principal Investigator

Managed a research team of 13 MEd scholars to investigate special educator and general educators' perspectives and utilization of high-leverage practices through a Q-sort survey and interviews.

Defining Teacher Leadership: Perspectives from Special Educators
Research Assistant

Interview study comparing special educators at varying points in their career (early, middle, late) perspectives on defining and obtaining leadership positions.

Special Education Leaders for Urban Centers of Tomorrow
Research Assistant

Interview study of administrator and teacher perspectives of teacher leadership development and support in schools across a large metropolitan area.

Special Education Teacher Leadership Measures
Research Assistant

Development a tool for measuring skills associated with special education teacher leadership.

University Teaching Experience

Instructor of Record

SPED 578: *School and Community-based Inquiry Internship* (Spring 2021) at University of Illinois at Chicago

TLSC 320: *Early Childhood Special Education: Using Classroom Data in a Collaborative Environment to Advance Student Achievement* (Fall 2020) at Loyola University, Chicago, IL

SPED 448: *Topics in Special Education Leadership* (Fall 2020, Spring 2020, Fall 2019, Summer 2019, Spring of 2019) at University of Illinois at Chicago.

SPED 465: *Understanding Students with High Incidence Disabilities* (Fall 2020, Fall 2019) at University of Illinois at Chicago.

SPED 472: *Academic Prosocial Intervention* (Summer 2019) at University of Illinois at Chicago

SPED 410: *Exceptional Learners* (Fall 2018) at University of Illinois at Chicago.

Student Teacher Field Instructor

SPED 580: *Curriculum and Teaching for Students with Disabilitie*s (Spring 2020, Spring 2019) at University of Illinois at Chicago.

Teaching Assistant

SPED 465: *Understanding Students with High Incidence Disabilities* (Summer 2018) at University of Illinois at Chicago.

Service to the Profession

Guest Presenter

Guest Presenter. Parent Advisory Council at Sayre World Language Academy in Chicago Public Schools, Winning Remote Learning (November 2020).

Guest Presenter. Sayre World Language Academy in Chicago Public Schools, Planning for Virtual Learning with Preschool Teachers (September 2020).

Guest Lecturer. SPED 580, Schoolwide PBIS and Students with Disabilities (Spring 2019).

Guest Lecturer. SPEDucators Student Organization, Educator Well-Being Interventions: Self-Care on the Job (Spring 2019).

Guest Presenter. Sayre World Language Academy in Chicago Public Schools, Providing Effective Accommodations for Students with Disabilities Workshop (Fall 2017).

Supporting Social Emotional Learning Needs of Students, Professional Development Series (Fall 2016, Spring 2017) at Academy of Urban School Leadership

Reviewer

Invited Reviewer, Early Childhood Education Journal, (2020, December; 2021, May)

Reviewer for Conference Proposals, DEC (2021, 2020, 2019).

Reviewer for Conference Proposals, AERA (2020, 2019).
Provide Input Multi-Tiered System of Support Framework in Early Childhood: Description and Implications Revised Position Statement (November 2019).

Professional Memberships

2018 – present	American Educators Research Association (AERA)
2017 – present	Council for Exceptional Children (CEC)
2017 – present	Division of Teacher Education Development (TED)
2018 – present	Council for Exceptional Children – Council for Early Childhood (DEC)
2018 – 2020	National Association for the Education of Young Children (NAEYC)