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Play-based early childhood classrooms and the effect on pre-kindergarten social and academic achievement

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Abstract

The purpose of this literature review is to examine the effects of a play-based early childhood curriculum on the academic and social development of pre-kindergarten children. The findings in this literature review examine the relationships between free play, social skills, and academic outcomes in the early years of school. The reviewed research suggested a positive correlation between free play in early childhood and future school success in literacy and social development. The conclusion of this review includes recommendations for improving teacher practices and educational policies.

Play-Based Early Childhood Classrooms and the Effect on Pre-Kindergarten Social and
Academic Achievement

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ABSTRACT

The purpose of this literature review is to examine the effects of a play-based early childhood curriculum on the academic and social development of pre-kindergarten children. The findings in this literature review examine the relationships between free play, social skills, and academic outcomes in the early years of school. The reviewed research suggested a positive correlation between free play in early childhood and future school success in literacy and social development. The conclusion of this review includes recommendations for improving teacher practices and educational policies.

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CHAPTER I

Introduction

“You can discover more about a person in an hour of play than in a year of conversation.” This quote, attributed to both Plato and Richard Lingard, a professor of divinity from the 17th century, sums up what early childhood educators have known for decades. Through play children explore their world, learn about math and science, and have ample opportunities to practice literacy and language skills. Through play children learn to navigate difficult social situations and develop problem-solving skills. Through play children learn that they can be anyone they want to be and that imagination is a powerful tool.

In this chapter I discuss how play is important to children from a social context, an educational context, and a research context. I explain how the results of this literature review will deepen our understanding of why keeping play in the school day is so important for early childhood programs. I provide a list of terms and acronyms that need definition, and I state the guiding research questions for this paper.

Social Importance of Play

We know that children who are able to sustain pretend play roles are able to work better with their peers and solve social problems (Bodrova, Germeroth, and Leong, 2011). This can extend beyond the school years into the working years and benefit the community as a whole. We are raising the next generation of citizens, and we can raise them better through play.

Higher-level Vygotskian play, where children create imaginary scenarios and act out roles, includes rules within the roles and situations. These rules correlate to real life, and aid in self-regulation by teaching children, through their play, the ability to wait for turns and control their impulses. When a child is playing the role of a patient in a doctor’s office, a stethoscope, no

matter how exciting to use, must not be played with because it is not a realistic part of the role. Only the child who is playing the role of doctor may use that particular tool or toy (Bodrova, Germeroth, and Leong, 2011).

Because of decreasing support for play in early childhood programs, play quality among preschoolers is diminishing to the lowest levels, those typically seen among toddlers, and we are no longer seeing mature, high-quality play scenarios in our classrooms (Bodrova, Germeroth, and Leong, 2011). If this trend continues, young children will enter kindergarten less able to play cooperatively and self-regulate.

Educational Importance of Play

According to Vygotsky's theory of the Zone of Proximal Development, scaffolding allows children to build on what they already know to deepen their existing knowledge and extend their skills. But Vygotsky believed that children could scaffold for themselves through pretend play. Pretend play can cause a change in representational abilities by creating a context in which a word represents a thing. Suddenly actions are less important than ideas. This new language skill helps the child understand that words represent experiences (Roskos and Christie, 2011), referred to as the Play-Literacy Nexus. This nexus is the point where play, language, and literacy meet and create a learning space in the classroom. This nexus is especially apparent in dramatic play areas because of the focus on pretend play, when children are acting out stories, using objects to stand for other objects, and building on what they already know to deepen their knowledge and pull their thinking forward (Roskos and Christie, 2011).

In my own classroom I can see the importance of allowing children time to scaffold for themselves through pretend play. I have witnessed a child who is reluctant to speak out in group settings come alive when she is playing the role of the mother in our house area. She participates

in back-and-forth conversations with her peers. She reads picture books to her baby dolls. She “reads” recipes in our cookbooks and teaches her peers how to cook the tortillas that she makes at home with her grandma. In short, she is gaining new language and literacy skills, and connecting with her home culture through unstructured play.

Importance of Play to Future Research

Regardless of the consistent reports, research, and test scores showing that children who are able to play cooperatively with their peers do better academically, behaviorally, and socially than those who are unable to play (Gray, 2011; Hanline, Milton, and Phelps; Reynolds, Stagnitti, and Kidd; Roskos and Christie, 2011), school administrators, who often lack expertise in early childhood education, focus on academic skills which results in a dramatic reduction and, in some places, the eradication of play from the kindergarten school day.

According to Wohlwend (2008), the kindergarten class she visited over the course of a year integrated play and literacy, and managed to produce happy children who grew in their literacy and social skills. She points out that the teacher was fortunate to have the support of her principal in her incorporation of play throughout the daily literacy block. The children were able to choose from several center areas within the classroom during the literacy block. Wohlwend observed that during this time children were very engaged with one another in creating peer relationships and having conversations that mimic those of adults. They were conversing and developing oral language skills that serve as scaffolds for their learning.

Wohlwend (2008) argues that play is not just a necessary part of a developmentally appropriate curriculum; rather it is the key to the new core curriculum that teachers use to prepare their students for the changing 21st century (2008). Within play, students are able to work with new technologies, explore new ways to use the materials at hand, and dream of what

the future holds, where they can be anything, and anyone, they want to be.

Rationale

Because of the curriculum pushdown from upper grades and the state pressure on raising academic achievement, less importance is being placed on play. Each year teachers are expected to spend more time in direct instruction and less time in free play. According to Gray (2011), between 1981 and 1997 children spent 25 percent less time in free play, while the time spent in school increased by 18 percent. The school day and school year have grown longer, recess times have shrunk or completely disappeared, and children are now attending preschools and kindergartens that are more academically focused than they were in 1981. Gray asserts that the increased academic focus and decrease in time for play adds up to a rise in social problems among children.

I teach pre-kindergarten, and have only three hours each day with my students. Although our curriculum dictates one hour per day for play, and 30 minutes each day for outside or gross motor play, we are pressed for time to also get in snack, large group, small groups, interventions, music and movement, and bathroom breaks. Although I make free play a priority, the kindergarten and first grade teachers have mentioned that our students are coming to them lacking what they call “preschool skills” such as the ability to work out problems with peers, and the ability to manage strong emotions appropriately. I fear the academic pushdown will only make it harder for our youngest students to learn the social skills they need to be successful.

My research review will help me continue to advocate for what I know is best practice and give me the talking points I need to enlist others to design early childhood experiences that support the development and future success of the youngest learners in my school district.

Purpose of Review Results

I am concerned about the increasing lack of play, and the importance placed on direct instruction for our youngest students. Through this literature review I hope to show that there are both academic and social benefits of guided free play in preschool and kindergarten.

I hope my research will influence teacher practices, and inform school administration about the developmental needs of young children. Through my examination of current research on the benefits of play to social and literacy outcomes for young children, I hope to show that play has a place in every early childhood classroom, and that the benefits of play are too great to ignore.

Terminology

In order to lend clarity to some new or unfamiliar terms, and to make this literature review easier to understand, I define the following terms:

Affective Social Competence (ASC)-The ability to send and receive affective messages, and the ability to feel affect are the three main components of ASC. ASC is a helpful tool for understanding how children adjust socially and emotionally to their environments (Lindsey & Colwell, 2013).

Explicit Instructional Vocabulary Protocol (EIVP)-A 7-step vocabulary intervention involving pictures, actions or props, and child-friendly definitions. The child is asked to look at the picture, hear the word, say the word, listen to the definition, repeat the definition, watch the word be acted out with a prop or action, and repeat the demonstration. The goal is to increase a child's vocabulary retention (Han, Moore, Vukelich, & Buell, 2010).

Explicit Instructional Vocabulary Protocol and Play Session (EIVP + Play)-EIVP with an added 8th step of a short play session. The goal is to have the child use the word in play to help with retention. Research shows that the added play session does aid in retention of vocabulary (Han,

Moore, Vukelich, & Buell, 2010).

Free Play-A type of play that is wholly child-directed and based on the interests and needs of the child. The teacher is merely an observer (Veiga, Neto, & Rieffe, 2016).

Guided Free Play-Either child- or adult-initiated, but the control is still with the child. The interests and needs of the child direct the play, while teachers question, coplay, or demonstrate new ways to use materials. Some consider this type of play developmentally inappropriate, because the teacher's involvement can lead to a child's interests being overlooked in favor of more academic needs being met (Pyle & Danniels, 2016).

Kindergarten-In the United States, kindergarten is the year of school before first grade. In the foreign studies used in this review, kindergarten refers to schooling for children ages 3-5.

Netnographic Study-An ethnographic study done over the internet. This more informal way of collecting data can lead to more authentic information being given to the researcher than may be given in a face-to-face interview (Lynch, 2015).

Scaffolding-Instructional support given by a teacher or more advanced peer with the intention of transitioning a student to the next level of development (Roskos and Christie 2011).

Teacher-Directed Free Play-Adult-initiated play with the intention of teaching something through play. This is considered by some to be developmentally inappropriate, as children need to be free to explore and engage with their environments without direct instruction or teacher interruption (Pyle & Danniels, 2016).

Zone of Proximal Development (ZPD)-According to Vygotsky, the ZPD is the space between what a child already knows, or where the child is developmentally, and the next level of development, which is attainable through adult or peer scaffolding (Roskos and Christie 2011).

Research Questions

This literature review explores the relationship between free play and a child's growth in the areas of literacy and social development. The objective of the review was to answer the following questions:

1. What effect does a play-based curriculum have on a prekindergarten child's ability to interact positively with peers?
2. How are kindergarten literacy skills affected by prekindergarten exposure to language and vocabulary in play?

CHAPTER II

Literature Review

In developing a review of research on the effects of free play on social and academic outcomes for young children I hope to provide early childhood educators with the tools they need to keep play in the curriculum in pre-kindergarten and kindergarten. This review of research will explain how free play is an integral part of both social and academic growth. In this chapter, I address these research questions:

1. What effect does a play-based curriculum have on a pre-kindergarten child's ability to interact positively with peers?
2. How are kindergarten literacy skills affected by pre-kindergarten exposure to language and vocabulary in play?

Play-based pre-kindergarten programs stress the importance of social skill development which includes working well with peers and self-regulation. The findings in this literature review examine the relationships between free play, social skills, and academic outcomes in the early years of school. Lynch (2015) conducted a netnographic study of kindergarten teachers to ascertain how the diminishing time afforded to free play in pre-kindergarten and kindergarten classrooms has affected the children they teach. Netnography is a relatively new field in which a researcher uses the internet to conduct research. One benefit is that the subjects may feel more comfortable to openly share their beliefs due to the relative anonymity of the method; thus the researcher can get more authentic results.

According to Lynch (2015) nearly all the teachers in her study believed that children benefit socially from free play. One teacher noted, "I am a big proponent of free play in

kindergarten. From my observations, they are learning while they are playing and demonstrating what they have learned through play” (p. 356).

Lynch postulates that because children have an intrinsic motivation for play, robbing them of that outlet will lead to a decrease in social competencies. Another teacher in Lynch’s study shared that her students were given no time for social development with the push for academics. According to this teacher, the children are failing when there is nothing wrong other than a need for play. The curriculum is failing the children (Lynch, 2015).

In addition, Lynch refers to research that shows a change in the brain during play; a change that enables children to acquire new skills (both academic and social) more easily and remember them for longer. She also cites research showing that play promotes social competencies in addition to academic skill development. Lynch concludes that in order for critical free play time to be allowed to continue in kindergarten classrooms, not only must the teachers be educated on the importance of play, but the administrators need to be knowledgeable and sympathetic towards the goal as well. She acknowledges that we have far to go (Lynch, 2015).

In this literature review I summarize articles relevant to my research questions. The first section of the review focuses on articles related to the effects of play on peer interactions. The second section focuses on articles related to the effects of play on literacy development.

Effects of Play on Social Development

The ability to get along with others and to self-regulate are important skills for pre-kindergarten children to learn before they reach kindergarten. As the child progresses through each grade the expectation for attending to large group lessons for longer periods of time increase. Free play, specifically positive peer interactions during free play, can help build

important self-regulation skills. In this section I review literature that examines the relationship between free play and social development. My first section examines the research on free play and affective social competence (ASC). The next section explores the relationship between free play and disruptive behaviors.

Effects of Play on Affective Social Competence (ASC) Skills

Children develop ASC skills primarily through pretend and physical play. Researchers do not all define ASC the same way. Some take a broad view, defining it as a concept that involves the social, emotional, cognitive, and behavioral skills a child needs to develop in order to be successful in life. These skills include sending and receiving affective messages, perspective taking, processing skills, conversational skills, and prosocial behavior (Semrud-Clikeman, (2007). Others define it more narrowly, as the ability to send and receive affective messages, and the ability to feel affect (Lindsey and Colwell, 2013).

Regardless of how it is defined, ASC is a useful concept for understanding how children adjust socially and emotionally to their environments. Lindsey and Colwell (2013) identified ways in which play contributes to the development of ASC skills. Building on the work of developmental theorists Piaget and Vygotsky, they hypothesized that children who participate in pretend play have more opportunities to practice perspective-taking and can better understand the emotions of others. In other words, children who have ample time for play learn to send and receive affective messages and experience affect. Lindsey & Colwell (2013) conducted a two-year study of 122 preschool-age children (57 boys, 65 girls; from mostly middle- and upper-middle class families) to ascertain how different types of play affect children's ASC skills. Researchers collected data in a number of ways: naturalistic observations to observe children's play behavior; interviews with the children to determine emotional knowledge; and

questionnaires filled out by parents to determine emotion regulation. Researchers videotaped children during naturally occurring play and coded the play behavior based on social involvement and form of play. Proportion scores were created for each child based on time spent in social, interactive play with peers, and the type of play involved in (fantasy, sociodramatic, exercise, or rough and tumble). Each child was given a score for emotional expressiveness, both positive (happiness, excitement, or joy) and negative (frustration, anger, or sadness), based on the duration and intensity of emotion displayed during the observations. They were also scored on emotion knowledge (ability to identify feelings of others), using interviews conducted with the children where they were presented with photos of various expressions and asked to identify them correctly, and emotion regulation (emotional intensity, and mood changes, as reported by mothers) which was used to rate ASC. The researchers define ASC as the ability to send and receive affective messages and to feel affect. Using regression analyses, the data, collected over a period of two years, showed a correlation between emotion knowledge, emotion regulation, and emotion expression and ASC skills. The researchers found that engaging in pretend play, especially sociodramatic play, increases a child's ASC. The authors suggest that sociodramatic play has an advantage over other types of pretend play, such as fantasy play, because during sociodramatic play children often take on other roles, and can practice imagining and acting out the emotions of another person. The children practice expressing emotions they may not be feeling in order to play the part, which also requires emotional regulation. In contrast, fantasy play allows children to be themselves, but they are using objects in place of other objects (Lindsey & Colwell, 2013). The children in this study all attended the same child care facility. The teachers all had the same views on play, and the toys available were similar for all students, therefore the children were all likely to interact in similar ways with each other and their play

environments. Future research is warranted in a broader context with children who may not have had the same play experiences.

In contrast to Lindsey and Colwell's findings, Veiga et al., (2017) conducted a study of 73 Portuguese preschoolers (44 boys, 29 girls) in order to determine whether one type of play is more important than others in developing social competence. Veiga et al. (2017) recorded children's play for three minutes at a time. The recordings were coded by type of activity, for example talking, or play. Then the play was subcategorized into one of five types:

1. Fantasy play: the child is using pretend objects symbolically as other things.
2. Role play: the child is assuming a symbolic role.
3. Exercise play: the child is jumping or running.
4. Rough-and-tumble play: the child is engaged in an activity which appears to be aggressive, but is done in a playful manner.
5. Other: the child is engaging in an activity that does not fit in the above, for example, constructing a model (Veiga et al., 2017).

Children also wore radio-frequency identification devices (RFID) to aid researchers in identifying the number of interactions each child had, the number of children per interaction, and how long each interaction lasted. Teachers rated children's ASC on a 3-point Strengths and Difficulties Questionnaire (SDQ).

The authors found that children who spent more time interacting in social groups within their free play activities were rated by their teachers as more socially competent than those who spent time playing alone. These are children who seem better able to sustain positive peer relationships and engage in positive social exchanges, even when the play is considered rough-and-tumble. They also found that the quality of peer interactions (defined as prolonged

interactions with smaller groups of peers) and the time spent in free play are more important to the development of ASC than any one type of play. A high correlation was found between children who scored higher on the SDQ and those who spent time in positive peer interactions. Therefore, they conclude that the play environment and quality of the play interactions have a greater effect on social outcomes than any one type of play. They recommend that the importance of free, unstructured play time not be overlooked in this era of replacing play with academics (Veiga et al., 2017).

This study was limited to social play on the playground. The choices children are given and physical environment during recess times often lead to more physical play or rough and tumble behaviors. The RFID data could be collected in the classroom just as easily, and would help researchers gather a bigger picture idea of how many children are playing together and in what capacity. In addition, they did not look at negative peer interactions. If quality interactions are defined as being prolonged, it would seem that some negative interactions would take place in that time. Further research is needed to see how the children handled those negative interactions.

Eggum-Wilkens et al. (2014) developed a study to determine the effect of Head Start children's peer play on school readiness in relation to social and academic competence and ASC. They believed that children who began kindergarten with higher level peer play skills would make the kindergarten transition more easily due to better kindergarten competence acquired through the peer play. Participants included 264 Head Start preschoolers from 18 different classrooms in seven schools. Observations of children at play were taken throughout the school year, both indoors and outdoors. Coders observed children according to a randomly generated list, for 10-second intervals, noting the nature of each child's play before moving to the next

child on the list. Peer play was classified as play involving verbal or physical activity in close proximity to another child, either positive or negative in nature. The total number of peer play observations per child was divided by the total number of observations for that child to calculate the proportion of peer play for each child. When the children began kindergarten, their teachers completed the Teacher Rating Scale of School Adjustment (TRSSA), which showed researchers how children were adapting to kindergarten. Kindergarten teachers also completed the Penn Interactive Peer Play Scale (PIPPS), which assesses children on play interaction, disruptive behaviors, and nonparticipation in play.

As predicted, children who exhibited higher levels of peer play (as measured by PIPPS) in Head Start were rated as more school-ready by their kindergarten teachers. These children were better able to follow directions, self-regulate, and cooperate, and they were better prepared for the academic rigors of kindergarten. The authors suggest that because children practice these ASC skills during peer play, they are learning, through play, how to behave and learn in a way that is socially and academically acceptable to their kindergarten teachers (Eggum-Wilkens et al., 2014). This study was exclusive to the children's Head Start and kindergarten years. The authors do not know which children had prior formal schooling, which could have influenced their peer play abilities.

Li, Hestenes, and Wang (2016) studied the relationship between children's pretend play and the development of ASC skills. They chose to observe children at play outdoors because of the lack of research available on children's play in outdoor settings. Participants in this study were from three child care centers in the same US city; there were a total of 28 children from four different classrooms. Children were observed in 20-second intervals, (10 seconds to observe and 10 seconds to record) with the intention of capturing pretend play frequency and type,

teacher interaction, and children's verbalizations. Each child was recorded for three minutes at a time. Over a period of six days at each site, researchers collected two waves of data per child, per day. Play was coded by type: abstract, meaning children were using only their imaginations; or concrete, meaning children were using objects to represent other objects. Play was also coded as social (playing with peers), or solitary (playing alone). The Social Skill Rating System (SSRS), a teacher-completed report, was used to measure cooperating skills (helping others and sharing), self-control (taking turns and compromising), and assertion (initiating play, asking for help, responding to others).

Researchers found that both social and abstract pretend play positively correlated with an overall higher SSRS score, leading the authors to suggest that these types of play are important in the development of social and cognitive ASC skills. They recommend that parents and teachers actively promote and extend social pretend play activities to build these important skills (Li, Hestenes, & Wang, 2016). The authors note that this study only looked at play behaviors on the playground. The benefits of social pretend play will extend into the classroom if teachers consciously promote pretend play during the school day.

Ramani (2012) examined how play fosters problem solving skills in preschool children by comparing children's behavior and task performance in two laboratory settings: a child-centered, playful setting, and a structured, adult-driven setting. The prediction was that children engaged in the playful, child-directed task would demonstrate higher levels of communication skills and task performance, and better cooperative problem-solving skills than the children who completed the adult-directed task.

A total of 76 four and five year old children from university-affiliated child care centers were the participants in this study, however data was collected in a laboratory setting, not in the

classroom. Children were paired with a familiar peer of the same age and gender whom they had known for at least one month. Children who were reported by their teachers to be best friends or to not get along were not paired. Within one week, each pair was observed on two separate days.

On the first day each pair was asked to complete a baseline building task (a house with four walls, a door, and two rooms) to ensure the conditions were the same. Children were free to build the house however they pleased within those characteristics. On the second day, pairs were read a story about cooperation, and then randomly assigned either a building task that involved informal play and was child-driven, or an adult-structured and directed building task. All pairs used the same blocks, and tasks were video recorded. In both conditions, the children were given ten minutes to complete their task. In the playful condition, children were asked to pretend to be the children in the story, and build a structure to play in. They were given suggestions for tall walls, rooms, a door, and a strong outside, just like the in the story, however the children were free to play pretend as they built, could choose how to make the structure, and could choose when they were finished. In the adult-directed condition children were told to build a playhouse just like the one in the story, how to complete it, what it should look like, and how much time they had. They were not allowed to play or pretend. Pictures were taken of all completed structures. Building complexity and completeness was coded based on the pictures taken, and based on height and length, colors, intricacy of design, and use of bridges. Cooperative behavior and communication were coded from videotapes based on the following: cooperative interaction (asking questions, explaining, directing, and demonstrating); joint communication (suggestions to peers, narration of activities, and agreements); and shared task responsibility (organizing behaviors and actions, dividing labor, and negotiating). Unproductive behavior was measured by disagreements, controlling peer, and verbalizations to the researcher (Ramani, 2012).

In the areas of cooperative behavior and communication, children in the playful condition had a greater proportion of positive joint communication than the children in the adult-directed groups, however the differences in cooperative behavior were not statistically significant. The children in the playful condition also built more complex and complete structures than the children in the adult-directed groups. The author suggests that the children in the playful condition were able to build more elaborate structures because of their higher level communication skills. The children's ability to make suggestions, mutually agree on the design, and narrate the play aided in the overall performance of the building task. The author also suggests that because the playful condition was child-directed the children were able to create their own shared goals and strategies to complete them, just as they do during pretend play. This shared task responsibility gave the children ownership of their play and the structure they built. In the adult-driven condition, however, there was no room for play, and no room for shared goals or strategy; the children were told what to build and how to build it. The decrease in freedom led to a decrease in interest and performance (Ramani, 2012). This study supports the belief that preschool children learn important social, problem solving, and communication skills through play. It should be noted, however, that all the children in this study attended child care centers that promoted social play and cooperation, and were familiar with how to work cooperatively. Also, the children in the playful condition were allowed to play, however they were not observed in a natural play setting.

The Learn to Play program is a child-led play intervention used to develop pretend play skills in children. Stagnitti, O'Connor, and Sheppard (2012) studied 19 children ages 5-6 years old in a specialist school in Victoria, Canada to determine how effective a play-based intervention can be in boosting children's affective social competence (ASC) and language

skills. The children were all in their first year in the specialist school and all had an intellectual disability, as diagnosed by an educational psychologist. Ten of the 19 children were diagnosed with autism. Others had behavioral needs or decreased social skills. Because pretend play is linked to the development of affective social competence skills such as cooperation and responding to others' needs, the researchers decided that a play intervention was the best tool for building those skills lacking in the children in the study. Baseline data was collected using the Penn Interactive Peer Play Scale (PIPPS) on each child in the study to assess peer play competencies. PIPPS has three subscales: Social Interaction (cooperation and helpfulness); Social Disruption (aggression); and Social Disconnection (withdrawal and nonparticipation in peer play). The Child-Initiated Pretend Play Assessment (ChIPPA) was also administered to measure children's quality of pretend play and the ability to initiate play. The Preschool Language Scale (PLS) was used to assess expressive and receptive communication skills. Follow up data was collected after the six-month intervention using PIPPS, ChIPPA, and PLS.

Children were placed into small groups of four to seven children with two adults per group. Twice each week for a six month period children participated in one-hour play sessions. During each play session the children started in a large group with a video of that day's play scripts. There were four play stations, however the small groups only played at one per day. The stations included: doll play (caring for dolls, including doctor play to "save" the babies); transport play (train tracks and roads, cars, trucks, and trains); construction play (building with blocks, human and animal figures, zoo, farm, home, and fire station play); and a home corner (cooking, cleaning, shopping, parties). The children acted out play scripts during the one-hour sessions, with photos being taken to review with the children as a large group language

experience after each session. The photos were used as prompts throughout the week during play time to remind the children how to play independently (Stagnitti, O'Connor, & Sheppard, 2012).

Researchers examined the relationship between variables at baseline and follow up to determine the change in social competence and language over the course of the six months. As expected, once the children were taught how to play, their social skills were strengthened and researchers saw a decrease in social disconnection. In addition, language abilities increased when children were taught to play. The authors suggest that play provides an important context for children to learn and practice ASC skills, and that this intervention works because it is child-led; the children are engaged in meaningful play with peers (Stagnitti, O'Connor, & Sheppard, 2012). This study was carried out in a school for developmentally disabled children. This research would be beneficial to carry out in a regular education setting in order to determine if the same results would be found for typically-developing children.

Effects of Play on Disruptive Behaviors

Research supports the need for play to promote growth in affective social competence and peer relations. The development of these positive social skills has another benefit; when children learn to self-regulate, disruptive behaviors in the classroom appear to decrease.

Veiga, Neto, and Reiffe (2016) tested the theory that children's social competence and emotional functioning is directly related to having ample time for active engagement in free play. Researchers tested 78 Portuguese children between the ages of four and six, and gathered questionnaire data from their parents about their free play habits at home. Children were tested on a variety of tasks, including Theory of Mind, which was tested through a desire task and two false belief tasks; Emotional Discrimination, in which children were asked to identify facial expressions; and Emotional Attribution, in which stories were told and children were asked to

identify how the character would feel. The Strengths and Difficulties Questionnaire (SDQ) was filled out by parents and used to measure behavior problems (fighting, hyperactivity) and prosocial behaviors. A Free Play Report, Empathy Questionnaire, and Social Functioning Report were submitted by the parents.

The authors found that more exposure to free play during the preschool years, as measured by the Free Play Report, in which parents reported their children's time spent in free play both during the week and on the weekends, is positively associated with theory of mind, emotion attribution, social competence, and emotion discrimination. They suggest that free play is associated with fewer disruptive behaviors, as measured by the SDQ, possibly because through free play children are able to safely explore ways to express socially unacceptable impulses in more desirable ways. In addition, the authors suggest that during free play children are given opportunities to solve problems for themselves, negotiate with peers, and practice perspective-taking roles. It is interesting to note that *solitary* free play is not positively associated with social competence. The authors suggest that the negative association between solitary free play and social competence is because critical social skills cannot be practiced when playing alone.

Because this study involved children from only one school, and they interacted with their parents instead of their peers, the results are not generalizable. The children all had the same opportunities for free play while at school, and therefore were able to participate in peer play at the start of the study. Further research is needed in a broader setting focusing on peer interactions.

In order to observe how pretend play positively affects social competence, Fung and Cheng (2017) studied the effect of pretend-play therapy on 60 Chinese preschoolers. Using observations, parent questionnaires, and the Peer Interactive Play Rating Scales (PIPRS) Fung

and Cheng assessed the children's social competence before and after the play training sessions, which lasted one month. Children who did not participate in the play training sessions spent the time in a non-pretend play activity, such as art.

The play training sessions took place in the dramatic play area of the room, where children were encouraged to take on pretend roles, and use the materials provided in accordance with a particular theme, for example, Hair Salon. The teachers did not participate in the play, except when necessary for redirection or behavior problems (Fung & Cheng, 2017).

They discovered that after the play training, girls tended to be less disruptive than their peers who participated in non-pretend play; however boys in both groups were similarly disruptive after the training (Fung & Cheng, 2017).

Researchers conclude that the link between pretend play and social competence is strong enough to warrant future research, and to recommend that teachers continue to allow ample time for free play. They suggest that because social competence is such an important skill for young children to develop, the need for play must not be ignored (Fung & Cheng, 2017).

This research supports the need for ample time for free play so that children can develop self-regulation skills and social competence, and thereby decrease disruptive behaviors. It stands to reason, then, that when children are less disruptive and better able to manage their emotions they would be better able to learn. Much research has been done on just that subject. This study had a small sample size of children from one school, in Hong Kong. Further research is needed here in the United States to see if the findings hold true for all children. The results support the continued existence of free play in all early childhood classrooms, regardless of the part of the world the children call home.

Bulotsky-Shearer, Bell, Carter, and Dietrich (2014) looked at the relationship between interactive peer play and academic skills. They predicted that there would be a positive correlation between cooperative peer interactions and preschool academic achievement. They also predicted that children who had negative interactions with peers or exhibited disruptive behaviors would have negative learning outcomes. The authors wanted to examine whether high-quality classroom environments that support the development of both social and academic skills through developmentally appropriate play-based curriculums would buffer the academic and social risks associated with disruptive behavior.

A random sample of 922 Head Start enrolled children was chosen from 53 classrooms in eight urban Head Start centers in the US. Teachers assessed the children's peer play using PIPPS at the beginning of the school year. PIPPS was used to measure play disruption, play interaction, and play disconnection. During the winter, the Classroom Assessment Scoring System (CLASS) was given in each of the classrooms. CLASS is an observational assessment used to measure the quality of interactions between teachers and children. There are three domains: Emotional Support (positive and negative climate, teacher sensitivity and regard for student perspective); Classroom Organization (behavior management, productivity, learning formats); and Instructional Support (concept development, language modeling, and quality of feedback). At the end of the school year children were assessed in Letter-Word Identification and Picture Vocabulary using the Woodcock-Johnson III Tests of Achievement (WJ-III). The Letter-Word Identification subtest assessed children's ability to recognize letters and words, and to pronounce words correctly, and the Picture Vocabulary subtest measured receptive vocabulary skills.

The authors found that preschoolers who exhibited higher levels of disruptive play early in the school year had lower literacy skills at the end of the year. They also found that

classrooms with high-quality teacher-student interactions and high levels of emotional support were positively associated with interactive peer play and academic readiness. The more high quality the classroom, the more academically and socially advanced the children were at the end of the year. The authors recommend integrating activities within the classroom routine that promote positive peer interactions, and increasing child-directed learning experiences with peers. This study did not assess children's academic skills at the beginning of the year, therefore there is not a baseline for academic growth, only a snapshot of the level of skill at the end of the preschool year.

Effects of Play on Literacy Development

In the following sections I review the research on free play and the effects on vocabulary, and language and literacy.

Effects of Play on Vocabulary Acquisition

A child's preschool vocabulary is a strong predictor of future reading success. Unfortunately, many children, particularly children from low income homes, start school with a significant vocabulary deficit (Hart and Risley, 1995). Early childhood educators know that early language exposure is critical to building vocabulary, and also that vocabulary mastery is an important component of future academic success in literacy. When children start school with poor vocabularies they are already at a disadvantage compared to their peers who have had those early language and literacy experiences. Han, Moore, Vukelich, and Buell (2010) set out to explore the best way to make up for those lost experiences in children who come to school at a disadvantage.

In a study of 49 children in a Head Start pre-kindergarten program, Han, Moore, Vukelich, and Buell (2010) tested two vocabulary-teaching interventions: Explicit Instructional

Vocabulary Protocol (EIVP), and EIVP and a play session (EIVP + play). Children were randomly assigned to one of the two groups (EIVP or EIVP + play). Throughout the school year the children were tested three times using the Individual Growth & Development Indicators (IGDIs) picture naming task, which assesses children's oral language skills, and the Peabody Picture Vocabulary Test-III (PPVT-III). The researchers chose to use EIVP because it had a history of success in increasing both expressive and receptive language skills, however they felt it needed an additional piece. They added the play component because they felt that time for play is dwindling in early childhood programs; in addition, the research in favor of learning through play supported their belief that adding a play component would be successful (Han, Moore, Vukelich, & Buell, 2010).

When they compared the two groups at pretest, no children met the benchmark for vocabulary achievement. All were considered high-risk. In post-testing, both groups showed an increase in scores, however the EIVP + play group had 62.5% of children meet the benchmark for vocabulary achievement, compared to 44% in the EIVP group. Although the researchers did not report statistics on the results, they did note that the EIVP + play group showed consistently higher gains over time. The researchers assert that the addition of the time for play helped children use the words they were learning in the intervention, through acting out stories and creating language-rich scenarios; this play time improved their memory and recall and created a connection between literacy and play (Han, Moore, Vukelich, & Buell, 2010). The researchers propose that given ample opportunities for language and vocabulary scaffolding through play, the children who come to school with gaps in their vocabularies can catch up.

In a similar study, researchers looked at the effectiveness of a widely used early literacy program, *Doors to Discovery* (Wright Group / McGraw-Hill 2002), which uses one-month topics

of study to introduce new vocabulary to young children. Roskos et al., (2008) studied 56 children from 15 rural preschool classrooms in the southwestern United States. Each classroom teacher was asked to select from three groups of children: two children who were typically developing, two who had special needs, and one child who was at-risk for disabilities.

The Doors to Discovery program includes three parts:

- Large group, where children interact with songs, rhymes, and stories. The teacher focuses instruction on alphabet knowledge, print concepts, and phonological awareness. This part of the day lasts for 20 minutes.
- Small group, which lasts for 10 minutes, includes vocabulary interventions using wordless, interactive books that relate to the current thematic unit. Children meet in small groups only once per week.
- Discovery Centers, when children spend 40 minutes in self-selected activities throughout the centers in the room. During this time teachers engage with the students using Wonderful Words, which are important vocabulary words chosen from the curriculum and taught during small group time (Roskos et al., 2008). Teachers use this time to reinforce the vocabulary words taught during the small group intervention time, and have the play centers set up to encourage these conversations.

Researchers used weekly Curriculum-Based Measurement (CBM) assessments as a progress monitoring tool to monitor children's language growth and vocabulary acquisition. The findings indicated that across all three groups of children, both expressive and receptive language skills increased when compared to the baseline scores. The researchers suggest that when literacy is embedded across the curriculum, as in the Doors to Discovery program, vocabulary and early

literacy growth is more stable over time, and according to the CBM, the growth is consistent enough to support the belief that children learn best through play and repeated exposure to new ideas and language in a developmentally appropriate way. Because the exposure to new vocabulary is repeated, and is occurring throughout different activities, including play, children are better able to acquire and remember new words (Roskos et al., 2008). This study did not include a control group for comparison, so it is difficult to determine whether the results are due to the inclusion of play, or the intervention itself. Further research is warranted with a control group.

Effects of Play on Language and Literacy

Early language experiences are a critical component of future reading and literacy success. Pre-kindergarten teachers spend much of their time reading books that introduce new vocabulary, and providing rich and varied language experiences for the students in their classrooms. Researchers are studying how early language experiences shape future academic success.

In order to determine how high-level language experiences shape our students' future academic endeavors, Dickinson and Porche (2011) conducted a longitudinal study to determine how the quantity and content of preschool child-teacher interactions predicts language and reading outcomes in kindergarten and grade 4. The participants were 83 four-year-old children from low-income homes who were recruited from 65 different classrooms. Researchers used observations, teacher interviews, and audiotapes of teacher-child interactions during free play, large groups, and shared reading time. The quality of the teacher utterances was measured by the variety of words spoken, as well as the nature of the words. For example, when a teacher was reading a book to the class, the only utterances coded were those not in the text. The Dale-Chall

list of 3,000 words recognized by fourth graders was used to screen out the words most commonly heard or used by preschoolers. Further analysis was done to filter out common nouns and slang like “mommy”, or “honey”, and a final list of almost 8,000 words was used to analyze the teacher talk across the classrooms, looking for sophisticated vocabulary. Children were tested on growth in literacy and language skills in kindergarten and fourth grade. Emergent literacy was tested in kindergarten using the Early Childhood Diagnostic Instrument, including writing, letter recognition, story and print concepts, and rhyming subtests. Receptive vocabulary was tested in kindergarten and fourth grade using the PPVT-Revised. Comprehension was tested in fourth grade using The Reading Comprehension measure from the California Achievement Test (Dickinson & Porche, 2011).

Significant correlations were found between literacy outcomes in kindergarten and grade four. The quality of teacher-child interactions (measured by the number of teacher utterances that extended teacher-child conversations, and the number of child-led conversations where children talked more than teachers) and teachers’ use of sophisticated vocabulary in preschool significantly correlate to higher fourth grade receptive vocabulary and word recognition scores. The authors suggest that language development begins in free play, and it is the teacher’s job to foster that growth to promote language and literacy success. They also assert that the quality of the teacher-child interactions is a better predictor of literacy learning than global ratings systems currently in place. They suggest developing a means by which to examine these conversations to get a better indicator of child growth. It is important to note that all the children in this study came from English-speaking homes, and no attendance issues were reported by teachers. Further research is warranted with children for whom English is not the primary language, and with

children who do not attend school as regularly, as they will not have as many opportunities for quality teacher-child interactions in the preschool years.

Meacham, Vukelich, Han, and Buell (2016) studied 11 teachers and 97 preschoolers in three Head Start centers to determine the relationship between teachers' responsiveness during free play and children's language use. Researchers gathered observational data from two audiovisual recordings of each teacher in the dramatic play area of the classroom. The recordings were then transcribed and utterances were analyzed and coded according to topic-continuing or topic-initiating. Child response was also coded as verbal (in or not in the pretend play mode), nonverbal (in or not in the pretend play mode), or no response. Sequential analysis was used to determine the relationship between the teacher utterances and the child responses.

As the authors expected, when teachers continued topics initiated by the children the conversations lasted longer and the children spoke more than when the teacher initiated the topic. This finding leads the researchers to recommend that teachers listen and be active participants in the conversations already happening. The authors believe it is possible to create high level language experiences for students based around topics of their interest. That should be the focus if long-term literacy success is the end goal (Meacham, Vukelich, Han, & Buell, 2016).

Proponents of play-based early childhood curriculum argue that children learn best in a developmentally appropriate program that addresses all their needs: cognitive, language, literacy, and social. To support this claim, and to investigate the growth children make in social and language skills over a six-month period, Reynolds, Stagnitti, and Kidd (2001) studied two primary schools in Victoria, Australia serving children ages four to six years. School 1 was a Reggio Emilia-style school with a play-based curriculum. Activities were based on student interests and teachers scaffolded student learning based on children's needs and interest level.

School 2 was a traditionally structured school with an academic focus. Teachers set aside blocks of time each day for direct instruction in literacy.

Researchers measured the children's ability to engage in pretend play using the Child-Initiated Pretend Play Assessment (ChIPPA); measured oral language with the School Age Oral Language Assessment (SAOLA); and measured social competence with the Penn Interactive Peer Play Scale (PIPPS). (It should be noted that in order to avoid bias, a speech pathologist who was blind to the study goals and the children scored the baseline and follow-up assessments in the narrative language section of the SAOLA.) At baseline assessment the two groups of children showed no significant differences in any assessment measures. However at the six-month follow-up, children in the play-based school program showed significant increases in language abilities over their peers in the traditionally structured school, related to increases in symbolic play as measured by the ChIPPA. The children in the play-based school also had higher rates of growth in narrative language skills, again explained by their increased ability to extend pretend play, as measured by the ChIPPA (Reynolds, Stagnitti, & Kidd, 2001). The researchers of this study concluded that emergent literacy skills are positively affected through play.

Pyle and Danniels (2016) conducted a study on play-based learning in Ontario, Canada. The goal of the study was to identify what role free play takes in learning, and how the teacher can support that learning through play. Over the course of a three-year period, they observed areas in 15 public kindergarten classrooms in three school districts where the teachers were implementing a new full-day kindergarten program that blended academic standards with a play-based approach. Each teacher set up the space to direct the academic outcome, for example including writing instruments and order forms in a dramatic play center flower shop. After a large group lesson or book about flowers, the students were then free to explore the area, and

control the direction of the play. They call this *playful learning*. In two phases over a three year period the researchers observed in these kindergarten classrooms. They took field notes, photographs, and videotapes during both instructional time and free play. They also conducted audiotaped interviews with the teachers to determine what their views were on the role of play in the classroom. The videotapes and field note descriptions of play were coded by type of play and teacher interviews were coded by teacher feelings about play. Through their observations, the authors found that the playful learning approach supported academic outcomes in a way that was engaging and fun for the students. They observed the teachers promoting language skills through the use of games, (e.g., using Letter Bingo to fish for letters with a magnet fishing pole). They note that while free play should be child directed, teachers can integrate learning to scaffold for children in an engaging and fun way. They recommend increased professional development in playful learning, which has a broader scope than traditional free play, to encourage more teachers to integrate literacy skill development into play in the classroom. In light of a new developmentally appropriate, play-based curriculum in Northern Ireland called Enriched Curriculum (EC), researchers conducted an eight-year longitudinal study to determine the effects of EC on literacy development and achievement. Three cohorts of children were used in this study, including a control group of children not receiving EC, and the first two years of the EC children. Throughout the study researchers compared the three groups of children using four measures: a) comparisons of academic achievement and attitudes toward learning; b) classroom observations; c) interviews with teachers and principals on their views of EC; and d) annual parent assessments to determine their viewpoints (McGuinness et al., 2014).

Researchers used Performance Indicators in Primary Schools (PIPS) to measure vocabulary and reading development. In the first three years of the study there were no positive

effects with EC and some negative effects were seen. The EC cohorts were underperforming in both vocabulary and reading development. However by year four they matched the control group, and by year seven the EC2 cohort was outperforming the EC1 cohort, and matched the control group suggesting that the teachers and children had adapted to the new curriculum, and were finding their stride (McGuinness et al., 2014). The authors caution that when a program or school is making a switch from a more formal way of teaching literacy to a more developmentally appropriate, play-based method that is based on the readiness of the children, administrators and teachers be mindful of the time it takes to settle in to the new approach. With consistent professional development and proper support, the switch to a play-based curriculum can have a positive effect on literacy development and future academic achievement. But it does take time. Because the first cohort did not catch up, even by year seven, and the EC2 cohort only matched the control group, further study is needed to see if better professional development would fill in the gaps, or if the EC cohorts did eventually outpace the control group.

Lewis, Boucher, Lupton, and Watson (2000) found a correlation between play and the development of language skills in young children. They conducted a study to determine the relationship between language development and symbolic and functional play. The participants included 40 children from the ages of 1-6, from suburban England. Researchers used the Test of Pretend Play (ToPP), Preschool Language Scale (PLS), Leiter International Performance Test, and Lowe and Costello Symbolic Play Test to assess the children. The ToPP allows researchers to observe children in a natural or structured play setting and assess object substitution, property attribution, and reference to absent objects. A nonverbal version is used with children under the age of three, and the researcher modeled symbolic play for the child to imitate. The PLS assesses expressive and receptive communication skills. The Lowe and Costello Symbolic Play Test is

given to children up to age three and is used to observe children playing with realistic toys in a natural, non-structured setting. The Leiter International Performance Test assesses the non-verbal skills in children between the ages of 2 and 18 and requires children to match various items, copy simple designs, and complete patterns.

Researchers found a significant correlation between ToPP performance and the language measures in the PLS. The authors suggest that the relationship between play and language development is due to the need for conceptual knowledge and symbolizing ability in both. They recommend encouraging both representational play (e.g., feeding a baby doll with a spoon) and symbolic play (e.g., using a block as a telephone) when children are playing pretend (Lewis, Boucher, Lupton, and Watson, 2000). This is an older study, but one that is relevant as it looks at language development during play from infancy through the pre-kindergarten years.

Vygotsky theorized that through sociodramatic play children learn to substitute symbols for objects, a precursor for reading. This theory suggests that the development of critical skills during free play, especially in the dramatic play area, leads to later success in the academic realm. In order to research this relationship further, Hanline, Milton, and Phelps (2008) studied 51 children (28 boys and 23 girls), 22 of whom were identified as having special needs. The majority of the students were white. Using the Batelle Developmental Inventory (BDI) (assessment of developmental skills in social, adaptive, motor, communication, and cognitive domains), Test of Early Reading Ability (assessment of reading development) (TERA), and videotaped play sessions, researchers gathered data over a period of three years, beginning in preschool and following the children into kindergarten. Videotapes were coded according to the three aspects of sociodramatic play which were symbolic substitution (how abstractly the props are used in play), symbolic agent, (with what or whom is the child playing), and symbolic

complexity (how many ideas are used in the play). For each minute of play, a researcher gave a score based on the highest level of each aspect of play observed.

Their findings concluded that symbolic complexity play did not significantly correlate to reading development as anticipated. They found that symbolic substitution play, however, highly correlates to reading development. They suggest that because symbolic play requires children to separate thoughts from objects, the understanding of written symbols becomes a natural transition. This finding supports the belief that sociodramatic play is an important part of the pre-kindergarten day. Free play supports literacy development (Hanline, Milton, & Phelps, 2008). This study used a small number of children all from the same preschool. Further study is needed in a broader setting.

In a similar study, Tompkins, Zucker, Justice, and Binici (2013) videotaped the small group interactions of 39 preschool teachers and their students to determine what type of teacher talk inspires children to use inferential language in the classroom and how teachers' use of higher-level language might scaffold children's responses to include a deeper level of abstraction. Because young children spend much of their day in play, these researchers wanted to study the children's engagement in conversations during those play times, particularly their engagement in adult-child conversations. The 39 teachers in the study were assigned randomly to two groups: half went about their day as usual while the other half received professional development regarding language practices, the goal of which was to inspire teachers to communicate with children more responsively (Tompkins, Zucker, Justice, & Binici, 2013).

All teachers recorded specific large- and small-group activities, including time the teacher spent with a teacher-selected group of four-to-six children interacting in a play session. Teachers recorded 20-minute videos every two weeks, for a total of 15 tapes per teacher over an

academic year. The videos were transcribed and coded to differentiate teacher questions from other utterances (such as managerial questions like, “Do you need to use the restroom?”) and to identify the level of abstraction for teacher questions and child responses using a continuum from literal to inferential. If more than one child responded to a teacher question, the highest level answer was used (Tompkins, Zucker, Justice, & Binici, 2013).

Researchers found that when teacher questions were inferential, children were more likely to respond inferentially. Likewise, when teachers asked literal questions, the children responded literally. They conclude that the exposure to high level language in play contributes to future language and reading achievement. Their recommendation is for teachers to continue scaffolding high level language in teacher-child play conversations (Tompkins, Zucker, Justice, & Binici, 2013).

This study had teachers interact with only a small number of their students. It is possible that the results would be different if the children were not handpicked. Further study is needed in a larger, more naturalistic setting.

Summary of Findings About Free Play and Social and Academic Outcomes

In examining the research on free play and the effects on social and academic development, it is clear that there is a correlation between play and academics. In order to summarize my findings, I will refer back to my two research questions.

What effect does a play-based curriculum have on a pre-kindergarten child’s ability to interact positively with peers? The research shows that children who are given ample time to engage in free play, especially pretend play, are better able to self-regulate, develop better social competence skills, and are better able to see things from another perspective. These skills can lead to fewer disruptive behaviors in the classroom as well (Veiga, Neto, & Reiffe, 2016).

How are kindergarten literacy skills affected by pre-kindergarten exposure to language and vocabulary in play? The research supports the belief that young children learn language and new vocabulary best through play. When they are exposed to high level language experiences, expressive story times, and vocabulary used in meaningful ways through play, young children are able to achieve language and literacy growth that will benefit them in the short- and long-term (Lewis, Boucher, Lupton, & Watson, 2000).

In the next chapter I will use the findings and conclusions of the researchers from my literature review to explain my conclusions and make recommendations for future practices in my classroom, my school, and my school district.

CHAPTER III

Conclusions and Recommendations

I chose to review the literature on the effects of free play on social and academic outcomes because every year in my pre-kindergarten program we are asked to increase time spent on academics, while time for free play is diminishing. I want to continue to advocate logically and persuasively for what I believe is best practice for the youngest learners in our school system. Having knowledge of the most recent research on this topic will support my efforts.

Based on the research available, I can conclude the following:

1. Through sociodramatic play children learn affective social competence (ASC) skills that guide them in developing the ability to take on roles and act out emotions that are part of the human experience (Lindsey & Colwell, 2013).
2. When given ample time and environmental supports for free play children develop social competence skills that result in fewer classroom disruptions (Vega, Neto, & Reiffe, 2016).
3. Children learn both social and academic skills best and most easily through play (Han, Moore, Vukelich, & Buell, 2010).
4. Through story retellings and acting out books in the dramatic play area of the room, children build literacy skills such as comprehension, which support future literacy outcomes (Hanline, Milton, & Phelps, 2008).
5. When teachers and preschool children interact during free play using sophisticated vocabulary, their fourth grade literacy scores are higher years later (Meacham, Vukelich, Han, & Buell, 2016).

Ideas for Improving Teacher Practices and Educational Policies

The findings that ASC skills are developed through ample time in sociodramatic play suggest that teachers should provide more time for quality free play in order to promote the development of perspective-taking skills and the ability to take on roles and act out the emotions of another person (Lindsey & Colwell, 2013). This recommendation is further supported by the research showing that ample time for free play is directly related to the development of social competence (Veiga, Neto, & Reiffe, 2016).

In order for children to engage in high-quality free play, teachers must be aware of the materials they select for the dramatic play area. To encourage students to take on roles and act out the emotions of others there needs to be a wealth of costumes and uniforms for children to try on. In addition, there should be baby dolls to take care of, and plenty of food, pots, pans and utensils that are representative of the children's home cultures for preparing meals. I would recommend that teachers regularly swap out the materials to keep the space engaging and exciting. My students' favorite themes are the beauty shop, pizza parlor, community helpers, and flower shop.

I further recommend that teachers share the importance of ASC skill development with their administrators, and encourage them to visit during free play time to see the learning that takes place. When administrators are observing, teachers can point out the language and social skills that are developing, because administrators may not notice on their own.

The findings that the development of social competence skills results in fewer classroom disruptions suggest that teachers should give students ample time for free play so that children can learn to problem solve, negotiate with peers, and practice perspective-taking (Veiga, Neto, & Reiffe, 2016). This recommendation is further supported by the research showing that children

who spend more time interacting with peers in free play are rated as more socially competent by their teachers (Veiga et al., 2017).

In order to give children time to practice negotiation and problem solving skills, teachers should give them unstructured play time during the day. I recommend that teachers model appropriate negotiation skills, teach conflict resolution skills, and scaffold problem solving strategies for children who struggle with appropriate behavior. This is important to start at the beginning of the year. In my classroom I use the toy people in the block area quite often, especially at the beginning of the year, to model appropriate talk and behavior, as block area is where many disagreements take place. Instead of stopping the play and getting a puppet, I just grab what is available to me and have a quick lesson through play. Before long the students are using the strategies I have taught them, and I need to intervene with less frequency. I further recommend that teachers let other adults in their room know that the children are working on their peer interaction skills, and to not step in right away to solve problems; much of the time children can work things out when given a chance.

The finding that children learn both social and academic skills best and most easily through play suggests that teachers should offer more unstructured time during the day for children to build the skills they need to succeed in kindergarten (Han, Moore, Vukelich, & Buell, 2010). This recommendation is further supported by the research showing that through play children practice what they have learned (Lynch, 2015).

Each year teachers are asked to spend more time in direct instruction and less time in free play. I recommend that teachers show this research to their administrators, and challenge them to come observe in the pre-kindergarten classrooms. Recently, the children in my classroom have been learning about music. We had a brief large group lesson about music symbols, where I

showed my students the sheet music for *Mary Had a Little Lamb* and we listened to a musician play the song while we clapped along to the notes as she played; we then went to centers. During center time I had children playing instruments to music their friends composed for them, children composing the music, and children writing about music in their journals or drawing music symbols at the art table. None of these things were discussed or recommended to them. They were practicing what we learned. If my administrator had been observing he would have witnessed the power of play as a vehicle for practicing what we learn.

The finding that children build literacy skills such as comprehension through story retellings and acting out books in the dramatic play area of the room suggests that teachers can support future literacy outcomes by providing a literacy rich environment (Hanline, Milton, & Phelps, 2008). This recommendation is further supported by the research showing that when teachers and preschool children interact during free play using sophisticated vocabulary, their fourth grade literacy scores are higher years later (Meacham, Vukelich, Han, & Buell, 2016).

These findings are important, as children spend much of their day in play; the teacher's job is to scaffold their learning so they grow deeper and develop new language skills. Knowing that the quality and depth of play conversations can do that is a powerful motivator not to be a casual playtime observer, but to get on the floor and interact and engage with students. I recommend that administrators be made aware of the importance of language-rich environments and be encouraged to offer professional development in this area for pre-kindergarten teachers. In my school district many of the professional development days are geared towards the K-12 teachers and the preschool teachers are left to their own devices. If teachers are to provide high quality educational experiences for the youngest learners in their schools, they need to be provided with relevant early childhood related professional development.

Future Research

Although I was able to answer my research questions, I was surprised by the lack of depth in the research. Many of the studies had small sample sizes or homogenous participant groups. Further research with a broader scope would be helpful. I also noticed that many of the studies on the impact of play based curriculum were carried out in other countries whose policies are to start formal academic instruction at age 6 or 7. Their pre-kindergarten programs use a play-based curriculum and I would like to see more research done in those programs on a broad scale.

In the end I realize that I am fortunate to work with a team of teachers that values the importance of play. We will continue to advocate for play, and to fight to keep free play in our classrooms. We know that spending more time in direct instruction will lead to disconnected young students who are not engaged in their learning. We also know that by continuing to guide them as they explore their world through play we are creating young learners who have a passion for learning, creating and investigating. We are teaching the next generation of 21st century learners, and we will continue to fight for what we know is developmentally appropriate practice.

CHAPTER IV

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