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Preservice Teachers' Beliefs About Play in Kindergarten

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Dedication

To my son, Caleb, may you always love to play.

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Abstract

The purpose of this research was to gain insight into preservice teachers' beliefs about play in kindergarten, and explore differences in beliefs about play between teachers just beginning their education program and those who are completing their degree. The study examined the beliefs of two groups of preservice teachers: one at the beginning of their early childhood education program (beginning students) and one at the end (teacher candidates). This study used a mixed methods approach including a survey with both Likert scale and open-ended questions as well as individual interviews. Data were collected at the beginning of the fall semester from beginning students and then at the end of that same semester from teacher candidates enrolled in a program preparing them for state teacher certification in early childhood education. Quantitative data analyzed through SPSS and SAS to find frequencies, descriptive statistics and t-tests were used to compare the data generated by the preservice teachers' answers. Thematic coding was used for gaining insight into the open-ended responses and interview data. Analyses indicated that both beginning students and teacher candidates reported similar beliefs regarding play in kindergarten. Comparing responses of these preservice groups revealed subtle yet significant differences between students' beliefs about appropriate instructional strategies and evaluation strategies in the kindergarten classrooms. Preservice students in this study seemed to have a "struggle of balance" regarding instructional strategies in kindergarten. Individual interviews supported these findings and also gave preservice

teachers opportunities to identify influences impacting their beliefs about play in kindergarten. In light of these findings, this study resulted in several implications for early childhood teacher educators.

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CHAPTER ONE

Introduction to the Study

Play has been the cornerstone of American early childhood education since Froebelian-inspired kindergarten began in 1856. With the 2002 passage of No Child Left Behind (NCLB), the bar of accountability was raised and teachers were pressured by federal legislation and state and local administration to prepare their students to perform well on standardized tests. As a result, time for play was often eliminated or reduced by teachers who were encouraged to rely on a scripted curriculum designed to prepare children for these formal assessments (Carlsson-Paige, & Levin, 2010).

The Race To The Top (RTTT) federal grant program launched in 2011 offered grant incentives designed to impact state education reform (McGuinn, 2012; U.S. Department of Education, n.d.). Required standardized testing and results were used to measure state grant eligibility, the results of which would be used to measure schools' and teachers' success, including, potentially, salaries and tenure. To be eligible, states were required to remove any law preventing student test data from being linked to teacher evaluations. Teachers and administrators, experiencing increasing pressure to prepare students for standardized testing, in many instances reduced time for play. Advocates for quality early childhood programming warned about the dangers of placing an emphasis on academics and omitting play, given that (a) play increases children's creativity, promotes their ability to solve problems, and supports their social and emotional

development, and that (b) dispositions and skills related to play are important to support during the early childhood years (Falk, 2012).

Statement of the Problem

In the climate of academically rigorous state standards, high stakes testing, and school and teacher accountability, some of the most beneficial teaching practices for kindergarten students, such as free play and guided play, are disappearing in many public schools in America and are being replaced by direct, didactic instruction (Zigler & Bishop-Josef, 2006; Hirsh-Pasek, Golinkoff, Berk, & Singer, 2009). This is the case in spite of the fact that play is recognized as one of the ways that young children learn best (Almon & Miller, 2011; Carlsson-Paige, 2008; Copple & Bredekamp, 2009; Elkind, 2001, 2007; Falk, 2012; Fromberg, 2006; Hirsh-Pasek, Golinkoff, Berk, & Singer, 2009; Isenberg & Quisenberry, 2002; Ranz-Smith, 2012; Singer, Golinkoff, & Hirsh-Pasek, 2006). Teacher educators have a responsibility to empower new teachers—many of whom will be encountering school climates that focus on narrow academic goals—to stand their ground against practices (or mandates) that are not beneficial to young children (National Association for the Education of Young Children [NAEYC], 2011). Achieving this goal may be particularly challenging because today's preservice teachers may not have as much personal experience with learning through play as have students in the past. It is likely they have recently graduated from a public school system where play was not valued.

Preservice teachers' memories of their own experiences related to play in kindergarten form the foundation for their beliefs about the value of play, which they bring to their professional preparation. These beliefs serve as a framework for their

growing understanding of young children and how they learn (Klugman, 1996; Richardson, 2003; Sherwood & Reifel, 2010). Teacher educators should prepare future teachers to understand best practices for young children and how to implement them in the current culture of public schools. This preparation requires early childhood teacher educators to equip all of their preservice teachers, regardless of the beliefs about the value of play they brought to their studies to use play effectively in kindergarten. By developing an awareness and understanding of their existing beliefs and directly addressing them through extensive experiences and opportunities, teacher educators can prepare preservice teachers to effectively incorporate play into their future classrooms (Pajares, 1992; Richardson, 2003).

Statement of the Purpose

The purpose of this research was to gain insight into preservice teachers' beliefs about play in kindergarten, and explore differences in beliefs about play between teachers just beginning their education program and those who are completing their degree. The study examined the beliefs of two groups of preservice teachers: one at the beginning of their early childhood education program (beginning students) and one at the end (teacher candidates).

Research Questions

To accomplish the stated purpose, this study asked the following research questions:

Question 1: What differences exist in preservice teachers' beliefs about the role of play in the kindergarten classroom?

A. Is there a difference between beginning students' and teacher candidates' beliefs about play in kindergarten?

B. Is there a difference between beginning students' and teacher candidates' beliefs about play as an appropriate instructional strategy in the kindergarten classroom?

C. Is there a difference between beginning students' and teacher candidates' beliefs about play as an evaluation of kindergarten children's learning?

Question 2: What influences do early childhood preservice teachers identify as having impacted their beliefs about how play contributes to kindergarten children's learning?

Research Approach

Mixed Methods

This study used a mixed methods approach to answer the research questions. This method of using both qualitative and quantitative data collection allowed freedom in choosing the best tools to gather the most meaningful forms of data. The type of mixed methods approach used in this study is a *synergistic approach*. Synergy is the essence of two distinct entities interacting so that the combination is greater than the influence of them individually (Hall & Howard, 2008). A synergistic approach does not give greater value to either qualitative or quantitative methods but allows "researchers using the synergistic approach to adopt a position of equal value" (Hall & Howard, 2008, p.251).

Using both qualitative and quantitative methods within this study makes it possible for the researcher to combine data from a variety of sources to answer the

research questions. Quantitative methods determined if significant differences between beginning students (BS) and teacher candidates (TC) existed in multiple questions related to play. Quantitative methods also determined if preservice teachers were consistent in their answers regarding play. Qualitative methods were chosen to provide rich descriptions related to participants' beliefs about play, and thus create a context for interpreting the quantitative data.

A survey, consisting of both Likert scale questions and open-ended questions, was distributed and incentives for participation were provided to both preservice students beginning their early childhood studies and seniors enrolled in their final full time internship (student teaching). In addition, semi-structured interviews were conducted so that open-ended survey question responses could be used to provide validity to the data. To determine participants for the individual interview, the survey data were analyzed and purposive maximum variance methods were employed (Patton, 2001). The interview responses were analyzed to identify themes related to teachers' beliefs about play.

Significance

Teacher educators lay the foundation of future early childhood teachers' pedagogy and equip them with the knowledge and skills to implement developmentally and culturally appropriate teaching strategies. They also prepare them to defend their educational beliefs and practices when they face pressures from families, administrators, and district mandates to push children beyond what is appropriate for their age or development. The significance of this study was determining the difference of beliefs between a group of students beginning their program of study and a group of students completing their student teaching. Though this study was not designed to measure change

over the course of teacher training, this study does measure cohort-independent differences that reasonably approximate such changes, and will inform future researchers on the important variables around play in education.

Definition of Terms

Free play: is dictated by the children. They choose where they play, what they play, and with whom they play (Zigler & Bishop-Josef, 2006).

Guided play: occurs when teachers purposely allow children to actively explore within an environment designed to help them achieve certain learning goals (Hirsh-Pasek, et al., 2009; Zigler & Bishop-Josef, 2006)

Preservice teacher: relating to the period before a person takes a job that requires training, especially in teaching (Oxford Dictionary). In this research it refers specifically to college students enrolled in the Early Childhood Teacher Education program at a university.

Synergistic approach: is used in a mixed methods approach to research in which qualitative and quantitative data are integrated, rather than keeping these methodologies separate. Synergy is the essence of two distinct entities interacting so that the combination is greater than the influence of them individually, which provides a much richer and more complex understanding of the phenomena being measured than either measurement technique on its own (Creswell, Klassen, Clark, & Smith, 2011; Hall & Howard, 2008).

Teacher beliefs: are the opinions or perspectives of a teacher regarding a topic. In this research it refers specifically to preservice teachers' opinions and perspectives about play.

Agency: is a person or thing through which power is exerted or an end is achieved (Merriam-Webster). In education it is defined as one's ability to use their "voice" and the freedom in "choice" (Long, Hutchinson, & Neiderhisen, 2011, p. vii).

CHAPTER TWO

Review of Related Literature

This review of literature includes a discussion of major topics important to teacher educators preparing students to teach young children: theoretical perspectives on play, neuroscience implications for play, the role of play in young children's learning and development, the state of play in United States kindergartens, preservice teachers' beliefs about the role of play in kindergarten, and strategies used by early childhood teacher educators to address students' beliefs. The review of literature related to play theory includes a working definition and a discussion of the theoretical foundations of play. The literature regarding the importance of play will identify how young children's social and emotional, physical, cognitive and academic development is enhanced by play. This chapter also includes a description of the state of play in early childhood in the US by discussing recently enacted policies and current trends that have an impact not only on early childhood educators but also the 21st century learner. The review will conclude with a look at the impact of preservice teachers' beliefs and challenges they can present to early childhood teacher educators.

Theoretical Perspectives on Play

Early childhood education builds its view of play through an interdisciplinary approach. Educational psychology, neuroscience, and early childhood education, viewed through the lens of appropriate developmental practice, lends itself to a balanced view of

play's importance in the lives of young children. Several scholars refer to play as a difficult construct to define (Brown, 2009; Sutton-Smith, 1997) and note "the definition of play is somewhat elusive in the literature" (Hirsh-Pasek, et al., 2009, p. 23). For the purposes of this study, "play" is referred to as either "free play" or "guided play." Both of these constructs are incorporated when scholars consider "playful learning" (Hirsh-Pasek, et al., 2009; Reed, Hirsh-Pasek, & Golinkoff, 2012).

"Free play" is defined as offering children the opportunity to choose where they play, what they play with, and with whom they play. Guided play occurs when teachers purposefully allow children to actively explore within an environment designed to help them achieve identified learning goals (Hirsh-Pasek, et al., 2009; Reed, et al., 2012). In guided play teachers may step in by asking questions and talking about the play, but then step out of the way and allow children to continue in their play (Hirsh-Pasek, et al., 2009, Reed, et al., 2012). Both types of play should be present in early childhood classrooms for the optimal development of the whole child (Hirsh-Pasek, et al., 2009; Zigler & Bishop-Josef, 2006).

Many theorists have contributed to the body of research that establishes the foundation of play theory. They include the seminal theories from developmental psychologists Jean Piaget (1948) and Lev Vygotsky (1978) who provide insights about child development as well as current scholars' understandings of play in the lives of young children, adolescents, and even adults. Early childhood education builds on many constructs to determine what is appropriate for the development of young children. Play is a topic that has generated a great deal of interest from scholars who reside in many fields including child development, psychology, neuroscience, medicine, as well as

education. Piaget and Vygotsky were among the first to discuss this topic and to link play with cognitive development (Bodrova & Leong, 2003). These two theorists laid the foundation for what the field of early childhood education believes about play and learning.

Piaget's theory. Jean Piaget theorized that cognitive development begins at birth. He taught that children learn about their surroundings through active engagement using their senses, and that it is through this active engagement that children construct knowledge (Singer & Revenson, 1996). Piaget is known for his explanation of cognitive development through stages that coincide with a child's maturation. Through this lens, the child is seen as a knowledge constructor who uses the environment to learn. Children continue adjusting their understanding of the environment and their experiences through the process of assimilation and accommodation. During assimilation, the child takes in new information and fits it into what he already knows about the world, his schema. Accommodation occurs when the child needs to adjust his previous understanding or schema to fit this new information (Piaget, 1948).

Piaget on play. Piaget identified three kinds of play: (1) practice play, (2) symbolic play, and (3) games with rules. Practice play occurs in sensorimotor and mental domains where no accommodation is required, and the desire to play is intrinsically motivated. Singer and Revenson (1996) offer an example of practice or mastery play as a child swinging on a swing for the pure enjoyment of the movement. When a child nears his second birthday, that swing could become a rocket ship blasting to space. The activity then becomes symbolic play, marking the onset of representational thought when children are able to substitute objects and actions for real things (i.e., a wooden block for a phone).

While some preschoolers can participate in games with rules, games with rules are most enjoyed by children in years seven through eleven. This interest in games with rules remains through adulthood and continues as children's moral development progresses (Piaget, 1948; Rogers & Sawyers, 1988; Singer & Revenson, 1996).

Piaget's descriptions of children's play inspired other researchers to extend his work. One of those researchers who formed a social play framework was Sara Smilansky (1968). Her stages of social play are: (1) functional play, (2) constructive play, (3) dramatic play, and (4) games with rules. Many researchers have relied upon Smilansky's research on categories of social play and her subsequent research of socio-dramatic play (Bodrova & Leong, 2003; Hirsh-Pasek, et al., 2009; Rubin, 1976). Piaget's conceptualization of how play influences the stages of cognitive development in children has had a substantial impact on early childhood education. His work influenced not only Smilansky but also many other researchers in the field (e.g., Kamii & DeVries, 1980; Rubin, 1976; Singer & Revenson, 1996).

Vygotsky's theory. Lev Vygotsky asserted that our social context has an impact on how we think and develop (Bodrova & Leong, 2007). Vygotsky believed that culture influences cognition, therefore a child's social environment influences not just what he knows but how he thinks. Vygotsky believed that for normative development to occur, both physical manipulation and social interaction needed to take place. One of the most recognized concepts proposed by Vygotsky is the Zone of Proximal Development (ZPD). A ZPD is known to be the range of challenges from those a child can master independently to the potential of what that child could do with the support of an adult or in collaboration with peers (Vygotsky, 1978).

Vygotsky on play. "In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself" (Vygotsky, 1978, p.102). This passage is often quoted when describing what play can do for a child, exemplifying his belief that the rules of play are what define this zone of for the child. Vygotsky's theory of social culturalism created an influential shift in thinking regarding cognitive development. It allowed the teacher to be seen as an active participant with children during their play. They design the classroom environment to promote social interaction and exploration, seek ways to scaffold children's learning, and serve as a constant resource for the children. It is important for teachers to embrace their active role as co-player/co-investigator with children during play (Jones & Reynolds, 2011). When teachers are active players with children, they are most likely to appreciate the benefits of play in children's development.

Vygotsky limited his view of play to dramatic or make-believe play of preschool and primary school age children. Vygotsky's definition of "real play" consisted of three components: (1) children create an imaginary situation, (2) they take on and act out roles, and (3) they follow a set of rules determined by the specific roles they chose. These rules were the parameters of the character(s) they were portraying in play. Vygotsky believed that real play promotes cognitive, emotional, and social development.

Neuroscience

The decade of the 90s brought many advances in high-tech brain imaging technology such as the fMRI. These advances made it possible for scientists and brain researchers to make great strides in understanding the brain, its functions, and its role in many aspects of human development. The advancements brought to research by these

technologies led to significant connections for education and child development therefore igniting the interest of educators toward neuroscience. One researcher referred to the 1990s as the "decade of the brain" (Frost, 1998, p. 2). This was the time in which neuroscientists began fully realizing the connections to education and child development in their explorations of the human brain as well as in play behaviors of non-human animals.

Neuroscience brain function. A description of the complexity of the human brain is beyond the scope of this study, but due to the importance of neuroscience to the field of child development and play theory, a discussion of pertinent features of the brain follows. The human brain is a highly developed communication system consisting of neurons, synapses, dendrites and neurotransmitters. Neurons carry the electrochemical messages of the brain to other neurons. Each neuron has an axon to send signals and a dendrite to receive signals. When an axon connects with a dendrite a synapse is created. However, in order for the connections to occur, a neurotransmitter must be present (e.g., serotonin, dopamine, or norepinephrine) to be passed from one cell to the next (Frost, 1998; Rushton, Juola-Rushton, & Larkin, 2010).

The connections between brain cells are happening with every experience a child encounters. When playing, a child is creating billions of neurons and synapses. Neuroscientists have confirmed that the brain is ever-changing through new experiences that either reinforce a connection or prune away the old ones. The term "plasticity" is used to describe this ever-changing phenomenon. The brain's limbic system is "hard wired" and changes very little. This area is responsible for regulating heartbeat, lung movements, and helping our kinesthetic senses, such as balance (Rushton, et al., 2010).

The brain of a young child is easily adaptable because of the constant and even over production of neurons and dendrite connections. Such rapid growth allows for children to generate and reinforce the many natural connections through their experiences (Rushton, et al., 2010). It is the focus on experiences that provides educators with a firm foundation to discuss the importance of allowing children to explore, play, and interact with their environment. Whether through free play or interaction with teachers during guided play, a child's opportunity for the production of new brain connections is accelerated.

Neuroscience in animal research. Neuroscience continues to advance our understanding of play, and the number of researchers interested in the relationships between the brain and play continues to increase. Much of this research has been focused on play fighting among rodents, though play fighting is pervasive in the animal kingdom and can be found in "social mammals and smart birds" (Brown, 2009, p.29; Burghardt, 2001). Several animal studies have established play as a primary driving force in sculpting how the brain grows and develops. Animal play researcher Fagen (1981) spent fifteen years studying the play behavior of grizzly bears. Through his investigations he discovered that the bears that played the most were the bears with the best survival rates (Brown, 2009). Additionally, when social mammals such as cats and rats were removed from play, they lost the ability to distinguish friend from foe, confused social signals, and when placed in social situations either responded with excessively aggressive behavior, or retreated and disengaged completely (Brown, 2009). A well-respected neuroscientist, Diamond, conducted landmark research at the University of California at Berkeley in the 1960s in which rats raised in an "enriched" environment were not only demonstrably

smarter, but whose brains were more complex, larger, and possessed a more developed cortex (where data processing occurs). Upon interviewing Diamond, Brown also discovered that the key component to rats' optimal cognitive development was that the successful rats played with "an ever-changing variety of rat toys" as well as "socialized with other rats" (Brown, 2009, p. 39). Thus, the active playing with a variety of toys and with others is what made the difference. From these studies, educational researchers may extrapolate to human behavior by concluding that social play is important for healthy cognitive development in children as well (Bergen, 2002).

Throughout the lifetime of experiences with their peers, children will be socialized during the experience of free play. And through arrangements of learning environments, children will be exposed to a variety of toys during guided play. Children's learning through play in early childhood is a foundational principle that guides teaching practices and curriculum development. It is important to understand the benefits of play and therefore the importance of play as determined by foundational, as well as current, theorists and researchers in early childhood.

Importance of Play

Public education, it seems, is primarily focused on a child's cognitive development, including an emphasis on language and literacy skills that match with the current standardized tests (Zigler & Bishop-Josef, 2006). Early childhood education advocates retain their focus however, on teaching the whole child in a meaningful context.

Cognitive development and play. Play provides the opportunity for both a meaningful environment and a space to develop cognitively. Piaget and Vygotsky suggest

the essential role of play in cognitive development. Piaget argues that children allowed to interact with materials in their environment construct their own knowledge about the world. Vygotsky focuses on how interactions with people such as parents, teachers and classmates foster cognitive development (Piaget,1948; Vygotsky, 1978; Zigler & Bishop-Josef, 2006). Play provides the means for children to grow cognitively.

Math. Play promotes children's development of mathematical understandings. One study conducted by Ginsburg, Pappas, and Seo (2001) examined the frequency of math-related activities in four- and five-year-old free play while in daycare. The researchers found that children spent over half of their play time in some form of math or science activity. The frequency of math play is linked to increased achievement and math knowledge (Ginsburg, Lee, & Boyd, 2008). Another study focused on the complexity of block play in preschool. The complexity of block play was significantly related to the junior high and high school math grades, as well as the number of math courses and honors courses taken (Wolfgang, Stannard, & Jones, 2001).

One final example of play's benefits in math development comes from a study that looked at the impact of guided play and direct instruction on preschoolers' development of shape concepts. The children were randomly placed in one of three groups: guided play, direct instruction, or the control group. The guided play group was instructed to look for the "secret of the shapes" and was only prompted to explore with questions such as, "How many sides are there?" (Reed, et al., 2012, p. 30). Children were asked to identify real triangles from the non-typical and non-triangles. The control group was read a story with no activity or instruction. The direct instruction group was taught the secret of the triangle shape and it was shown to them. The results showed that

children who experienced guided play and direct instruction had similar outcomes in their success identifying triangular shapes. This pattern of results did not hold true for more complex shapes. Children in guided play not only did better with hexagons and pentagons, but also still retained their learning two weeks later (Reed, et al., 2012).

Language. Socio-dramatic play is recognized as foundational to the development of language and literacy in early childhood (Hirsh-Pasek, et al., 2009; Paley, 2004; Reed, et al., 2012; Smilansky, 1990; Vygotsky, 1978). There are many components to social pretend play that naturally incorporate language. The players must decide what they will play, negotiate who will take on certain roles, choose and create the props, and then verbalize and act out the story/scene through playing together. All of these components are important to oral language development. Children have to learn to negotiate with one another through language and thus resolve conflicts in order to play. Reed and colleagues summarized the research by stating, "The narrative that children create in play builds a foundation for later literacy" (Reed et al., 2012, p. 31).

Teachers can enhance the play environment with literacy-rich play centers. For example, the doctor play center may contain pencils and pens, a prescription pad, a sign-in sheet, patient folders and an appointment book in order to foster print awareness in young children. When props of this nature are included in the play areas, there is a decided increase in children's emergent reading and writing activity during play (Neuman & Roskos, 1992, as cited in Christie & Roskos, 2006).

Play can also enhance story comprehension and recall in kindergarten to second grade children. Pelligrini and Galda (1982) conducted an experiment where a book was read aloud to them, and then children were place in one of three experimental groups: (1)

thematic-fantasy play, where students acted out the story they had just heard, (2) discussion, where students discussed the story; and (3) drawing, where students drew illustrations of the story. These three groups were compared on their performance on both a story comprehension and a story recall task. The results specified that children in the thematic-fantasy playgroup performed better on both tasks than children in the other two groups (Reed, et al., 2012).

The mathematical and literacy studies discussed highlight many contributions of play in young children's cognitive development. Cognitive skills are important and intertwined with the physical, social, and emotional systems (Bishop-Josef, 2006). Play in early childhood provides key social experiences that help to develop healthy social and emotional dispositions in young children.

Socio-emotional development and play. Make-believe play involving more than one child, also known as socio-dramatic play, is the catalyst for social development and self-regulation in children (Berk, Mann, & Ogan, 2006; Bronson, 2000; Vygotsky, 1978). Through socio-dramatic play, children must negotiate roles, think about others' feelings and how to respond to them, and play within the rules of their pretend setting and character. All of these steps and experiences lead to a better awareness of other children and of themselves. They realize that their intentions and desires may not match those of others (Reed, et al., 2012). This is a big step in self-awareness, and the beginning of developing empathy (Singer & Revenson, 1996). "Play offers children a secure space to try out something new in their repertoire with minimum anxiety" (Goldman, 2006, p. 178).

Through play, children are interacting and engaging with the world around them, practicing adult roles, and conquering fears, all while building new competencies that lead to increased confidence and resiliency to face challenges in the future (Ginsberg, 2007; Vygotsky, 1978). Several studies have demonstrated that peer interaction skills and peer acceptance is linked to higher level functioning in the classroom and into adulthood (Bronson, 2000; Bronson, Pierson, & Tivnan, 1984; Lazar & Darlington, 1982; Pelligrini, 1992). Play creates the environment and the circumstances necessary to build not only critical social and emotional skills, but also self-regulation in young children.

An understanding of self-regulation in young children has been enhanced through developments in neuroscience. Self-regulation does not just mature in the child, but results from "dynamic interchanges between brain activity and experience" (Berk, et al., 2006, p. 75). Substantial changes in the cerebral cortex, especially in the frontal lobes, explain the growth of self-regulation in preschool children. The formation of synapses in the frontal lobes peaks near the age of four years, and synapses that are no longer utilized experience the process of pruning. During this time, a child's brain is flexible and prepared for learning (Berk, et al., 2006).

Appropriate environmental support is needed for the proper cerebral organization underpinning self-regulation. For children to develop self-regulation, opportunities are needed to practice overcoming impulses and managing their own behavior. Make-believe play provides an optimum learning environment for these skills. Additionally, children's participation in make-believe play and interaction with expert play partners (e.g., parents, older siblings, and teachers) promotes the development of rich, private speech dialogue (Berk, et al., 2006). According to Berk (1992), preschoolers' private speech, or self-talk,

is 20 to 60% of their utterances during play at this stage of their development. More expert play partners influence preschoolers' private speech as the child provides instructions for their own actions. Self-regulation leads to opportunities for children to learn how to work in groups, learn how to share, negotiate, resolve conflicts, and become emotionally stronger (Ginsberg, 2007).

Play provides the opportunities for children to pursue their own passions in an environment that welcomes exploration and invention. Social skills not only impact relationships and emotional stability, but they also have an impact on school success (Berk, et al., 2006; Hirsh-Pasek, et al., 2009; Reed, et al., 2012). Rich experiences in make-believe, sensitively fostered by parents and teachers, are among the most effective ways to ensure that young children gain the self-regulatory skills necessary for succeeding in school, both academically and socially (Berk, et al., 2006).

Physical development and play. There are physical benefits to a child's engagement in play as well. "The boisterous, exuberant physical play of children" Carlson claims, "is more than just fun; it's a vital part of their development" (Carlson, 2012, para.1). Typically the kind of play that fosters physical development happens outdoors. In fact it is "big body play" (Carlson, 2011a) that leads to children developing gross motor skills that include awareness of how their bodies move as well as how to control these movements. Big body play can include rough play, running, rolling, pushing, chasing, tagging, falling, climbing, and rowdy play. It is this very physical, boisterous, large motor focused play that children seem to naturally crave (Carlson, 2011a).

Big body play is very vigorous and enjoyable for young children, making it possible for them to sustain optimal levels of exercise for health benefits. It is recommended that toddlers through adults participate in unstructured, moderate to vigorous exercise for at least an hour daily for optimum physical health (American Alliance for Health, Physical Education, Recreation and Dance, 2013; Ginsberg, 2007).

Rough and tumble play is one way that children participate in vigorous exercise that supports cardiovascular strength. There are distinct differences between rough and tumble play and fighting that parents and teachers need to recognize in order for children to reap the benefits of this kind of play.

Some examples of these key components of rough and tumble play are (1) children's faces are free and easy, usually with smiles and laughter, (2) children initiate and sustain the play by taking turns, (3) open hands are used for tagging, and (4) children return for more play fighting (Carlson, 2009, 2011a; 2011b). It is particularly important for boys to have the opportunity for rough and tumble play because it provides them an opportunity for showing care and concern for one another. Often boys hug and pat each other on the back during and after this kind of play (Carlson, 2011b).

Neuroscience has suggested a connection between physically active play and the brain's ability to self-regulate impulsivity in preschoolers. Results of one study suggests when play is withheld from young animals, it may delay or disrupt the maturation of their frontal lobes, the locus of monitoring and self-regulation (Brown, 2009; Panksepp, 2007). The study further explained that rats with damage to their frontal lobes (thought to model human ADHD) were able to reduce their normal impulsivity through play (Brown, 2009; Panksepp, 2007). This research has led to "a [proposed] connection between a lack of

rough and tumble play and ADHD. In fact, based on their findings that 'abundant access to rough and tumble play' reduces the inappropriate hyper-playfulness and impulsivity of rats with frontal lobe damage," the researchers suggest that regular social, vigorous play could help children with mild to moderate ADHD regulate impulsivity (Brown, 2009, p. 100; Panksepp, 2007). Thus, big body play has many benefits to young children and should be an essential part of the kindergarten school day.

In today's society, this rambunctious, vigorous style of play is often not valued. Misunderstandings about rough and tumble play have caused its removal from many early childhood settings. Recess time is also being reduced in many schools, replaced by more cognitive-based academic pursuits (Carlson, 2011a; Freeman & Brown, 2004).

Sedentary activities are replacing physical activity, play, and other opportunities for children to develop their imaginations and creativity (Falk, 2012; Levin, 2013). Recess – unlike physical education class – gives children opportunities for social interaction as well as a reprieve from instruction. Young children are still developing attentional skills, so recess provides the needed respite enabling them to re-enter the classroom refreshed and ready to attend (Falk, 2012; Madaus & Lee-St. John, 2012; Pelligrini & Holmes, 2006). Physical play is a critical part of young children's development as they grow into strong, healthy, and attentive students.

The trend in today's American public schools has been to reduce or cancel recess time (Levin, 2013; Pelligrini & Holmes, 2006; Rivkin, 2014). This removal of physical play in schools, coupled with a reduction in outdoor play at home is leading children towards a more sedentary lifestyle, and negatively impacting children's development. Children's lives are being scheduled with structured activities and team sports, then

bombarded with mobile devices, television, video games and computers which, while they do provide new opportunities for learning, occur in an overwhelmingly sedentary state (Elkind, 2007; Falk, 2012; Frost & Woods, 2015; Rivkin, 2015).

Much research from educational psychology, child development, and neuroscience show the benefits of play in the cognitive, social, emotional as well as physical development of children. Play should be a significant part of a kindergarten classroom.

State of Play in U.S. Kindergartens

Miller and Almon (2009) found that the foundational learning experiences of early education are disappearing. No longer can one enter a kindergarten classroom and be assured of finding children engaged in pretend play, block play or play with objects of any kind. Current early childhood practices occurring in the U.S. are contrary to what research supports regarding how young children learn (Almon & Miller, 2011), as the pedagogical focus has shifted from encompassing the whole child and has now narrowed to only the cognitive child (Zigler & Bishop-Josef, 2006). As such, play has been replaced with lessons that concentrate on cognitive skills, primarily in literacy and mathematics domains, because they match the content represented on standardized tests (Zigler & Bishop-Josef, 2006).

Instead of play rich environments, children in kindergarten are sitting at tables with papers in front of them being led in undifferentiated, whole group lessons. Didactic teaching of academic facts for successful test scores is pushing aside techniques appropriate for the development of young minds and bodies (Hirsh-Pasek, et al., 2009). Certainly cognitive development is important, but the curriculum should not be so narrow

as to exclude the physical, social and emotional aspects of a child's learning (Brown & Freeman, 2001; Zigler & Bishop-Josef, 2006).

Some researchers look to history to determine when a line was "drawn in the sand" regarding American attitudes about education.

Sputnik. Some researchers have suggested that the dichotomy between an academic focus and play-centered learning began in the late 1950s when the Soviet Union launched Sputnik (Zigler & Bishop-Josef, 2006). The American public was led to believe the United States was falling behind in the race to space. In fact, by the direct orders of the U.S. President, a rocket was not launched into space prior to Sputnik to protect secret work on spy missiles (Dickson, 2007). If the rocket had been launched, America would never have experienced the panic and subsequent changes to their current educational programs. A recent historical event created a similar misconception for the American public.

No Child Left Behind. The George W. Bush No Child Left Behind Act of 2001 (NCLB) reform of education put the focus on early childhood literacy with the goal of all children being able to read by third grade. Reaction to the law increased student assessments, changed many academic standards and accountability and created school-wide reforms with a focus on academic skills and reading (Zigler & Finn-Stevenson, 2012). The high-stakes nature of accountability caused academic skills to be "bumped-down" from first and second grade to kindergarten (Hirsh-Pasek, et al., 2009). The focus narrowed to content with an emphasis on *what* to teach instead of *how* to best educate young children (Hirsh-Pasek, et al., 2009, emphasis added).

Race to the Top. With the Obama administration came new incentives for education. The Race to the Top (RTTT) program was created by the Department of Education to fund a federal grant competition that gave states an opportunity to compete for large grants. To earn the money, states had to commit to adopt the Common Core State Standards Initiative (CCSS) created by a consortium of the National Governors' Association Center for Best Practices and the Council of Chief State School Officers and funded by the Gates Foundation and the Bill and Melinda Gates Foundation (Porter, McMaken, Hwang, & Yang, 2011). The CCSS were created with the hope of reaching consensus on what is expected for student knowledge and skills in grades K-12. The primary areas of focus were on mathematics, English language arts and literacy (Porter, et al., 2011). America's single-minded attention to content rather than how children learn best is perpetuating the reduction of intellectual, playful, experiential learning needed in kindergarten (Fromberg, 2006). Once again the focus of legislation was not on how children learn best but the perpetuation of academic knowledge.

Expectations for what children will have to know and be able to do has been reframed nationally and yet it is significant that these CCSS are based on the premise of a professional workforce as signaled by their rationale and guidelines which state, "Teachers are thus free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the Standards" (NGACBP, 2010 p. 4). For early childhood educators, even more importantly:

> The Standards define what all students are expected to know and be able to do, not how teachers should teach. For instance, the use of play with young children is not specified by the Standards, but it is welcome as a valuable activity in its

> own right and as a way to help students meet the expectations in this document (NGACBP, 2010, p. 6).

There is an opportunity for teachers who know and implement child-centered pedagogy to incorporate play while addressing the CCSS and to bring meaningful learning experiences back to kindergarten.

Conclusion. As early childhood educators, we cannot always count on educational reforms to be written with the development of young children in mind. As Long, et al. (2011) advocates, what early childhood teacher educators can do is stand firm in preparing teachers to resist scripted, direct teaching and to identify their own "agency (voice and choice)" to implement "principles that guide good teaching" (Long et al., 2011, p. vii & p. 3).

Preservice Teachers' Beliefs About Play

In order for early childhood teacher educators to equip future teachers to be effective early childhood educators, they first must recognize that preservice teachers bring their own beliefs to the program of study. Researchers explain that preservice teachers come to their professional training with set beliefs about education (Calderhead & Robson, 1991; Fang, 1996; Pajares, 1992; Richardson, 2003; Vartuli & Rohs, 2009). Beginning students in the profession of teaching are different from students beginning a pursuit in history or physical science. Students entering the teaching profession come with their personal experiences, based largely on their own twelve to thirteen years as students. They already have set beliefs about education and what makes a good teacher (Fajet, Bello, Leftwich, Mesler, & Shaver, 2005; Kennedy 1997; Ng, Nicholas & Williams, 2010; Pajares, 1992; Richardson, 2003). These beliefs form the lens through

which they interpret and perceive all the new information acquired through coursework and field experiences.

When students' beliefs are challenged by new teachings, they often dismiss these ideas as being too theoretical and non-practical (Kennedy, 1997). Often teacher educators are ill-equipped to address the discrepancy between students' beliefs and the recommended teaching practices, because students' firmly held beliefs rarely surface during their education courses. However, they do make an appearance when the students begin practicum, student teaching experiences, and especially when they have classrooms of their own (Zeicher & Tabachnick, 1981). Interweaving fieldwork with coursework, along with purposeful reflection of preservice students' on their entering beliefs – particularly when these beliefs are contrary to ideas presented in the program of study – is recognized as an effective method for changing inexperienced beliefs (Vartuli & Rohs, 2009). Teacher educators must also "help [their students] develop powerful images of [dynamic] teaching and strong professional commitments or the entering beliefs will continue to shape ideas and practice" (Vartuli & Rohs, 2009, p. 312).

The research regarding preservice teachers' beliefs about play is of value to early childhood teacher educators because play is a foundational practice in early childhood yet being pushed out of kindergarten classrooms across America (Hirsh-Pasek, et al., 2009; Zigler & Bishop-Josef, 2006). The empirical evidence reveals that play is not being prioritized in kindergarten classrooms even though it is revered by early childhood education. Explanations for this phenomenon must be sought. Two studies of note have focused specifically on preservice teachers and their beliefs about play.

First, Klugman (1996) asked all early childhood freshmen about their own experiences with play at home, at school, and the role of play in learning. Through questionnaires, participants shared memories of playing with toys, playing outside, participating in recess, and engaging in pretend and constructive play. The researcher concluded that their experiences shaped the students' current perspectives on play. The students' descriptions of play did overlap but there was not a singular understanding of play.

The second study asked, "What do preservice teachers believe constitutes play?" (Sherwood & Reifel, 2010, p. 325). That qualitative study focused on a practicum of seven preservice teachers who participated in three data collection strategies including interviews, field notes of observations, and document collections (Sherwood & Reifel, 2010). The preservice teachers appeared to believe that play had multiple meanings. However, each preservice teacher had an individualized meaning of play.

Combined, these two studies highlight the multiple meanings of play and how it has a various personal meanings to people. Also, preservice teachers either may not have experienced or do not remember playful learning in their early childhood years, and thus play may have no significant meaning for them. Thus, preservice teachers could have a different belief regarding best practices for young children minimizing play as a teaching practice.

The current study focused on preservice teachers' beliefs about play in kindergarten. However, rather than examining what has shaped their beliefs about how play contributes to children's learning, it compared and contrasted the beliefs of

preservice teachers just beginning the early childhood program with those who are completing their student teaching.

Early Childhood Teacher Preparation and Play

Research demonstrates that it is difficult, but not impossible, to change beliefs (Richardson, 2003). How do teacher preparation programs go about effecting change in preservice teachers' beliefs? Richardson (2003) gives two suggested approaches: (1) encourage preservice teachers to be reflective, to examine their own beliefs and to learn to become more critical thinkers; and (2) require more quality field experience observation and participation as part of all academic classes. The rationale for the latter suggestion is that the preservice teacher's belief system was constructed while in their personal childhood classroom environment, and the best way to create dissonance in their understanding is to provide more hours of high quality experiences in classroom environments in a different role. These field experiences can be most beneficial when there is cooperation between the teaching faculty, preservice teachers, cooperating teachers, and supervisors who have a shared understanding of good quality teaching that permeates coursework and field experiences (Vartuli & Rohs, 2009).

Chapter Summary

Many scholars have contributed to the body of research that established the foundation of play theory. Piaget and Vygotsky provided the foundation for early childhood play and its benefits for young children's learning and development. Play is a topic that has generated a great deal of interest from scholars who reside in many fields including child development, psychology, neuroscience, medicine, as well as education. The scholars in these fields continue to add valuable research and understanding

regarding how play affects young children. The field of neuroscience is ever changing and provides insights into how play impacts brain development. New connections between brain cells are being created with every experience a child encounters. Experiences in play leads to important cognitive, socio-emotional and physical development and learning.

Early childhood education recognizes the importance of play in the development and learning of young children, and yet kindergarten classrooms across the U.S. are limiting or removing the time for children to play. Education reforms have impacted the decisions of those in administration; therefore, the focus has become didactic teaching of skills in kindergarten. The intense focus on accountability and standardized testing has impacted how we teach kindergarten children.

In order for early childhood teacher educators to equip future kindergarten teachers to be effective, they first must recognize that preservice teachers bring their own beliefs to the program of study. These beliefs provide the lens through which preservice teachers view all new information presented to them in their teacher preparation program. Research suggests that the effects of these beliefs do not appear until the preservice teachers are teaching in a classroom setting. To thwart any misguided beliefs, early childhood teacher educators have an opportunity to acknowledge that preservice teachers' beliefs exist and provide examples of best practices in the early childhood program of study.

Our focus as teacher educators is to prepare students for the future. The 21st century is a time to focus on ingenuity, creativity, critical thinking, collaboration, communication, and innovation if we want to foster students who will succeed (Gardner,

2006; Liu, 2014; Pink, 2005; Reed, et al., 2012). All of these attributes can begin with play in kindergarten. Play has the power to influence the development of a young child's brain and lay the foundation for attributes that can carry them through their school years and into their future. Early childhood teacher education has a responsibility to empower preservice teachers with the knowledge of play theory and the understanding of how to support children's play in their classrooms.

CHAPTER THREE

Research Methods

The purpose of this research was to gain insight into preservice teachers' beliefs about play in kindergarten, and explore differences in beliefs about play between teachers just beginning their education program and those who are completing their degree. The study examined the beliefs of two groups of preservice teachers: one at the beginning of their early childhood education program (beginning students) and one at the end (teacher candidates). Early childhood research has established the important role of play in the kindergarten classroom (Almon & Miller, 2011; Hirsh-Pasek, et al., 2009; Paley, 1990, 2004; Smilansky, 1990; Stannard, Wolfgang, Jones, & Phelps, 2001). Most early childhood teacher education programs help preservice teachers recognize how children learn through play (Copple & Bredekamp, 2009; Fromberg, 2006; Saracho, 2013), and recognize that preservice teachers have preconceived beliefs of play based on their own experiences (Richardson, 2003). This mixed methods study sought to identify preservice teachers' beliefs about play in kindergarten, comparing the beliefs of beginning students (preservice students beginning their early childhood studies) with teacher candidates (seniors enrolled in their final full time internship; student teaching). This study explored the following primary and secondary research questions:

Question 1: What differences exist in preservice teachers' beliefs about the role of play in the kindergarten classroom?

A. Is there a difference between beginning students' and teacher candidates' beliefs about play in kindergarten?

B. Is there a difference between beginning students' and teacher candidates' beliefs about play as an appropriate instructional strategy in the kindergarten classroom? Is there a difference between beginning students' and teacher candidates' beliefs about play as an evaluation of kindergarten children's learning?

Question 2: What influences do early childhood preservice teachers identify as having impacted their beliefs about how play contributes to kindergarten children's learning?

Research Design

Tashakkori and Creswell (2007) define mixed methods as "research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study" (p. 4). The researcher chose a mixed methods approach to this study to gain understanding of the general beliefs about play of beginning students and teacher candidates through survey data, and gain rich descriptions and clarifying details through individual interviews. This approach allowed the researcher to triangulate the data and achieve a more in-depth understanding of their beliefs about play (Bloomberg & Volpe, 2012).

This study features a synergistic approach to mixed methods research. A synergistic approach allows the essence of two distinct entities to interact so that the combination is greater than the influence of either individually (Hall & Howard, 2008).

Both quantitative and qualitative data were employed so as to "strike a balance between a design that would provide sufficient structure and direction while remaining flexible enough to respond to the applied real world research environment" (Hall & Howard, 2008, p. 249). By definition, synergistic research represents both qualitative and quantitative approaches equally. The stance of the researcher is key in developing this notion of equal value. It is not necessarily an equal division of methods as is seen in a pragmatic approach, but gives the researcher the opportunity to choose the methods that contribute meaningful data from multiple perspectives (Hall & Howard, 2008).

Research Sample

The research site of this study is a comprehensive, public university in the American southeast. It has an enrollment of more than 30,000 students and is located in the capitol city of the state. The College of Education at this institution enrolls more than 1,200 undergraduates. This study investigated the beliefs of students (preservice teachers) enrolled in the undergraduate early childhood initial licensure degree program.

Purposeful sampling was used to identify research participants, which allowed the researcher to select information-rich cases for study (Patton, 2001). Beginning students were chosen for participation because their beliefs about play may have been formed primarily by their earlier personal experiences with play as a child or interactions they have had, as adults, with young children in a variety of settings, but without exposure to course lectures, professional readings, observations, and field experiences. In contrast, teacher candidates have beliefs about play that may be influenced by their previous experiences, as well as their course lectures, professional readings, observations, and field experiences.

Fowler (2009) suggests, "The keys to good sampling are finding a way to give all (or nearly all) population members the same chance of being selected" to participate in the survey (p. 4). The researcher went to the classrooms of beginning students and teacher candidates to administer the survey. Students at the beginning of their early childhood education coursework (Beginning Students/ BS, $n = 68$) were enrolled in what is typically their first early childhood course (EDEC 201: Inquiry into Early Childhood Education); Teacher Candidates (TC, $n = 62$) were enrolled in their final internship, also known as Student Teaching, (EDEC 492: Internship in Curriculum, Assessment, Teaching, and Professional Roles, EDEC 591: Seminar on Teaching in Early Childhood). According to Fowler (2009), "Generally speaking, when students in classrooms or workers at job settings are asked to complete questionnaires, the rate of response is near 100%" (p. 75). Visiting students in their classes helped to gain as many participants as possible from the preservice teachers at this university.

To solicit appropriate interview participants, the researcher included a question at the end of the survey asking them to indicate their willingness to participate in an interview. Once survey data were collected and analyzed, the researcher used maximum variation sampling of the willing participants to select which participants to interview. Maximum variation sampling is a strategy for purposeful sampling that seeks to identify diverse characteristics or criteria within the sample. This approach provides uniqueness as well as heterogeneity to a small sample (Patton, 2001). Those who provided their information and were selected to participate in the interviews were contacted by the researcher.

Ethical Considerations

This study was granted IRB exempt status. Students were provided letters securing informed consent as the first page of their survey (see Appendix A). Participants in interviews were invited through an email providing another letter of consent (see Appendix A). The students were assured that their confidentiality would be protected throughout, whether in written descriptions of the research or in future presentations of the data. They were also informed that participating in the study did not have any effect on their grade and that their instructors would not know how they responded to survey or interview questions.

Students' time was rewarded through coupons and gift cards. As an incentive for undergraduates to participate in this research, each student who completed the survey received one free sandwich coupon. The researcher administered the surveys in hardcopy during the scheduled class periods and gave students their coupons once they had completed the survey. Participants selected to take part in the interview were given a $40 gift card upon completion of the interview. Reciprocity is a respected practice in research; most frequently, participants who give of their time are rewarded with a monetary gift (Glesne, 2006).

Data Collection

Data collection for this mixed methods study consisted of two phases (surveys and interviews) with two groups of participants (BS and TC) following the timeline in Table 3.1.

Table 3.1

Data Collection Timeline of Early Childhood Preservice Teachers

Participants:	Survey Phase:	Interview Phase:
Beginning Students (BS)	Early Fall 2014	Mid Fall 2014
Teacher Candidates (TC)	End of Fall 2014	After completion of student teaching December 2014

Two methods of data collection were utilized in this study: a paper and pencil survey and individual interviews. Beginning students were administered the researcher-developed Preservice Teacher Beliefs Survey: Early Childhood Beginning Students (PTBS:ECBS) at the beginning of the fall semester, and Teacher Candidates were administered the researcher-developed Preservice Teacher Beliefs Survey: Early Childhood Teacher Candidates (PTBS:ECTC) survey at the end of the same semester. A subset of survey respondents who indicated their willingness to participate in an individual interview were contacted to schedule a convenient time to meet and were interviewed.

Surveys

During the survey phase, the researcher administered a survey designed to gather data regarding preservice teachers' beliefs about play. Survey method was employed to gather pertinent information in a short period of time from the previously described two groups of preservice teachers. According to Fink (2009), "Surveys can be used in deciding policy or in planning and evaluating programs and conducting research when the information you need should come directly from people" (p. 4).

Survey construction. The researcher developed a survey including Likert scales, checklists and open-ended questions designed to generate descriptive quantitative and qualitative data regarding students' current beliefs about play. The survey was short enough to be completed in a few minutes at the end of students' classes yet thorough enough to acquire the necessary information. Preservice teachers completed different versions of the survey (Appendix B) depending on their level in the early childhood program. On the two versions of the survey, the questions regarding participants' beliefs about play were identical. In the case of the beginning students, however, the survey also asked how long they had been an early childhood education major and if they had taken the university course *EDEC 250: Play and Early Learning*.

Based on research conducted by Klugman (1996) suggesting that prior experiences shape beliefs, one checklist item asked preservice teachers to identify which of the listed experiences they had with young children. Another checklist item focused on free play and the ages that participants' believed free play was appropriate. Additional survey items gathered participants' demographic information.

The researcher adapted and incorporated some Likert scale items from a beliefs survey originally conceptualized and developed by Charlesworth, Hart, Burts, and Hernandez (1991) which was revised by Burts, et al., (2004) and used again in 2004 (Kim, 2005). The Likert questions not only allowed the researcher to explore preservice teachers' beliefs about many different aspects of play, but also provided an effective way to analyze and compare the two groups of preservice teachers. The researcher used a four-point scale, which is known as a forced-choice method, because it removes the neutral position, making the analysis of participants' beliefs clearer (Fink, 2009).

The open-ended questions on the survey allowed the researcher to gain more perspective and understanding by allowing the participants to describe their own beliefs about play. These types of questions gave participants the opportunity to clarify or specify their own beliefs that may not have been easily expressed through Likert or checklist survey questions.

Survey administration. The researcher asked the instructors of the introductory and seminar courses for permission to distribute surveys to their students during their class meeting time. The four instructors who agreed received an email explaining the study and requesting a date and time for the researcher to distribute the surveys. A reminder email was sent the day of the class. The researcher then administered the surveys in hardcopy during the four scheduled class periods.

Interviews

During the interview phase, semi-structured the researcher conducted individual interviews to further explore selected students' beliefs regarding their own experiences with play, their beliefs about how children learn, how they learned as a child, and what they believe is appropriate kindergarten pedagogy. Individual interviews were necessary to clarify the researcher's understanding of the participants' answers to the survey's open-ended questions, as well as to allow them to elaborate and provide personal, detailed descriptions of their experiences with and beliefs about play. Individual interviews were preferable to a focus group because, although focus groups can be useful in facilitating discussion, they do not lead to rich descriptive histories of individuals' experiences and beliefs, as does an individual interview (Patton, 2001).

Participant selection. To select students to participate interview phase of the study, the researcher employed maximum variation sampling. This researcher used data gathered in the survey phase of the study to purposefully identify the diverse characteristics and uniqueness found in students' responses in order to contextualize and gain a deeper understanding of the pre-service teachers' beliefs (Creswell & Clark, 2011; Lincoln & Guba, 1985; Patton, 2001).

Interview construction and administration. Nine (4 BS and 5 TC) survey participants who indicated their willingness to participate in an individual interview were contacted to schedule a convenient time to participate in the interview. Table 3.2 provides participant demographics. The time and place of the interview were negotiated, and most were conducted on campus. The researcher offered to meet at locations convenient to the participants and thus two interviews were held in coffee shops, three were held via GotoMeeting.com for seniors who had already left campus, and the remainder were in a quiet office on the university campus.

The interviews in this study were semi-structure (see Appendix C). Some questions were predetermined to triangulate data from the open-ended survey questions, and others emerged from the survey data as the interview unfolded (Bloomberg & Volpe, 2012; Denzin & Lincoln, 2000; Patton, 2001). The interview always began by referring to the open-ended responses to the survey. The researcher read their responses to them aloud and allowed them to confirm, expound upon or clarify anything they desired. The researcher further probed their responses when needed and then proceeded to the semi-structured protocol (Appendix C).

Each interview of approximately 20 to 40 minutes was audiotaped while the researcher also took notes. These interviews were transcribed and coded to determine thematic connections in and among questions and comments to create profiles and themes (Seidman, 2013).

Table 3.2

Demographics of Interviewees

Participant	Sex	Age Range	Ethnicity
Beginning Student #5	Male	18-25	African American
Beginning Student #8	Female	18-25	White
Beginning Student #49	Male	26-30	White
Beginning Student #56	Female	18-25	White
Teacher Candidate #71	Female	31-35	White
Teacher Candidate #75	Female	18-25	African American
Teacher Candidate #89	Female	26-30	White
Teacher Candidate #92	Female	18-25	African American
Teacher Candidate #123	Female	18-25	White

Data Analysis

Analysis of the research data occurred in multiple steps. The first step was to analyze the beginning students' survey data. Data were transcribed to SPSS Statistics software for analysis using descriptive statistics. Next, all open-ended responses were entered into Microsoft Excel, coded into categories, and examined for emerging themes.

The subsequent coding was done by hand. This process was repeated at the end of the semester with the teacher candidates' data. Then, SPSS and SAS software were used to run t-tests to determine if any differences between the two groups of preservice teachers were significant.

The final step of analysis created transcripts of the audio data from individual interviews. Transcripts were sent to the participants for a member check to validate the accuracy of the data. According to Saldana (2013), "qualitative codes are essence-capturing and essential elements of the research story that, when clustered together according to similarity and regularity (pattern), they actively facilitate the development of categories and thus analysis of their connections" (p. 8). The transcripts were coded to determine thematic connections in and among questions and comments to create profiles and themes (Seidman, 2013).

Trustworthiness

This research study sought to provide trustworthy data and analysis by incorporating many safeguards as suggested by Lincoln and Guba (1985). The trustworthiness of the study will be discussed specifically in terms of credibility, transferability, dependability and confirmability.

Credibility

An important issue for any researcher is to provide a research study with results that are credible or plausible. According to Guba (1981), this can be accomplished through peer debriefing, triangulation and member checks. In this study, the researcher implemented a peer-debriefing component by meeting regularly with members of the dissertation committee to address questions as they arose throughout the research study.

In addition, data triangulation was implemented using two methods of data collection: surveys and interviews. Interviewed participants were asked to expand and confirm their answers to the open-ended questions from the survey. The researcher coded their comments, and assigned themes from the survey results or created new themes.

The researcher and one of the committee co-chairs independently coded the responses to the open-ended survey questions. The codes from the surveys were compared and discussed until consensus was reached. This process was repeated using interview transcripts with the other co-chair. Outliers were discussed with both co-chairs until consensus was determined, as these either had no relation to the research questions or necessitated a new code. Thus inter-rater reliability was established (Lincoln & Guba, 1985; Patton, 2001).

Once voice recorded data were transcribed and themes developed, member checks were employed by sending participants the transcriptions of their interviews as well as the researcher-developed themes. Participants were asked to confirm that data were accurate and that the researcher captured their intended meaning. All participants indicated that the applied themes were appropriate for their intended answers.

Transferability

Naturalist researchers view nearly all social/behavioral phenomena as context bound and therefore do not generalize findings across populations (Guba, 1981). Detailed descriptive statements provide readers the opportunity to decide whether the findings could be applied to a similar setting. Descriptive details of the university program, as well as courses the participants were enrolled in at the time, provide context. Another way transferability was addressed was through the use of purposive sampling. The sample was

chosen with the research questions in mind. To select information-rich cases for illuminating the questions, both beginning students and teacher candidates were chosen to participate (Patton, 2001). These choices increased the possibility that the findings of this study could be transferred to similar groups of participants in similar contexts.

Confirmability

Naturalists, according to Guba (1981), "shift away from the concept of investigator objectivity toward the concept of data (and interpretational) confirmability" (p. 87). Confirmability ensures the neutrality of the findings, and is accomplished through triangulation and a confirmability audit. The use of mixed methods helped to establish triangulation of the data. The validity of survey scores was achieved through statistical procedures for internal consistency. Quotes from the qualitative data confirm the statistical results (Creswell & Clark, 2011). Weekly or biweekly meetings with the committee co-chairs provided an audit of the study. Discussions were held, as mentioned previously for dependability, and continued regarding data support for each interpretation. All of these methods were used to establish the trustworthiness of this study in an effort to allow the reader to develop confidence in the findings.

Chapter Summary

Data were gathered via mixed-methods from two groups of early childhood preservice teachers through survey and – after purposeful, maximum variation sampling – semi-structured individual interviews. The researcher gathered data from both beginning students and teacher candidates to compare their beliefs, as well as the influences on their beliefs, related to the role of play in the kindergarten classroom. This approach not only allowed the researcher to efficiently gather meaningful data through the implementation

of a survey, but to also gain rich descriptions of play beliefs and experiences through the use of interviews. The findings of this study are discussed in Chapter Four.

CHAPTER FOUR

Results

This study was conducted at a large, comprehensive, public university located in the southeastern United States. The purpose of this research was to gain insight into preservice teachers' beliefs about play in kindergarten. The study examined the beliefs of two groups of preservice teachers, one at the beginning of their early childhood education program (BS, beginning students) and one at the end (TC, teacher candidates), in an effort to better understand the differences between their beliefs about play. This study was designed to answer these three primary research questions:

Question 1: What differences exist in preservice teachers' beliefs about the role of play in the kindergarten classroom?

A. Is there a difference between beginning students' and teacher candidates' beliefs about play in kindergarten?

B. Is there a difference between beginning students' and teacher candidates' beliefs about play as an appropriate instructional strategy in the kindergarten classroom?

C. Is there a difference between beginning students' and teacher candidates' beliefs about play as an evaluation of kindergarten children's learning?

Question 2: What influences do early childhood preservice teachers identify as having impacted their beliefs about how play contributes to kindergarten children's learning?

These questions served as an organizational framework for presenting and interpreting the data generated by students' responses to the paper and pencil PTBS:ECBS and PTBS: ECTC, which included Likert-scale and multiple-choice questions as well as an individual semi-structured interview. Quantitative and qualitative analyses were combined to provide an aggregate analysis and interpretation of the data.

Quantitative Data Findings

The quantitative data analysis included the review of students' responses on the survey. To determine if any significant differences existed between the two groups' responses to the Likert-type scale items, SPSS and SAS software packages were used to compute independent *t*-tests and to calculate *p* values ($p < 0.05$).

Both groups of students completed the same surveys with one exception; the BS survey asked students to indicate how long they had been early childhood majors and if they had taken a course on play theory (since TC were to have completed all required coursework including a course on play theory before student teaching). For this reason, the numbering on the two surveys was slightly different. In the following discussion, survey questions are referred to by indicating the question's number on each survey (e.g., "BS6/TC4" refers to the beginning students' survey question #6, which is the same as the teacher candidates' survey question #4. In addition, all Likert scale items used the same four-point scale: *1 = Not Important, 2 = Slightly important, 3 = Important, 4 = Very Important.*

Research Question 1: What differences exist in preservice teachers' beliefs about the role of play in the kindergarten classroom?

Survey question BS6/TC4 asked preservice teachers to indicate how important they believed play to be the kindergarten classroom. On the four-point items scale, students rated their beliefs about the importance of play from *1 = Not Important* to *4 = Very Important.* Table 4.1 reports the frequencies of students' responses to this question.

Table 4.1

Frequency of Participants' Responses to Survey Question BS6/TC4: How important is play in the kindergarten classroom?

	Beginning Students (n = 68)	Teacher Candidates (n = 62)
Not Important	0	0
Slightly Important	0	0
Important	10 (14.7%)	4 (6.5%)
Very Important	58 (85.3%)	58 (93.6%)

The difference between the BS (M = 3.85, SD = .36) and TC (M = 3.94, SD = .25) ratings of beliefs about the importance of play was not significant ($p > .05$). Both groups of preservice teachers were in agreement. BS and TC believed play was *important* or *very important* in the kindergarten classroom.

Answers to the three secondary questions to Research Question 1 provided additional information that elaborated on preservice teachers' beliefs about the importance of play in the kindergarten classroom.

Research Question 1A: Is there a difference between beginning students' and teacher candidates' beliefs about play in kindergarten?

The three survey items that addressed this secondary question were:

- Question BS7/TC5: *It is ____for kindergarten teachers to provide a variety of materials to support children's play*
- Question BS8/TC6: *It is ___for kindergarten teachers to plan extended periods of time for children to play.*
- Question BS11/TC9: *It is ___ that kindergarten children have extended periods of outdoor play during the school day.*

Responses to each of the survey question results are explored below.

Materials kindergarten teachers provide to support play. Survey question BS7/TC5 asked preservice teachers to rate how important it is for kindergarten teachers to provide a variety of materials to support children's play using the four-point Likert scale. The frequencies of preservice teachers' responses are represented in Table 4.2.

Table 4.2

Frequency of Participants' Responses to Survey Question BS7/TC5: It is ___for kindergarten teachers to provide a variety of materials to support children's play.

	Beginning Students (n = 68)	Teacher Candidates (n = 62)
Not Important	0	0
Slightly Important	0	0
Important	13 (19.1%)	10 (16.1%)
Very Important	55 (80.9%)	52 (83.9%)

The data show that BS and TC responses were similar regarding kindergarten teachers' need to provide a variety of materials to support play. Both groups indicated that they believed it was *important* or *very important* for kindergarten teachers to provide a variety of materials to support children's play. Given the near-identical mean scores

between the BS (M = 3.81, SD = 0.40) and the TC (M = 3.84, SD = 0.25), a t-test resulted in no significant differences between the groups ($p > .05$).

Extended play time. Survey question BS8/TC6 asked preservice teachers to indicate if they believed that it was important for kindergarten teachers to plan extended periods of time for children to play in school using the four-point Likert scale. Table 4.3 reports the frequencies of students' responses to this question.

Table 4.3

Frequency of Participants' Responses to Survey Question BS8/TC6: It is ___for kindergarten teachers to plan extended periods of time for children to play.

	Beginning Students (n = 68)	Teacher Candidates (n = 62)
Not Important	1 (1.5%)	0
Slightly Important	4 (5.9%)	2 (3.4%)
Important	32 (47.1%)	25 (42.4%)
Very Important	31 (45.6%)	32 (54.2%)

The difference between the BS (M = 3.37, SD = .68) and TC (M = 3.51, SD = .57) ratings of beliefs about the importance of teachers planning extended periods for children to play was not significant ($p > .05$). The BS and the TC students agreed that it was important that teachers plan extended periods for children to play.

Outdoor play. In survey question BS11/TC9, preservice teachers were asked to rate their beliefs regarding the importance of providing extended periods of outdoor play during the kindergarten school day. Table 4.4 reports the frequencies of students' responses to this question.

Table 4.4

Frequency of Participants' Responses to Survey Question BS11/TC9: It is ___ that kindergarten children have extended periods of outdoor play during the school day.

	Beginning Students (n = 68)	Teacher Candidates (n = 62)
Not Important	0	0
Slightly Important	7 (10.3%)	4 (6.5%)
Important	27 (39.7%)	23 (37.1%)
Very Important	34 (50.0%)	35 (56.5%)

Both groups of preservice teachers agreed that they believed that teachers should provide kindergarten children extended periods of outdoor play during their school day. BS ratings (M = 3.40, SD = .67) were only slightly lower than TC ratings (M = 3.50, SD = .62).

Research Question 1A explored preservice teachers' beliefs about appropriate ways for kindergarten teachers to support play. There were no significant differences between the BS and TC reported beliefs about the importance of materials used to support play, the importance of planning extended periods of play, or the importance of extended periods of outdoor play.

Research Question 1B*: *Is there a difference between beginning students' and teacher candidates' beliefs about appropriate instructional strategies in the kindergarten classroom?

The following survey item provided information regarding preservice teachers' beliefs about play as an appropriate instructional strategy for different age groups:

- Question BS5/TC3: *Free play is defined as offering children the opportunity to choose where they play, what they play, and with whom they play. Using this*

definition, free play is an appropriate method of instruction for what grade(s) or age groups?

Students indicated their beliefs by responding to a checklist of age ranges beginning with *Birth-to-1 year* and ending with *3rd grade*, as well as an *All ages* category.

Additionally, the following two survey questions provided information regarding preservice teachers' beliefs about play as an appropriate instructional strategy in the kindergarten classroom:

- Question BS9/TC7: *It is _____for kindergarten children to play more than they complete activities such as workbooks, worksheets, and similar activities during the school day.*
- Question BS10/TC8*: It is _____for the kindergarten children to complete activities such as workbooks, worksheets, & similar activities more than play during the school day.*

Appropriateness of free play as an instructional method by ages and grades.

Preservice teachers were also asked if free play was an appropriate method of instruction for different ages/grades. For survey question BS5/TC3, there were not enough data points in each age range group comparisons, therefore a *t*-test was not appropriate. However, the frequencies were revealing, and are displayed in Figure 4.1, below.

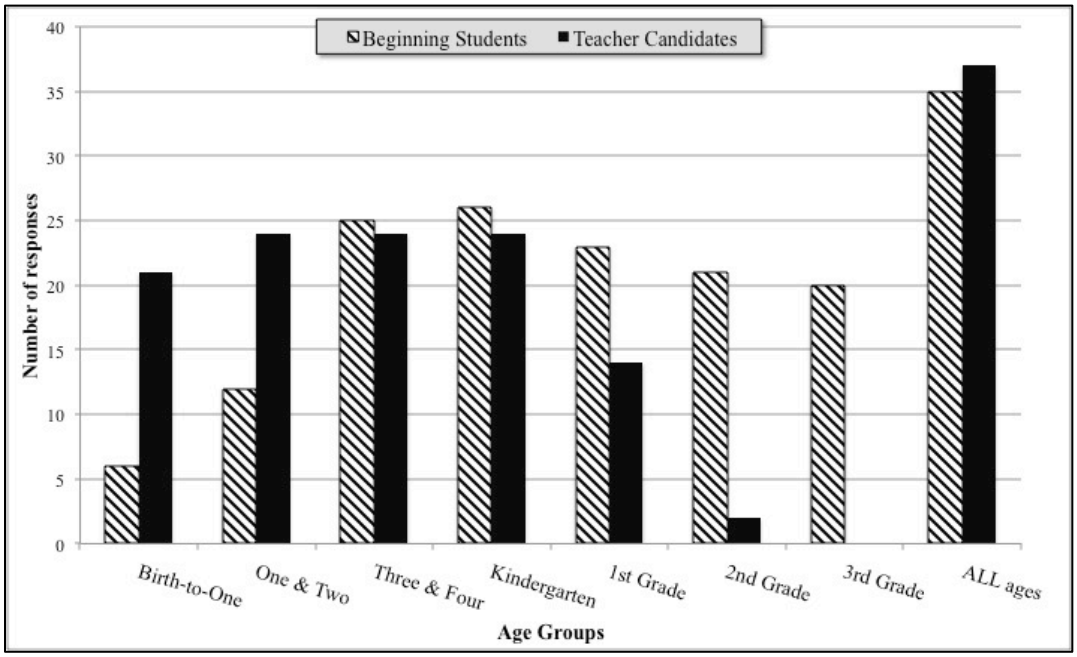

Figure 4.1. Frequency of Participants' Responses to Survey Question BS5/TC3: Free play is an appropriate method of instruction for what grade(s) or age groups?

It is noteworthy that over half of the TC (54.4%), as well as just over half of the BS (51.5%), believed that free play was an appropriate strategy of instruction for *all ages.*

The remaining BS (48.5%) showed a gradual increase in their level of support for free play as an instructional strategy from birth (8.8%) through kindergarten (38.2%). Then there was a gradual decrease from kindergarten to third grade (29.4%). The remaining TC (45.6%) indicated a stronger sense of the appropriateness of free play as a method of instruction in the early years through kindergarten than did the remaining BS. Remaining TC responses supporting play as an instructional strategy for children ages birth-to-one (30.9%) and for children ages one and two, three and four, and kindergarten were consistent at 35.3%. For TCs, there was a notable decline in their beliefs about the appropriateness of free play following kindergarten, as only two TC responses indicated

that they believed free play experiences should be used as a method of instruction in second grade, and no TC indicated that they believed free play should be used as an instructional strategy in third grade. In contrast, of the remaining BS, 30.9% rated free play as appropriate for second graders and 29.4% for third graders. While these frequencies provide a glimpse into the differences between preservice teachers' beliefs regarding the appropriateness of in-school play during the early childhood ages, the finding that is most relevant to this research – contrasting preservice teachers' beliefs about the role of play in kindergarten – reveals that the remaining BS (38.2%) and TC (35.3%) have similar beliefs about free play as a method during this year of instruction.

Appropriateness of time devoted to play versus paper and pencil activities. On the same four-point Likert scale, Question BS9/TC7 asked students to rate their beliefs about the importance of providing kindergarten children opportunities to play rather than require them to complete workbooks, worksheets, and similar activities. The frequency of preservice teachers' responses to this question can be found in Table 4.5.

Table 4.5

Frequency of Participants' Responses to Survey Question BS9/TC7: It is _____for kindergarten children to play more than they complete activities such as workbooks, worksheets, & similar activities during the school day.

	Beginning Students ($N = 68$)	Teacher Candidates ($N = 62$)
Not Important	8 (11.8%)	2 (3.3%)
Slightly Important	28 (41.2%)	15 (24.6%)
Important	21 (30.9%)	23 (37.7%)
Very Important	11 (16.2%)	21 (34.4%)

The BS responses indicated that most believed that it is *slightly important* or *important* for kindergarten children to play more than it is that they complete workbooks, worksheets, or similar activities ($M = 2.51$, $SD = .88$). The TC responses showed that most believed it is *important* to offer children time to play instead of requiring them to complete workbooks, worksheets, and do similar activities ($M = 3.03$, $SD = .86$).

The difference between the BS and TC ratings was substantial and significant ($p < .001$) and contrasted the two groups' reported beliefs in the importantance for kindergarten children to play rather than complete workbooks, worksheets, or similar activities.

Question BS10/TC8 addressed the same issue as BS9/TC7, but asked the question in reverse. It asked if it is more important for kindergarten children to complete workbooks, worksheets, and similar activities than it is that they play during the school day. The frequency of preservice teachers' responses can be found in Table 4.6.

Table 4.6

Frequency of Participants' Responses to Survey Question BS10/TC8: It is _____for the kindergarten children to complete activities such as workbooks, worksheets, & similar activities more than play during the school day.

	Beginning Students ($N = 68$)	Teacher Candidates ($N = 62$)
Not Important	6 (8.8%)	28 (45.2%)
Slightly Important	36 (52.9%)	26 (41.9%)
Important	19 (27.9%)	7 (11.3%)
Very Important	7 (10.3%)	1 (1.6%)

Most BS responded that it was *slightly important* or *important* for kindergarteners to complete workbooks, worksheets, and do similar activities during the school day ($M =$

2.40, *SD* = .79), whereas, the TC responses to this question (*M* = 1.69, *SD* = .74) were consistent with the beliefs they expressed when answering survey question BS9/TC7. That is to say, most TC believed it was *not important* or *slightly important* for kindergarteners to complete workbooks, worksheets, or similar activities rather than play during the school day.

The results of independent t-tests for BS9/TC7 ($p < .01$) and BS10/TC8 ($p < .001$) reflected the significant differences between the two groups of preservice teachers' beliefs about the importance of kindergarten children completing workbooks, worksheets, and doing similar activities than playing during the school day.

Survey questions BS9/TC7 and BS10/TC8 are purposefully contradictory to illustrate consistency in participants' beliefs regarding the appropriateness of play versus pencil-and-paper activities such as worksheets and workbooks. The BS answers to these contradictory questions conflicted each other, suggesting they had no strongly held beliefs about methods of instruction, but may lean slightly toward prioritizing workbooks, worksheets, and similar tasks. The BS appeared to be struggling with answering the question of whether students should spend more time engaged in play than in completing workbooks, worksheets, and doing similar activities. TC responses illustrated their beliefs that play is more important in kindergarten than are workbooks, worksheets, and similar activities.

In summary, Research Question 1B examined the difference between preservice teachers' beliefs about play as an appropriate instructional strategy in the kindergarten classroom. BS and TC believed that free play is an appropriate instructional strategy for kindergarten classrooms. Their responses differed on whether more time should be spent

on play or workbooks, worksheets, and similar tasks in the kindergarten classroom. The BS answers were clustered in the middle for the contradictory survey questions suggesting they were not certain which strategy should be used more in a kindergarten classroom. The TC, however, indicated their beliefs that play should be integral to the instructional strategy used more in the kindergarten classroom.

Research Question 1C: Is there a difference between beginning students' and teacher candidates' beliefs about play as an evaluation of kindergarten children's learning?

Survey question BS12/TC10 had six parts. It asked, in Likert scale format, if a kindergarten teacher observes children's play, can s/he learn about a child's (1) motor development, (2) social and emotional development, (3) math knowledge and skills, (4) science knowledge and skills, (5) language and literacy knowledge and skills, and (6) music development. Participants responded to the Likert questions with *1 = no, 2 = probably no, 3 = probably yes,* or *4 = yes*. Table 4.7 provides the frequencies, percentages and significant difference values of both groups of preservice teachers for each of these areas of development in kindergarten.

Table 4.7

Frequency of Participants' Responses to Survey Question BS12/TC10: If a kindergarten teacher observes children's play, s/he can learn about a child's:

Motor development		
	Beginning Students	Teacher Candidates
No	0	0
Probably Not	2 (2.9%)	0
Probably Yes	10 (14.7%)	0
Yes	56 (82.4%)	62 (100%)
Social and emotional development		
	Beginning Students	Teacher Candidates
No	0	0
Probably No	1 (1.5%)	0
Probably Yes	11 (16.2%)	1 (1.6%)
Yes	56 (82.4%)	61 (98.4%)
Math knowledge & skills		
	Beginning Students	Teacher Candidates
No	2 (2.9%)	1 (1.6%)
Probably No	21 (30.9%)	3 (4.8%)
Probably Yes	29 (42.6%)	23 (37.1%)
Yes	16 (23.5%)	35 (56.5%)
Science knowledge & skills		
	Beginning Students	Teacher Candidates
No	1 (1.5%)	0
Probably No	23 (33.8%)	3 (4.84%)
Probably Yes	27 (39.7%)	19 (30.7%)
Yes	17 (25.0%)	40 (64.5%)
Language & literature knowledge & skills		
	Beginning Students	Teacher Candidates
No	0	0
Probably No	7 (10.3%)	0
Probably Yes	31 (45.6%)	9 (14.5%)
Yes	30 (44.1%)	53 (85.5%)
Music development		
	Beginning Students	Teacher Candidates
No	3 (4.4%)	1 (1.5%)
Probably No	19 (27.9%)	7 (10.3%)
Probably Yes	33 (48.5%)	24 (35.3%)
Yes	13 (19.1%)	36 (52.9%)

Overall, BS and TC responses to this question were significantly different. Table 4.8 reports the mean scores for this question and provides the level of significance for each area.

Table 4.8

Mean Scores for Survey Question BS12/TC10: If a kindergarten teacher observes children's play, s/he can learn about a child's:

	Beginning Students (n = 68)	Teacher Candidates (n = 62)	t-test Difference
Motor development	3.79	4.00	**
Social & emotional development	3.79	3.98	**
Math knowledge & skills	2.82	3.47	
Science knowledge & skills	2.88	3.60	**
Lang. & lit. knowledge & skills	3.34	3.85	**
Music development	2.82	3.41	**

* $p < .05$, ** $p < .01$

The only area of development that did not show a significant difference between the two groups of preservice teachers' beliefs about using play as an evaluation tool was in the area of math knowledge and skills, with 66.1% of BS responding *yes* or *probably yes* that teachers can observe play and learn about math skills in kindergarten and 93.6% of TC. Both groups indicated they believe play can help evaluate kindergarten children's math knowledge and skills. The difference in means between the two groups for math knowledge and skills was not significant (see Table 4.8).

The TC were more likely than the BS to believe that a teacher can evaluate children's learning and development through observing their play in the areas of motor development, social and emotional development, science knowledge and skills, language and literacy knowledge and skills, and music development, but not in math knowledge and skills.

Research Question 2: What influences do early childhood preservice teachers identify as having impacted their beliefs about how play contributes to kindergarten children's learning?

Research Question 2 sought to identify factors that preservice teachers indicated have impacted their beliefs about how play contributes to kindergarten children's learning, assessment, and time and materials that are provided to kindergarteners. This question is important because research indicates that past personal experiences shape current perspectives on play (Klugman, 1996). These factors are difficult to measure in a quick survey such as the *PTBS* used in this study. Preservice teachers need to spend time in reflection to accurately identify factors they believe have impacted their current beliefs. To create a starting point and gain additional insights, the following survey question was included:

- Question BS4/TC2: *What experiences have you had working with young children?*

Students identified their own personal experiences from a list of potential types of experiences with young children. The list included: afterschool care, babysitting, childcare center teacher/caregiver, children's church, nanny, parent, Sunday school teacher, teacher cadet in high school, and university field placements. The frequencies of preservice teachers' responses are reported in Table 4.9.

Table 4.9

Frequency of Participants' Responses to Survey Question BS4/TC2: What experiences have you had working with young children?

	Beginning Students (n = 67*)	Teacher Candidates (n = 62)
Afterschool Care	28 (41.8%)	34 (54.8%)
Babysitting	64 (95.5%)	58 (93.5%)
Childcare Center Teacher/caregiver	23 (34.3%)	31 (50.0%)
Children's Church	32 (47.7%)	32 (51.6%)
Nanny	27 (40.3%)	31 (50.0%)
Parent	1 (1.5%)	3 (4.8%)
Sunday School teacher	20 (29.9%)	18 (29.0%)
Teacher Cadet in high school	30 (44.8%)	29 (46.8%)
USC Field Placements	0 (0.0%)	62 (100%)

* One participant did not answer this question

Both BS and TC groups had a similar pattern of experiences. The most frequently reported experiences for both groups were babysitting, afterschool care, and children's church.

Quantitative Data Summary

The quantitative data collected through the survey provided illustrative context for each research question. Research Question 1 included three secondary questions to determine preservice teachers' beliefs about the role of play in the kindergarten classroom.

Question 1A was addressed through three questions on the survey. Analyses of responses to questions (BS7/TC5, BS8/TC6 and BS11/TC9) indicated no significant differences between beliefs of the groups of preservice teachers. All surveyed students believed that teachers should

- provide a variety of materials to support play;
- plan extended periods of time for play; and

- have extended periods of outdoor play throughout the kindergarten day.

Question 1B investigated whether there were differences of beliefs about appropriate instructional strategies in the kindergarten classroom. Survey question BS5/TC3 addressed question 1B by asking if the preservice teachers believed free play was an appropriate method of instruction for particular ages/grades. There were not enough data points to run a statistical analysis, but a comparison of frequencies indicated that a slight difference in beliefs might exist even though approximately half of BS (51.5%) and TC (54.4%) believed that play was an appropriate instructional method for *all* children. Counterbalanced Likert survey questions BS9/TC7 and BS10/TC8 were designed to determine which kind of instructional strategies (comparing play versus paper-and-pencil activities) that preservice teachers believed to be most important in a kindergarten classroom. One question – regarding whether kindergarten children should play more or have more time devoted to workbooks, worksheets and similar activities – did elicit significantly different responses in the two groups of preservice teachers' answers. The BS data reflected contradictory responses, suggesting some uncertainty, whereas the TC responses clearly indicated a belief that kindergarten children should play more than complete written activities.

Question 1C provided the researcher with several opportunities for comparing the groups' beliefs about how to best evaluate kindergarten children's learning. The only domain for which the BS and TC groups agreed that play could be used to evaluate and learn about a child's knowledge and skills was in mathematics. However, in the areas of motor development, social and emotional development, science knowledge and skills,

language and literacy knowledge and skills, and music development, the mean TC rating was significantly higher than for the BS.

Question 2 asked what influences preservice teachers identified as having impacted their beliefs about how play contributes to kindergarten children's learning. The survey asked students to identify their past experiences with young children in hopes that their answers would provide some context for their beliefs as evidenced by Klugman's (1996) study. For both groups, the most frequently reported experiences were (1) babysitting, (2) afterschool care and (3) children's church.

These quantitative data helped to illustrate that the preservice teachers had similar experiences with young children, but that those differences in beliefs were apparent and need to be evaluated more closely. The qualitative data will add voices and examples to the quantitative data, as well as provide more clarity.

Qualitative Analysis

Qualitative analyses were used in this research study to support and further inform the research questions by incorporating participants' own words. The researcher analyzed the open-ended questions from the PTBS then conducted semi-structured individual interviews with purposefully selected students who agreed to participate. The researcher was able to interview four BS and five TC. The interviews were arranged at the participants' convenience. Of the nine interviews, two were conducted at coffee shops, three over the Internet via GotoMeeting.com and the others in a university office. All interviews were transcribed and coded. To achieve inter-rater reliability, the researcher's codes for answers to the open-ended questions were compared with those of one member of the doctoral committee, and the codes from the interviews were compared with the

codes applied by an additional member of the doctoral committee until consensus for both datasets was reached. Outliers were discussed with both committee members until consensus was reached: in some instances new codes were developed to incorporate these passages, and in others the researcher determined that the students' responses showed no appreciation for the importance of play and these responses were coded as such.

In this section, the researcher will report the thematic codes that emerged from this study's collected qualitative data. Interpretations of these results will be addressed in Chapter Five. Participant data are identified throughout the data analysis by using parentheses indicating where the data are from (Survey or Interview), followed by participant group (BS or TC), and the participant number. For example, data from an interview of teacher candidate, participant number five is reported as such: (Interview, TC #5). Results of analyses are reported with regard to each main research question.

Research Question 1: What differences exist in preservice teachers' beliefs about the role of play in the kindergarten classroom?

Research Question 1 sought to determine preservice teachers' beliefs about the role of play in the kindergarten classroom. This question was addressed in the open-ended survey question: *What is the role of play in a kindergarten classroom*? This question was addressed again in individual interviews to allow participants to clarify or expand upon their answer to this survey question. The interview protocol can be found in Appendix C. With regard to Research Question 1, the following themes emerged for preservice teachers' beliefs:

Theme 1- Learning

- Children engage in free play to learn.

- Teacher-initiated/guided play is a tool for learning.
- Play helps students engage with peers and/or with learning.
- Play allows children to explore (BS only).
- Play fosters imagination and creativity (TC only).
- Play allows children to make their own choices in learning (TC only).

Theme 2- Development

- Play provides opportunities for socio-emotional development.
- Play provides opportunities for motor development.
- Play is a useful outlet to help children meet their need for movement.
- Play provides the opportunity for children to interact with one another

Theme 3- Evaluation

- Observation and anecdotal notes are the best ways to evaluate kindergarten children's learning.
- Interviews are the best way to evaluate kindergarten children's learning.
- Tests and written worksheets are the best ways to evaluate kindergarten children's learning
- Assessment is the best way to evaluate kindergarten children's learning (BS only).
- Checklists are the best way to evaluate kindergarten children's learning (TC only).
- Hands-on Activities are the best way to evaluate kindergarten children's learning (TC only).

Theme 4 – Balance

Each of the themes was supported with the qualitative data collected from BS and TC in this study. The themes were supported through participants' interview responses to the question "What is the role of play in a kindergarten classroom?" and are detailed in this section.

Theme 1: Learning.

Children engage in free play to learn. This theme was applied to responses that refer to the benefits of child-directed, free-choice play in kindergarten. Nearly half of BS and TC responses to this open-ended question were coded as being correlated to this theme. Interview participants stated additional comments related to this theme such as:

> *[Kindergarteners] like free play, if you watch them on the playground, they have complete control of the choices that they make.* (Interview, BS #5)

> *I'd rather it be focused too much on play than be focused too much on deskwork, because I think it's just inherent for children to explore and make their own ideas about the world through play.* (Interview, TC #89)

These statements are representative of the responses of many preservice teachers, reflecting their beliefs that children should engage in free play to learn.

Teacher initiated/guided play is a tool for learning. Another approach to play in kindergarten is adult-initiated and teacher-guided, designed to address specific learning goals (Hirsh-Pasek, et al., 2009). Some BS and slightly more of TC discussed play using the terms *guided play, adult-initiated*, *or teacher-initiated* in their responses. Interview participants stated additional comments related to this theme:

> *Whatever standards we were focusing on for that week, I would go find things to put in the center that addresses those standards.* (Interview, TC #89*)*

> *Not too much adult intervention but also not just, "here you go do everything" because I think that at recess there's that complete freedom, but in the classroom*

you can really foster and tailor it to how you want by providing the materials that you want. (Interview, TC #123)

Play helps students engage with peers and/or with learning. The researcher noted several words that participants in both groups used repeatedly in discussing the role of play. Most notably, the word "engage*"* was used in two different ways. Some preservice teachers used it to describe social interaction while others used it to describe children's connections with learning. For example:

I think it's good to show appreciation for play, to keep them ***engaged****, entertained, and to- if you can bring a little bit of joy to their day, I think it might have an impact on how they feel about school.* (Interview, BS #49)

They learn in various ways while ***engaging*** *in socio-dramatic play*. (Interview, TC #92)

Play allows children to explore. A few of the BS used the word "explore" to describe the *role of play* in kindergarten in their survey responses. The idea that play allows children to explore was used in regards to their environment and things of interest to the children. One participant's comment reflected this concept:

I think it's just inherent for children to ***explore*** *and make their own concepts, and I guess that constructivist idea, of you're constructing your own ideas about the world through play.* (Interview, TC #89)

Play fosters imagination and creativity. Themes addressed by TC survey responses, but not by BS, focus on the *imagination* and/or *creativity* in play and allowing children to make their own choices in learning. TC responses illustrated that this group of students believe that play fosters imagination and creativity in kindergarteners. One participant made the following comment reflecting this theme:

I do believe some things can be real and made out for them, but I love to have just objects in the classroom that they have to make it something. Like they might just have a block that they turn into a spaceship. You know, something that they can

*use their own **creativity** as well as add to it because that also helps them in their learning process, being able to think outside the box*. (Interview, TC #92)

Play allows children to make their own choices in learning. Teacher candidates were also the only group that stated, in their survey responses to the question "What is the role of play in a kindergarten classroom?", their belief that play provides children the autonomy to make their own choices. During the interview, one TC stated:

*In the beginning of those [play experiences], it can be anything I want it to be, and I don't think kids get that enough, they have their own **autonomy**. That's something I'm big on is self-learning, self-direction, self-control*. (Interview, BS #49)

Theme 2: Development.

Play provides opportunities for socio-emotional development. In response to the open-ended survey question, "What is the role of play in a kindergarten classroom?", preservice teachers in both groups indicated that play provides kindergarteners opportunities for socio-emotional development. Some BS and slightly more TC discussed the importance of the opportunities play provides for social interaction and expressed their appreciation for how those experiences in kindergarten promote children's development. Two participant statements that illustrate this concept well are:

I do remember centers. I remember like kitchen and home living being really fun. I also remember that kind of being the time where (which I love now when I look at kids) . . . when typical conversation takes place where you're not having a teacher over you all the time so it's like you're talking to a child and figuring it out between yourselves, so you have that conversation that should be cultivated. And without having an adult there it kind of opens up a door to – you have to negotiate your own conversation. (Interview, TC #89)

I think that when children are playing at that age, at a stage when they communicate about everything, they need approval from the other children in the room, and just them- even like two girls playing with dolls, they'll talk about what they're doing, which helps their own communication and social skills. (Interview, BS #8)

Play provides opportunities for motor development. Some of these preservice teachers described play as an opportunity for motor development. A few of the BS and TC acknowledged play as a means for motor development in kindergarten. For example:

> *They are learning and they don't even realize it and they're realizing how to use the different body parts. Like how to pick up things, that's when I mentioned fine and gross motor skills. Using their body, just learning how to do that. And, I don't know, play is just fun*. (Interview, BS #5)

> *Children need exercise during play and the educator has the opportunity to observe and take anecdotal notes on behavior as well as development while they're engaged in play.* (Interview, TC #92)

Play is a useful outlet to help children meet their need for movement. Mostly BS mentioned play as a means for children to release excess energy, which is exemplified by this BS statement:

> *Children have to have that time to get their energy out. I know not all kids have ADHD but they all need to run, to be active, to go full drive. And you know it helps keep them healthier too when they can play*. (Interview, BS #49)

Play provides the opportunity for children to "interact" with one another. Another word both groups of preservice teachers used to describe the *role of play* is "interact". A few BS and more TC used the word "interact" in their survey responses to describe how play allows social communication and connection between other children. One interview participant stated additional comments related to this theme:

> *We have just read a lot of articles and done a lot of classwork explaining about how important play is, just even outside of the classroom, it helps them learn every single day. And just socializing- because they're* ***interacting*** *with the other kids in the classroom*. (Interview, BS #5)

Theme 3: Evaluation.

Observation and anecdotal notes are the best ways to evaluate kindergarten children's learning. More than half of both BS and TC believed that observation and anecdotal notes are the best ways to evaluate kindergarten children's learning. These comments are two such representative statements:

> *Observation is tremendous. I don't think you can observe too much*. (Interview, BS #49)

> *I think a lot of teachers- maybe- they underestimate play time too. Because if you just sit back- I mean not even talk to them, just watch them play- you can learn so much about where they are cognitively, socially, and I think a lot of teachers skip that part*. (Interview, TC #71)

Interviews are the best way to evaluate kindergarten children's learning. Both preservice teacher groups suggested interviews as an additional way to evaluate kindergarteners. Of the open-ended survey data, some BS and TC agreed that interviews are an appropriate assessment strategy in kindergarten. For example:

> *Or even asking questions- I think a simple interview can tell you more about- because I love the fact that if you give an interview or if you watch kids play, you're not giving this closed question. It's an open-ended thing where they can take it wherever they want, and then you realize, "Oh wow, they knew way more about that concept than I ever would have guessed"*. (Interview, TC #89)

Tests and written worksheets are the best ways to evaluate kindergarten children's learning. Some BS but only a few TC thought assessments by tests and written worksheets were appropriate for evaluating kindergarteners:

> *Just not exactly reading [worksheets], but ones that would be explain, say, having to color in all things that are red, color them in red, so they would have to color an apple or any other red item or just like recognition of things they see in their lives. Not reading, but- just objects and types of people. Even something as simple as drawing their family and just acknowledging things in their own lives.* (Interview, BS #8)

Assessment is the best way to evaluate kindergarten children's learning. In the open-ended survey data, some BS participants who used the word "assessment" to describe how you should evaluate in kindergarten provided no further clarification of what they meant. However, the researcher was able to explore their responses during the interviews. Those participants elaborated upon and provided explanations for the kinds of evaluations they would use in a kindergarten classroom.

Checklists are the best way to evaluate kindergarten children's learning. The teacher candidates added two more suggestions to how evaluation should take place in kindergarten. A few TC mentioned checklists as the best way to evaluate kindergarteners. Some representative examples are:

> *I definitely [believe in] teacher observation and checklists. A checklist method, definitely, versus a worksheet- something that is just going to go way over their head. It needs to be broken down to their level. I feel like you get a better result, also, giving them something to manipulate. Either play or something that's on their level versus a worksheet.* (Interview, TC #92)

> *Definitely using anecdotal records and writing records, just so that you can do a checklist almost to see what they've mastered and what they need help with*. (Interview, TC #75)

Hands-on activities are the best way to evaluate kindergarten children's learning. A few TC discussed hands-on activities as appropriate for kindergarten assessments:

> *Free play. Also with manipulatives. A lot of hands on activities.* (Survey, TC #104)

> *Open-ended questions, interactions with other students, hands-on activity.* (Survey, TC #94)

Theme 4: Balance.

Analysis of the interview transcripts and open-ended survey questions brought to light a recurring notion of balance. It was an underlying current found in the transcripts that understanding how to balance play in the kindergarten classroom was needed. An interview participant expressed the need for balance referring to assessment:

> *I think formative assessments can all be taken from play. So I believe that learning and assessments should be play-based. And, you know if there are some things that you can't—I think there has to be a happy medium, but if you focus too much on. . . I'd rather it be focused too much on play than be focused too much on desk work, because I think it's just inherent for children to explore and make their own concepts, and I guess that constructivist idea of you're constructing your own ideas about the world through play. In some ways it would be more beneficial to be too much play rather than too much desk time.* (Interview, TC #89)

Another interview participant expressed a need for balance in curriculum:

> *What they don't realize is that you can still teach those standards and requirements while incorporating play into the curriculum.* (Interview, BS #5)

In summary of Research Question 1, analysis of preservice teachers' responses to the survey's open-ended questions and interviews revealed these four themes: Learning, Development, Evaluation, and Balance. Multiple secondary themes emerged within these primary themes, many of which offered differing opinions about best practices:

(1) children engage in free play to learn;

(2) teacher-initiated/guided play is a tool for learning;

(3) play helps students "engage" with peers and/or with learning

(4) play allows children to explore (BS only);

(5) play fosters imagination and creativity (TC only);

(6) play allows children to make their own choices in learning (TC only);

(7) play provides the opportunity for socio-emotional development;

(8) play provides opportunities for motor development;

(9) play is a useful outlet to help children meet their need for movement;

(10) play provides children opportunities to "interact" with each other;

(11) observation and anecdotal notes are the best ways to evaluate kindergarten children's learning,

(12) interviews are the best way to evaluate kindergarten children's learning;

(13) tests and written worksheets are the best ways to evaluate kindergarten children's learning;

(14) "assessment" is the best way to evaluate kindergarten children's learning (BS only);

(15) checklists are the best way to evaluate kindergarten children's learning (TC only);

(16) hands-on activities are the best way to evaluate kindergarten children's learning (TC only).

In summary of Research Question 1, interview participants reported believing that play can lead to learning through free and guided play. They believed play provides opportunities for independence and collaboration, as well as structure for children to develop socially, emotionally, and physically. Participants also believed play provides an opportunity for teachers to assess children in a natural environment.

Research Question 2: What influences do early childhood preservice teachers identify as having impacted their beliefs about how play contributes to kindergarten children's learning?

Two main themes emerged from students' responses to the semi-structured interview questions (See Appendix C) that led the researcher to create secondary themes from these discussions:

Theme 1 – A variety of childhood play experiences shaped beliefs:

- Large motor/outdoor play
- Make-believe play
- School play

Theme 2 – A variety of university experiences influenced and shaped beliefs:

- Classes, instruction and/or instructors.
- Their own experiences teaching, leading, and/or observing kindergarten age children.

All of the preservice teachers conversed about their own experiences with play as a child at home and at school.

Theme 1: A variety of childhood play experiences shaped beliefs.

Large motor/outdoor play. Many of the interview participants discussed their memories of outdoor play/large motor play. Preservice teachers described their favorite play memories from childhood. Some examples of outdoor play were riding bikes, four square, tag, basketball, swing sets, sprinklers, pools, Sardines[1], and sand and water table play.

[11] Sardines- a hide-and-seek game with multiple seekers who join the hider once they are found therefore ending the game packed in a space like "sardines."

Make-believe play. Make-believe play was another experience that many preservice teachers remembered. They recounted experiences at school in centers but also how they played at home by themselves or with siblings and friends. Some examples of pretend play themes are playing house, super heroes, cops and robbers, and school.

School play. Interview participants also recollected some play experiences in their pre-K and kindergarten classrooms. Many of them remembered having blocks, home living/dramatic play and art area centers in the classroom. All of them expressed their fond memories of school recess. They remembered it as a time to run and release energy as well as to play with friends.

Theme 2: A variety of university experiences influenced and shaped beliefs.

Influenced by classes/instruction/instructors. The participants' university requires a course, *Play and Early Learning*. Some of the BS who participated in this study were enrolled in the class at the time of data collection. The TC had all completed this course. Preservice teachers commented that certain classes or instructors were influential in their beliefs about play.

Influenced by experiences teaching/leading/observing kindergarten children. The other influences on preservice teachers' beliefs that these students identified came from their personal experiences teaching, leading or observing kindergarten age children. Teacher candidates gave examples of these influences. Some of these experiences also led them to identify challenges to play in kindergarten.

In summary of Research Question 2, preservice teachers identified many influences that they believed shaped their beliefs about how play contributes to kindergarten children's learning. These influences were grouped into two themes: A Variety of Childhood Play Experiences and A Variety of University Experiences. Multiple secondary themes expanded these primary themes:

(1) large motor/outdoor play;

(2) make-believe play; and

(3) school play;

(4) influenced by classes;

(5) influenced by instruction and/or instructors;

(6) influenced by their own experiences teaching, leading, and/or observing kindergarten age children.

Qualitative Data Summary

The qualitative data illustrated that preservice students believed that the role of play in kindergarten is for learning, development, and evaluation while they sought to discover the balance it takes to use it effectively.

The influences that preservice teachers identified as contributing to their beliefs about play in kindergarten included their own play experiences, their university classes, as well as their experiences teaching, leading and/or observing kindergarten age children.

Chapter Summary

The quantitative and qualitative findings highlighted many similarities between the BS and TC participants. However, there were a few significant differences as well as subtle differences in beliefs that will be discussed in Chapter Five.

CHAPTER FIVE

Discussion

The purpose of this research was to gain insight into preservice teachers' beliefs about play in kindergarten, and explore differences in beliefs about play between teachers just beginning their education program and those who are completing their degree. The study examined the beliefs of two groups of preservice teachers: one at the beginning of their early childhood education program (beginning students) and one at the end (teacher candidates). This chapter will discuss the findings of this study and their potential implications for early childhood teacher educators, the limitations of this study, as well as suggestions for future research.

Summary of Findings

This study sought to build upon prior studies by Klugman (1996) and Sherwood and Reifel (2010) by comparing beliefs between BS and TC. This focus on BS beliefs and TC beliefs provided information beneficial to teacher educators. The findings were as follows:

(1) Play belongs in kindergarten classrooms

(2) Play has a role in kindergarten

(3) Play is an evaluation tool

(4) Preservice teachers struggle with balancing play and didactic activities

(5) Childhood play experiences shape play beliefs

(6) University experiences shape play beliefs

Play belongs in kindergarten classrooms. As evidenced through their survey responses and individual interviews, both BS and TC preservice teachers in this study believed that play belongs in the kindergarten classroom. Participants' survey responses demonstrated that preservice teachers in this study believed that kindergarten teachers should provide a variety of materials that support children's play, and that kindergarten teachers should provide extended periods of time for children to play both indoors and outdoors during the school day. This belief is supported in scholarly literature stating that children allowed to interact with materials in their environment construct their own knowledge about the world (Piaget, 1948). Playful learning promotes academic gains, (language and literacy, mathematics, and problem solving) as well as social development (Hirsh-Pasek, et al., 2009; Reed, et al., 2012; Singer, et al., 2006). Several researchers discuss the importance of outdoor play to children's development in self-regulation of impulsivity, gross motor development, and social development (Carlson, 2012; Hirsh Pasek, et al., 2009; Rivkin, 2015; Singer, et al., 2006). Survey responses revealed that BS and TC believed that free play is an appropriate method of instruction for kindergarten. This finding is in agreement with Zigler & Bishop- Josef (2006), who say, "Through both forms of play [free play and teacher-directed play], children can learn vocabulary, language skills, concepts, problem solving, perspective taking, representational skills, memory, and creativity (p.22). Open-ended questions and interview questions provided more detailed insights into why and how preservice teachers believe play belongs in the kindergarten classroom. These insights will be discussed in the following sections.

Play has a role in kindergarten. Participants reported their belief that play provides a means for continued development and learning in many areas during

kindergarten. Piaget (1948) and Vygotsky (1978) were among the foundational theorists in early childhood education who linked play to cognitive, social, and emotional development in young children. Preservice teachers in this study provided many examples of the roles play can have in the kindergarten classroom. The two major themes that emerged from their responses to the role of play in the kindergarten classroom are (1) Learning and (2) Development. Several sub-themes emerged for the theme Learning:

(1) children engage in free play to learn;

(2) teacher-initiated/guided play is a tool for learning;

(3) play helps students "engage" with peers and/or with learning;

(4) play allows children to explore (BS only);

(5) play fosters imagination and creativity (TC only); and

(6) play allows children to make their own choices in learning (TC only).

Sub-themes for the theme Development emerged as well:

(1) play provides opportunities for socio-emotional development;

(2) play provides opportunities for motor development;

(3) play is a useful outlet to help children meet their need for movement; and

(4) play provides the opportunity for children to "interact" with one another.

The following responses are representative illustrations of beginning students' beliefs about the role of play in kindergarten:

> *I believe that play has a very important role in the kindergarten classroom. I think that play is essential to the development of a child's motor (fine and gross), social, and even educational skills. Play helps a child to learn.* (Survey, BS #5)

> *Without them playing and interacting with others, children would not learn how to be social or how to handle certain situations.* (Survey, BS #48)

> *It's frustrating that some people will look at kids playing and think that they're just doing nothing, that they're getting nothing out of it; they'd rather see them in a more structured environment. And you know children have to have that time to get their energy out.* (Interview, BS #49)

Beginning students' answers focused on their beliefs that play is important for energy release, motor, and social development. The BS responses confirmed beliefs about the importance of the role of play in kindergarten.

The following teacher candidates' responses exemplify their beliefs about the role of play in kindergarten and give evidence of their more extensive experiences observing children at play:

> *Play allows children to take control of their own learning. They experiment with things that most interest them in ways that are individually beneficial.* (Survey, TC #87)

> *Children explore the world through play. They take knowledge and skills learned in more "traditional" classroom activities and apply them to their play. They need time to try out new things and test ideas, such as physically observing parts of a plant or using manipulatives to prove that 2 and 3 is 5. This cements the concept in their minds. Play also allows for socio emotional development, gross and fine motor development, and development of autonomy.* (Survey, TC #73)

> *I have developed my understanding of play from my experiences working at the Children's Center. They just talk a lot about play, social development, and how you can foster it and make it academic, you can kind of tailor it to whatever you need it to be with out it being so much of a structured environment for young children.* (Interview, TC #123)

Teacher candidates' beliefs about the role of play in the kindergarten classroom clustered around play as a tool for learning as well as development.

Students' responses demonstrated agreement that play provides the opportunity and environment for kindergarten children to develop at a pace that meets their current needs, as well as a solid foundation for their future learning and collaborations. These students' beliefs were congruent with research findings related to play's ability to provide

an environment where children can develop and learn in meaningful and impactful ways (Berk, et al., 2006; Brown, 2009; Zigler & Bishop-Josef, 2006). Vivian Paley (2004), known for her seminal work with kindergarten children, views the role of play as the "work of the child" where children work out and solidify their understanding of new information and the world around them.

Play is an evaluation tool. There are notable differences between the reported beliefs of the BS and TC regarding play as an evaluation tool. Most of the BS believed that play is an effective evaluation tool for kindergarten as did the TC. The survey data indicate that BS were less likely than the TC to believe play was as effective an evaluation tool in kindergarten, except in the area of math knowledge and skills. The differences in BS and TC beliefs were *not* statistically significant. One possible explanation for why the difference in students' views about appropriate strategies for assessing kindergarteners' in this domain was not statistically significant could be that BS use manipulatives and other math games while in school. This outcome speaks to previous research that suggests preservice teachers' memories from past experiences influence their current beliefs and practices (Pajares, 1992; Van Hook, 2002). Teacher candidates have had personal experiences in addition to courses that focus on using manipulatives, block play, sorting, and other playful activities as a means for teaching math as well as for assessing children's knowledge and skills.

Some of the representative responses from the BS regarding the best evaluation or assessment tools in kindergarten are below:

> *The best way to evaluate their development is by watching them play.* (Survey, BS #2)

> *I believe the best way to evaluate a child's development is by observing and asking them questions.* (Survey, BS #58)
>
> *A teacher can learn a lot about a child's development through play they will see how the child is developing physically and socially. Also, they may see how a child develops cognitively depending on what the child is playing with.* (Survey, BS #16)
>
> *Observation and casual testing are the best evaluations. Making children take a written test would be very hard but sitting with each one individually and verbally quizzing and observing them is effective.* (Survey, BS #56)

Most BS believe that evaluation can occur through observation of children's play, but a few maintain their belief that traditional testing is the best means of evaluation.

Teacher candidates' responses gave evidence of learning about observational assessment strategies with the many suggestions and specifics they mention in their responses:

> *The best way that a teacher can evaluate children's development and learning in kindergarten is to simply watch. A teacher needs to notice social interactions and other skills' development uninterrupted.* (Survey, TC #121)
>
> *Kid-watching, rubrics and checklists.* (Survey, TC #90)
>
> *Anecdotal records, checklists-frequent, interviews.* (Survey, TC #80)
>
> *Free play. Also with manipulatives. A lot of hands-on activities.* (Survey, TC #104)

Most TC believe that evaluation can occur during play, and provided examples of several assessment strategies in their responses.

Beginning students in this study asserted that evaluation could occur while observing play during mathematics. Teacher candidates were in agreement, but reported that by observing play, kindergarten teachers could also learn about a child's motor development, social and emotional development, music development, science knowledge and skills, and language and literacy knowledge and skills. More BS than TC believed

that testing is the appropriate form of evaluation in kindergarten. Teacher candidates expressed a deeper understanding of evaluation and assessment practices through responses to open-ended questions. This could be a result of their experiences in coursework, practicums and internships.

Teacher candidates in this study described evaluation in play that aligns with other early childhood scholars. Christie and Roskos (2006) explained, "Play documentation can also serve as an assessment tool. For example, samples of play-related writing can be saved in folders or more elaborate 'portfolios' and used to document children's writing development to parents" (p. 68). Similarly, Carr (2014) discussed issues of assessment in play and playfulness: "Assessing [children] in formative ways, as assessment *for* learning rather than the more summative assessment *of* learning, ensures that the assessment sits inside the pedagogy… and works to strengthen the role of play in an early years setting" (p. 265). Carr offered many examples of these assessment practices such as: feedback in conversations as evident in the work of Paley (2004), photographs with commentary for portfolios, checklists usually supplemented by context to view learning as a whole, and annotated narratives of learning also called "learning stories" (Carr, 2014). Play can provide a valuable opportunity to observe and record the learning of kindergarten children.

Preservice teachers struggle with balancing play and didactic activities. The *struggle of balance* between teaching with play or more didactic paper-and-pencil activities is evident in this study through participants' survey responses, answers to open-ended questions, and interview responses.

While analyzing students' responses to the survey and interview questions, it became clear that the BS in this study struggle to identify the appropriate balance between play and paper-and-pencil activities in a kindergarten classroom. This struggle is first evident in the survey data, wherein the BS contradict their own answers when asked whether worksheets, workbooks and other written exercises or play should dominate the kindergarten day. Survey question BS9/TC7 asked if play was more important than worksheets, workbooks and other written exercises during the kindergarten school day. Forty-nine of the sixty-eight BS said that it was *slightly important* or *important* for kindergarten children to play more than they complete activities such as workbooks, worksheets, & similar activities during the school day. The very next survey question, BS10/TC8 asked the reverse. Fifty-five of the sixty-eight BS responded that it is *slightly important* or *important* for the kindergarten children to complete activities such as workbooks, worksheets, and similar activities more than play during the school day. Most of the BS answered these reverse questions the same way, showing that they do not know if kindergarten children should play more or have more workbooks, worksheets and similar activities during the school day. Responses to this item were not the only evidence of preservice teachers' apparent struggle with the idea of balance between "work" and play. This conflict emerged again while coding the interviews, prompting the researcher to re-analyze the open-ended questions of the survey to look specifically for examples illustrating this struggle of balance between "work" and play in kindergarten. The following responses further illustrate the conflict BS experience when considering the balance between play and paper-and-pencil activities in kindergarten:

> *I believe that play should be important, but that is should be shared with time to learn.* (Survey, BS #18)

> *I believe that the role of play in a kindergarten classroom is so that you don't overwork a child with teaching them so much in one day. With play, you can make sure you have their attention when teaching.* (Survey, BS #21)
>
> *The role of play in a kindergarten classroom should be pretty leveled. I say pretty leveled because at the age of 4-5 children know when to stop playing and actually learn schoolwork.* (Survey, BS #47)
>
> *I guess you don't want too much play, if that makes sense. You need to have the right balance between like a structured class setting and also play. You don't want the kids to, when they go to first grade you don't want them expecting to be jumping around and running around the entire day.* (Interview, BS #5)
>
> *Obviously state tests can be, like people disagree on them, but there's a lot of skills in them that are evaluated that children need to have to progress. So, I don't want to say that I fully agree with state testing, but there are things about them that are beneficial to the students, and the school, and their teachers. Researcher: and you think that is appropriate for kindergarten? Yeah.* (Interview, BS #8)

These BS responses suggest that students believe that play does not equal learning. While they believe it is important to balance work and play in the kindergarten classroom, these comments reflect that some of the BS see the contribution of play as making children more attentive and receptive to teachers' direct instruction. The answers indicate that some BS believe direct instruction is when "real learning" takes place.

In the survey, preservice teachers were asked to indicate what ages/grades free play is appropriate. Half of the TC as well as just over half of the BS believe that free play is appropriate for *all ages*. The remaining TC responses in support of play as an instructional strategy for children ages birth-to-one (30.9%), and for children ages one & two, three & four, and kindergarten (35.3%) are consistent. However, the data for first to third grades show that preservice teachers' believe free play to be a less appropriate pedagogical strategy beginning around third grade. Of the remaining 48.5% of TC responses, only 2 TC believe that it is appropriate in second grade and no TC believe that

it is appropriate in third grade. Half of the TC in this study appear to struggle with how to balance free play in first, second and third grades yet believe in its importance for young children birth to kindergarten. The apparent struggle of balance for TC is further evidenced in these open-ended and interview responses:

> *The teacher can learn a lot about a child through play. Unfortunately the kindergarten classroom is designed for a lot of lessons. I think providing center/play time for young kids is important but kindergarten is also designed to prepare students for the rest of the grades. This time is given for students to wind down and be 5 and play with peers.* (Survey, TC #76)

> *I feel that there is a way play should be used in kindergarten, and a way that it is realistically used. I am in a kindergarten class now and very little importance is put on student play. Students rarely free play indoors and don't always get outdoors. The teacher believes play is important but rarely has time for it with mandates she must follow. The role shouldn't just be for students to release energy and run around, it should also be used to further learning and development.* (Survey, TC #88)

> *I think formative assessments can all be taken from play. So I believe that learning and assessments should be play-based. And, you know if there are some things that you can't—I think there has to be a happy medium, but if you focus too much on. . . I'd rather it be focused too much on play than be focused too much on desk work, because I think it's just inherent for children to explore and make their own concepts, and I guess that constructivist idea of you're constructing your own ideas about the world through play. In some ways it would be more beneficial to be too much play rather than too much desk time.* (Interview, TC #89)

Teacher candidates struggle with the balance of play and a standards-driven curriculum that may not provide many play opportunities. They have recent experience with imposed curriculum, planning and pacing guides, and accountability that may not recognize the value play provides to accomplish learning goals. The TC may have witnessed environments in which a teacher says that she values play, but is unable to give opportunities to play during the school day. Teacher educators need to help preservice teachers find ways to reconcile their struggle to balance play with direct instruction.

The review of literature in Chapter 2 outlines the benefits attributed to play in early childhood, as well as the current state of public education and the focus on standardized education (Almon & Miller, 2011; Fromberg, 2006; Hirsh-Pasek, 2009; Zigler & Bishop-Josef, 2006). In many early childhood teacher preparation programs, play is still valued and advocated as an appropriate practice for kindergarten children. However, preservice teachers do not always observe play being implemented in the standards-focused, public kindergarten classrooms, as was evidenced through the responses of participants in this study. The *struggle of balance* in this instance is between what they have been taught versus what they have experienced in their public school placements. This struggle leads preservice teachers to determine for themselves how to stay true to what they know to be appropriate for young children and to do what is expected of them as a public educator. It is a phenomenon that teacher educators need to address.

In summary, the *struggle of balance* in this study was evident for preservice teachers in two areas. The first area was a struggle of balance between play and paper-and-pencil activities in the kindergarten classroom, and this conflict is becoming increasingly evident as public schools focus on standards-driven instruction. The second area where preservice teachers revealed a struggle of balance was between what they believe to be appropriate practices for kindergarten as taught in their course of study, and the planning and pacing guides and didactic teaching curricula they face in public school. These struggles of balance are key issues for teacher educators.

Childhood play experiences shape play beliefs. Memories of early learning experiences can influence preservice teachers' beliefs and future teaching practices

(Pajares, 1992; Van Hook, 2002). During individual interviews, some BS shared their memories of play as well as how their kindergarten teachers supported play:

> *My kindergarten classroom had a kitchen, and it wasn't just the girls who played in it, because I specifically remember a boy, I'm still friends with today, playing with us in the kitchen. It was a home set-up, I guess. I feel like kindergarten today has become so regulated as opposed to when I was there. We had more playtime with lots of centers where we were learning specific things wherever we chose to go. We [teacher and class] would socialize and talk about our experiences afterwards.* (Interview, BS #8)

> *I remember in my kindergarten class, we used to get together in the morning and you would pick what center you were going to that day. The teacher would put a clothespin with your name at that center. But I think it's important for the children to get to do what interests them. So, I believe you should let them go from one center to another as they please.* (Interview, BS #56)

Teacher candidates also have memories of their own experiences with play in kindergarten.

> *When I think back on my favorite memories of play it would be in housekeeping center. I always enjoyed playing with the blocks, building things, just those plain wooden blocks.* (Interview, TC #71)

> *I remember in kindergarten, at my private school, we had just gotten our computers. I remember playing some game almost like Pac Man but with letters- I loved playing that game.* (Interview, TC #75)

> *I have a twin, so my favorite memories of play are with her. I remember dressing up and writing our own scripts to put on plays together. Lots of socio-dramatic play.* (Interview, TC #123)

But for some TC, fresh in their minds are the experiences they recently completed in their early childhood field placements:

> *[My coaching teacher's] classroom is a great example. She has the Lego area, and she has the writing and art center, the block center, and then housekeeping. After a content lesson, she will leave it up there because not every child got to have a chance to do the activity. During center time, the kids are role-playing what just happened in class. Someone is the teacher and students raise their hands to take a turn- learning is continuing. I love her whole set-up!* (Interview, TC #71)

> *In the kindergarten class, at the beginning of student teaching, they read a book "The Other Side." In that book, there was a bridge. During centers one day, months later, a boy was building a bridge and he retold the story- this is a bridge and these people were going to play with their friends but the bridge was going to be torn down. I was just impressed, all he needed was the blocks and he was able to retell the story events to me.* (Interview, TC #92)

It is important for preservice teachers to acknowledge the memories of their prior experiences with play and to reflect on how it impacts their beliefs about play and learning. As discussed previously, research has demonstrated time and again that experiences shape preservice teachers' current perspectives on play (Klugman, 1996).

University experiences shape play beliefs. The early childhood program of study at a university has the potential to shape play beliefs in preservice teachers, which is even more critical if the preservice teachers' prior experiences do not support play. Richardson (2003) suggested two approaches to effecting change in preservice teacher beliefs: (1) encourage preservice teachers to be reflective, examine their own beliefs and learn to be critical thinkers, and (2) make more quality field experience observation and participation a part of all academic classes. The preservice teachers in this study acknowledge the influence of the university on their beliefs:

> *The play course is definitely helping. I guess just my own personal experiences. I've worked with kids since I was 13 in summer camps and I would always take the 5 and 6 year olds. It's just a fun group, they're still learning.* (Interview, BS #5)

> *In the classroom setting, being able to observe during my practicum experiences as well as my student teaching. Just being able to see and listen.* (Interview, TC #92)

> *I think it was 250 that we had the play [course]. I had Dr. S, he was awesome. I think that's when my eyes really opened, because before then I would just be like anybody else saying, "They're just playing." But when you have a class where they say, "OK well, I'm going to put you in here, just look for these . . . just go look and I want you to tell me what you come back with." And you read some text*

> *kind of supporting that, and you go watch them, I mean it's right there in front of you. These children developing relationships and using their language and just every aspect of it, they're just building during that playtime.* (Interview, TC #123)

> *I don't know if you know Professor M but yeah, he is amazing. He is a big proponent of constructivism too, and I love how it's all natural learning for him. He feels the same as far as play goes. His school is like . . . you walk down the halls and it's all process versus product. Like how do we get here? It doesn't have to look perfect.* (Interview, TC #89)

The interview participants in this study all referred to their own experiences as impacting their beliefs, whether it was through personal experiences in school, work, volunteering, or university coursework. The findings of Klugman's (1996) study are confirmed through interviews in this study.

Implications and Recommendations for Teacher Education

The results of this study provide implications and recommendations for teacher education regarding play in kindergarten. Preservice teachers' beliefs about play should be addressed by individual teacher educators and collectively as a teacher education program in order to effectively prepare early childhood educators.

Teacher educators' role regarding play beliefs. Teacher educators can play a key role in aiding students' self-examination and self-awareness of their beliefs about play. Memories and prior experiences influence the beliefs that preservice teachers bring to their program of study (Klugman, 1996; Pajares, 1992; Van Hook, 2002).

New or contradictory information or theories can easily be dismissed by preservice teachers, especially if they are not aware of their personal beliefs about play and how those beliefs were established (Kennedy, 1997). Most preservice teachers need to be guided through a process of self-awareness by their professors and encouraged to be critical thinkers as they continue through the program of study. The process of preservice

teachers' self-awareness requires intentionality on the part of teacher educators. Baum and King (2006) offer suggestions to aid in this process: (1) create an emotionally and intellectually safe environment, (2) educate the whole student and (3) examine pedagogy. Preservice teachers need to gain trust in their instructors and develop a feeling of comfort in expressing their ideas and opinions if they are to genuinely examine their personal belief system (Baum & King, 2006). Early childhood teacher educators are familiar with educating the whole child. This same principal should apply in teacher educators' role with preservice teachers. The focus of teaching should not solely meet preservice teachers' cognitive needs, but help them discover their own beliefs, talents, and the characteristics that are unique to them. "[The teacher educators'] role is to support [preservice teachers'] explorations, offering suggestions, information, and resources when they may be helpful to further [preservice teachers'] development" (Baum & King, 2006, p. 220).

The individual teacher educator should create assignments and space for discussions that allow preservice teachers to reflect on their own play experiences during childhood. Preservice teachers should be encouraged to think about childhood play experiences at home, at school and any other play experiences they can recall. The preservice teachers should record these memories by way of writing or drawing. After sufficient reflection and recording time, teacher educators should encourage a time for preservice teachers to share their experiences with one another in small groups and as a whole class. Discussion provides an opportunity for learning and understanding their own experiences and beliefs; classmates' experiences and beliefs; and how they may differ from one another.

A next important step for teacher educators is to lead preservice teachers through expressing how their childhood experiences shape their current beliefs about play. This allows preservice teachers to examine their current beliefs about play and understand how the beliefs may have formed. It also allows teacher educators a window of opportunity to suggest and study pedagogy and teaching methods that may challenge the beliefs that preservice teachers bring to their program of study. According to previous research, the beliefs that preservice teachers bring with them to their program of study will be unchanged during their program of study unless they are challenged to identify their beliefs and led in self-examination to discover how they formed (Klugman, 1996; Pajares, 1992; Van Hook, 2002).

This initial step of guiding self-awareness is an essential foundation for teacher educators to eventually equip preservice teachers with the knowledge of what is beneficial and appropriate for kindergarten learners (Richardson, 2003; Vartuli & Rohs, 2009). To impart the knowledge of appropriate kindergarten pedagogy, the pedagogical methods used by teacher educators in their own courses should reflect the best practices that they value.

Teacher educators' positive support of play throughout coursework. "Equipping teachers to be mindful and strategic in using play to help children learn academically requires that play be front and center in early childhood teacher education programs" (Christie & Roskos, 2006, p. 67). Support of play as a thoughtful, intentional teaching method should be evident throughout all early childhood education coursework, including a play course, a methods course, or other program experiences. Teacher educators should focus on increasing preservice teachers' knowledge of the connections

between play, literacy learning, and academic standards, especially in the current environment of standards-driven education (Christie & Roskos, 2006, Long, et al., 2011). Teacher educators must communicate and demonstrate how to plan and implement play experiences that address academic standards.

Methods courses need to explicitly show how play can be used to reach the academic standards. An observation assignment could provide that experience. Preservice teachers should observe in an early childhood classroom and address how play was used in the classroom and what academic standard it addressed. Play may have been void from the lesson, thus giving the teacher educator an opportunity to challenge the preservice teacher to decide how to incorporate play into the observed lesson and standard. This forces them to think critically and prepares them to effectively include play in their own lessons.

A perpetual challenge for teacher education programs is locating high-quality, play-based field experiences in a public school environment that values play as an instructional tool (Hirsh-Pasek, et al., 2009; Zeichner, 2010). Teacher educators must incorporate these types of classroom experiences to "help [their students] develop powerful images of [dynamic] teaching and strong professional commitments or the entering beliefs will continue to shape ideas and practice" (Vartuli & Rohs ,2009, p. 312).

Many universities have attempted to address the disconnect that can exist between university teachings and public school experience by forming school-university partnerships, sometimes known as Professional Development Schools (PDS), where school- and university-based faculty work together to provide constructive learning experiences for preservice teachers (Goodlad, 1993).

Universities should also attempt to address the disconnect that can exist within the teacher education program. There are many activities that individual teacher educators can do within their own classes to impact preservice teachers beliefs and provide support for play in kindergarten. However, even more impactful is a teacher education program that is collectively supportive of play (Christie & Roskos, 2006). Programs should encourage communication between teacher educators to identify what is taught in individual courses and strive to build on one another. This demonstrates to preservice teachers that the courses and what they learn about pedagogy in each course are interconnected. Play is an important part of early childhood pedagogy; therefore it should be addressed in each methods course within the early childhood program.

Long, Hutchinson, & Neiderhiser (2011) express the characteristics of an effective early childhood teacher in light of a standards driven system:

> They teach successfully within and beyond standards because they see them as resources to be used in concert with other resources, in particular, their own professional knowledge and commitment to building instruction from the expertise that children bring to their classrooms. They refuse to settle for policies and practices that would have them view students as test scores or that ignore the wealth of cultural resources within and beyond the school walls. (p. 5)

Early childhood teacher education programs should prepare preservice teachers to know the standards, interpret them using the knowledge of theory and developmentally appropriate practices, then teach in ways that will benefit those particular students in the classroom.

Two seemingly simple, yet potentially impactful implications and recommendations based on the results of this study: (1) Teacher educators can play a key role in aiding students' self-examination and self-awareness of their beliefs about play, and (2) Teacher educators must communicate and demonstrate how to plan and implement play experiences that address academic standards.

Early childhood teacher educators have a significant responsibility to effectively equip preservice teachers for teaching kindergarten in developmentally appropriate ways while operating within the bounds of a standards-driven school environment. While not an easy task, this combined approach is necessary for preserving the benefits that learning through play can provide to young children.

Limitations

This research study has a number of limitations.

1. Teacher candidates completed the required play course as a part of their early childhood teacher preparation program. Some of the beginning students were currently enrolled and in their first weeks of class. It is possible that responses provided by these participants were influenced by the information presented during the first few weeks of this course. It is also possible that these preservice teachers' statements were influenced by demand characteristics of participating in a study, and therefore responded in ways they believed were appropriate, even when their answers did not truly reflect their actual beliefs or understandings. Future recommendations would be to (a) provide anonymity, and (b) conduct survey for BS population **before** they begin their coursework.

2. The sample size for the surveys was relatively small (BS $n = 68$, TC $n = 62$), and data were gathered at only one university. A modest dataset rendered comparative testing for certain survey questions impossible. Future recommendations would be to increase the sample size, increasing the number of participants in each group as well as sampling from a wider variety of education schools.
3. This study is a cross-sectional design with one instance of data collection; as such, it was designed to measure differences rather than change over time. While the strength of this study design is efficiency, it is vulnerable to potential confound by a cohort effect, and thus a limitation of this study is not being able to clearly isolate the effect of common life experiences (cohort) from the effects of the preservice education process. To address this design characteristic, a replication over multiple years and multiple measurements of the same cohorts to compare changes in beliefs about play throughout the duration of their program of study is recommended.
4. Closed-ended surveys such as Likert ratings allow efficient and convenient querying and are ideal in exploratory studies. However, they limit the amount of specific information that can be gathered, and both details and depth are difficult to obtain. Future recommendations are to design more open-ended survey questions and qualitative research protocols. Interviews and focus groups would provide more details and examples to support statements of belief.

5. The PSTB survey question BS4/TC2, "What experiences have you had working with young children?" was included for three main reasons: (1) to find out more about the experiences preservice teachers brought to their program of study, (2) to confirm the Klugman (1996) study, and (3) to provide a context for the quantitative measures of beliefs. The nature of a multiple-response question did not provide the details necessary to accurately identify the impact of experiences on current beliefs. It provided an account of things they have done without the details of frequency or meaning. This question could have been included as an open-ended question if worded as "What experiences have you had with young children that impacted your beliefs about play?" The data would have been more informative and could have provided more support for the Klugman (1996) study. Future recommendations are to change survey question BS4/TC2 to an open-ended question.
6. Any survey questions can be interpreted in ways the researcher did not intend. An example would be the language used in the survey question "extended play time." Some participants may have interpreted this to mean play time beyond the required minutes mandated by a child care center instead of viewing it in light of public school kindergarten. Future recommendations are to clarify the wording of the question to more precisely express what "extended play time" means in the context of public school.

Implications for Future Research

Many studies regarding preservice teachers' beliefs have been conducted, but few have specifically addressed beliefs about play in the early childhood classroom. According to Ryan and Northey-Berg (2014), "little research attention has been paid to what it is teachers need to know and be able to do to enact a pedagogy of play" (p. 205). A "pedagogy of play" includes the methods and practices used to implement play in an early childhood classroom. More research is needed to continue the dialogue regarding preservice teachers' beliefs about play in early childhood, and how teacher educators can effectively shape these beliefs to align with beneficial pedagogy for young children. Longitudinal studies focusing on beliefs about play are also needed, following preservice teachers through an entire early childhood program of study. More research regarding a pedagogy of play in early childhood teacher education programs is vital if early if they are to advocate for and continue to include play in their programs of study (Ryan & Northey-Berg, 2014). Future research regarding play and teachers' beliefs about play will preserve the beneficial work of play in kindergarten.

The focus of this dissertation research was on the beliefs of early childhood preservice teachers regarding play in kindergarten. Beginning students' and teacher candidates' beliefs about play were explored using a mixed methods approach utilizing both surveys and interviews. This study confirmed that there are subtle and significant differences in beliefs about play in kindergarten between early childhood preservice teachers at the beginning of their teacher preparation program and those completing their program of study. These results have important implications for early childhood teacher educators.

Early childhood teacher educators contribute to the future by teaching, guiding, and empowering preservice teachers of young children. Preservice teachers' beliefs, which they bring to their program of study, must be challenged by the early childhood teacher educators by encouraging careful reflection and critical thought that can produce self-awareness. Coursework grounded in play theory and quality field experiences of play-based learning will empower early childhood preservice teachers to continue providing kindergarten children the opportunity to learn through play.

This study serves as a call for early childhood teacher educators to be diligent in providing opportunities for preservice teachers to become aware of their beliefs about play, and to provide preservice teachers with quality examples of play-based learning. Early childhood teacher educators committed to the importance of learning through play will empower future teachers to continue utilizing play as a beneficial method of instruction for young children.

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Appendix A: Letters of Consent

Department of Instruction and Teacher Education
College of Education

Preservice Teachers' Experiences With and Beliefs About Play in Kindergarten: Implications for Early Childhood Teacher Educators

Dear Early Childhood Education Student,

My name is Michelle Clevenger. I am a doctoral candidate in Early Childhood Education at the University of South Carolina. I am conducting a research study as part of the requirements for my Doctorate of Philosophy degree in Early Childhood Education and I would like to invite you to participate. This study is partially funded by the NAECTE Foundation.

I am studying preservice teachers' beliefs about the role of play in kindergarten near the beginning of their professional preparation and during the final phase of their programs of study to identify the influences that have shaped their perspectives and beliefs. If you decide to participate, you will be asked to complete a survey about your beliefs regarding play. It should take about 5-10 minutes to complete.

Taking part in this study is not likely to benefit you personally. However, this research may help Early Childhood Teacher Educators understand preservice teachers' beliefs better and make for more effective teaching strategies for Early Childhood Teacher Educators.

Participation is confidential. A number will be assigned to each participant at the beginning of the project. This number will be used on project records rather than your name, and no one other than the researcher will be able to link your information with your name. Study records/data will be stored in safe files and protected computer files of the researcher. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

Those who choose to participate will receive a coupon for a free sub and drink when your survey is completed.

Taking part in the study is your decision. You do not have to be in this study if you do not want to. Participation, non-participation or withdrawal will not affect your grades in any way.

We will be happy to answer any questions you have about the study. You may contact me at (803) 360-3094 or Scchelle@gmail.com or my faculty advisor, Dr. Angela Baum, (803) 777- 4947 or bauma@mailbox.sc.edu if you have study related questions or problems. If you have any questions about your rights as a research participant, you may contact the Office of Research Compliance at the University of South Carolina at 803-777-7095.

Thank you for your consideration. If you would like to participate, please open the attached survey packet and begin completing the study materials. When you are done, please return the survey to the researcher and receive your coupon.

With kind regards,

Michelle Clevenger
University of South Carolina
Early Childhood Education
(803) 360-3094
Scchelle@gmail.com

Department of Instruction and Teacher Education
College of Education

Preservice Teachers' Experiences With and Beliefs About Play in Kindergarten: Implications for Early Childhood Teacher Educators

Dear Early Childhood Education Student,

My name is Michelle Clevenger. I am a doctoral candidate in Early Childhood Education at the University of South Carolina. I am conducting a research study as part of the requirements for my Doctorate of Philosophy degree in Early Childhood Education and I would like to invite you to participate. This study is partially funded by the NAECTE Foundation.

I am studying preservice teachers' beliefs about the role of play in kindergarten near the beginning of their professional preparation and during the final phase of their programs of study to identify the influences that have shaped their perspectives and beliefs. If you decide to participate, you will be asked to participate in an interview about your beliefs about play. The interview will take place at a mutually agreed upon time and place, and should last about 30-45 minutes. The interview will be audio taped so that I can accurately reflect on what is discussed. The tapes will only be reviewed by members of the research team who will transcribe and analyze them. They will then be destroyed.

Taking part in this study is not likely to benefit you personally. However, this research may help Early Childhood Teacher Educators understand preservice teacher beliefs better and make for more effective teaching strategies for Early Childhood Teacher Educators.

Participation is confidential. A number will be assigned to each participant at the beginning of the project. This number will be used on project records rather than your name, and no one other than the researcher will be able to link your information with your name. Study records/data will be stored in safe files and protected computer files of the researcher. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

Those who choose to participate will receive a $40 gift card of your choice to Target or Office Depot when your interview is completed.

Taking part in the study is your decision. You do not have to be in this study if you do not want to. Participation, non-participation or withdrawal will not affect your grades in any way.

We will be happy to answer any questions you have about the study. You may contact me at (803)360-3094 or Scchelle@gmail.com or my faculty advisor, Dr. Angela Baum, (803)777- 4947 or bauma@mailbox.sc.edu if you have study related questions or problems. If you have any questions about your rights as a research participant, you may contact the Office of Research Compliance at the University of South Carolina at 803-777-7095.

Thank you for your consideration. If you would like to participate, please contact me by responding to the email below with dates and times that you are able to schedule the interview.

With kind regards,

Michelle Clevenger
University of South Carolina
Early Childhood Education
(803) 360-3094
Scchelle@gmail.com

Appendix B: Surveys

Preservice Teacher Beliefs Survey:
Early Childhood Beginning Students

This survey is part of a doctoral dissertation about the beliefs of preservice teachers. Please answer the questions according to your **own personal beliefs** and experiences in early childhood education.

1. I am currently enrolled in: (mark all that apply)
   - __ EDEC 201- Inquiry into Early Childhood Education
   - __ EDFN 300- Schools in Communities
   - __ EDPY 401- Learners and the Diversity of Learning
   - __ EDPY 401P- Practicum: Learners and the Diversity of Learning
   - __ EDRM 423- Introduction to Classroom Assessment
   - __ EDEC 250- Play and Early Learning
   - __ EDEC 336- Culturally Relevant Pedagogy in Early Childhood Classrooms
   - __ EDEC 340- The Young Child: Development, Care, and Edu (Birth-3 years)
   - __ EDEC 340P- The Young Child (Birth-3 years) Practicum
   - __ EDEC 342- The Young Child: Development, Care and Edu (3-8 years)

2. How long have you been an Early Childhood Education major?
   - __ This is my first semester
   - __ 2-4 semesters
   - __ 2-3 years
   - __ 4 or more years
   - __ Other (please explain)_____

3. Have you taken EDEC 250- Play and Early Learning or a play theory class at another college or university?

   Yes No

4. What experiences have you had working with young children?
   (Please mark all that apply

   - __ Afterschool care
   - __ Babysitting
   - __ Childcare Center teacher/caregiver
   - __ Children's Church
   - __ Nanny
   - __ Parent
   - __ Sunday School teacher
   - __ Teacher Cadet in high school

5. **Free play is defined as offering children the opportunity to choose where they play, what they play with and with whom they play.**

   Using this definition, free play is an appropriate method of instruction for what grade(s) or age groups? (**Please mark all that apply**)

   __ Birth – 1 year
   __ 1 and 2 year olds
   __ 3 and 4 year olds
   __ Kindergarten
   __ 1st Grade
   __ 2nd Grade
   __ 3rd Grade
   __ All ages

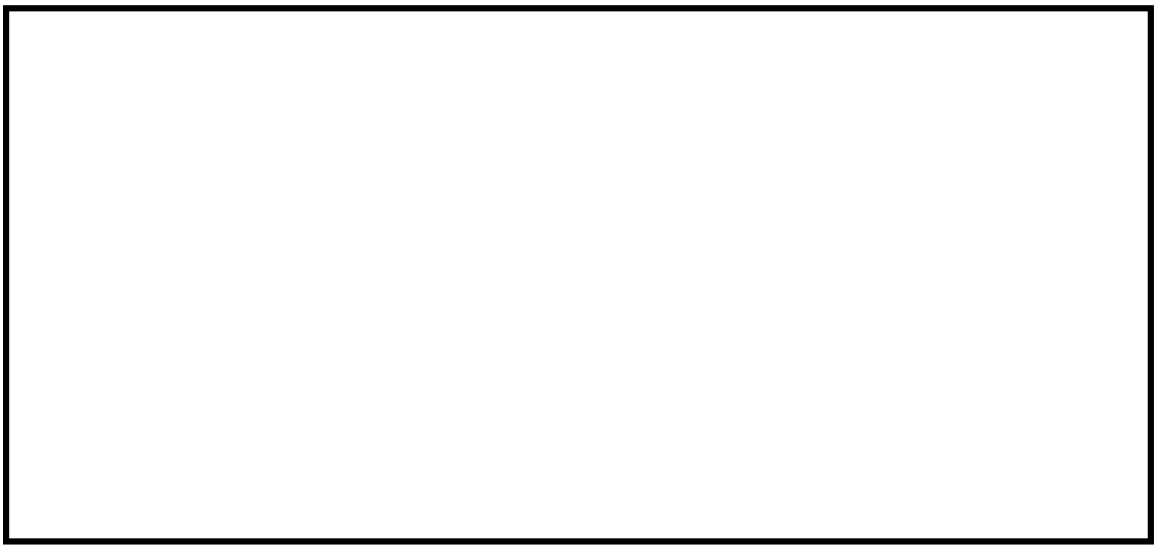
For the following questions, please circle the number that most accurately represents <u>your beliefs</u> about Kindergarten.

	Not Important	Slightly Important	Important	Very Important
6. How important is play in the Kindergarten classroom?	1	2	3	4
7. It is _____ for the Kindergarten teacher to provide a variety of materials to support children's play.	1	2	3	4
8. It is _____ for Kindergarten teachers to plan extended periods of time for children to engage in play.	1	2	3	4
9. It is _____ for Kindergarten children to play more than they complete activities such as workbooks, worksheets, & similar activities during the school day.	1	2	3	4

	Not Important	Slightly Important	Important	Very Important
10. It is _____ for the Kindergarten children to complete activities such as workbooks, worksheets, & similar activities more than play during the school day.	1	2	3	4
11. It is _____ that Kindergarten children have extended periods of outdoor play.	1	2	3	4
12. If a Kindergarten teacher observes children's play, s/he can learn about a child's:	**No**	**Probably Not**	**Probably Yes**	**Yes**
a. motor development?	1	2	3	4
b. social & emotional development?	1	2	3	4
c. math knowledge & skills?	1	2	3	4
d. science knowledge & skills?	1	2	3	4
e. language & literacy knowledge & skills?	1	2	3	4
f. music development?	1	2	3	4

Open Ended Questions:

13. What is the role of play in a Kindergarten classroom?



14. What is the best way to evaluate children's development and learning in Kindergarten?

Please complete the following information to tell us more about you.

I am: female male

Ethnicity:

__ White/Caucasian
__ African American
__ Hispanic/Latin American
__ Asian
__ Native American
__ Other: _____

Please select the appropriate age range:

__ 18-25
__ 26-30
__ 31-35
__ 36-40
__ 41 & above

Thank you for completing this survey.

Would you be interested in discussing this topic in more depth? Some students will be invited to participate in a 30-45 minute one-on-one interview. If you would like to be considered please provide your name and email address below.

If you are selected for an interview the researcher will contact you and you will be eligible to receive a **$40 gift card** for Target or Office Depot.

Name:_____

Email:_____

Preservice Teacher Beliefs Survey:
Early Childhood Teacher Candidates

This survey is part of a doctoral dissertation about the beliefs of preservice teachers. Please answer the questions according to your **own personal beliefs** and experiences in early childhood education.

1. I am currently enrolled in:

   __ EDEC 591- Seminar on Teaching in Early Childhood
   __ EDEC 492- Internship in Curriculum, Assessment, Teaching, and Professional Roles
   __ Other _____ (please list)

2. What experiences have you had working with young children?
   (Please mark all that apply)

   __ Afterschool care
   __ Babysitting
   __ Childcare Center teacher/caregiver
   __ Children's Church
   __ Nanny
   __ Parent
   __ Sunday School teacher
   __ Teacher Cadet in high school
   __ USC Field Placements

3. **Free play is defined as offering children the opportunity to choose where they play, what they play with and with whom they play.**

   Using this definition, free play is an appropriate method of instruction for what grade(s) or age groups?
   (**Please mark all that apply**)

   __ Birth – 1 year
   __ 1 and 2 year olds
   __ 3 and 4 year olds
   __ Kindergarten
   __ 1st Grade
   __ 2nd Grade
   __ 3rd Grade
   __ All ages

For the following questions, please circle the number that most accurately represents <u>your beliefs</u> about Kindergarten.

	Not Important	Slightly Important	Important	Very Important
4. How important is play in the Kindergarten classroom?	1	2	3	4
5. It is _____ for Kindergarten teachers to provide a variety of materials to support children's play.	1	2	3	4
6. It is _____ for Kindergarten teachers to plan extended periods of time for children to play.	1	2	3	4
7. It is _____ for Kindergarten children to spend more time playing than they do on activities such as workbooks, worksheets, & similar activities during the school day.	1	2	3	4
8. It is _____ for the Kindergarten children to complete activities such as workbooks, worksheets, & similar activities more than play during the school day.	1	2	3	4
9. It is _____ that Kindergarten children have extended periods of outdoor play during the school day.	1	2	3	4
10. If a Kindergarten teacher observes children's play, s/he can learn about a child's:	**No**	**Probably Not**	**Probably Yes**	**Yes**
a. motor development?	1	2	3	4
b. social & emotional development?	1	2	3	4
c. math knowledge & skills?	1	2	3	4
d. science knowledge & skills?	1	2	3	4

10. If a Kindergarten teacher observes children's play, s/he can learn about a child's:	No	Probably Not	Probably Yes	Yes
e. language & literacy knowledge & skills?	1	2	3	4
f. music development?	1	2	3	4

Open Ended Questions:

13. What is the role of play in a Kindergarten classroom?

14. What is the best way to evaluate children's development and learning in Kindergarten?

Please complete the following information to tell us more about you.

I am: female male

Ethnicity:

__ White/Caucasian
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__ Asian
__ Native American
__ Other: _____

Please select the appropriate age range:

__ 18-25
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Thank you for completing this survey.

Would you be interested in discussing this topic in more depth? Some students will be invited to participate in a 30-45 minute one-on-one interview. If you would like to be considered please provide your name and email address below.

If you are selected for an interview the researcher will contact you and you will be eligible to receive a **$40 gift card** for Target or Office Depot.

Name:_____

Email:_____

Appendix C: Interview Protocol

Semi-structured Interview Protocol

From the survey, read their responses and probe:

- What is the role of play in a Kindergarten classroom?

- What is the best way to evaluate children's development and learning in Kindergarten?

Potential Questions:

- What do you think contributed to your beliefs about play and Kindergarten?
- Describe your favorite memories of play in your childhood. (who, where, what)
- Describe play memories from kindergarten. What did it involve?
- Why do you think teachers eliminate recess play?
- You are the teacher now- what does play look like in your classroom? How would you incorporate it into your classroom?
- What are the challenges that you see to play in Kindergarten?

If further clarification is needed:

- If you are teaching Kindergarten, would you incorporate play within the cognitive development aspects of learning in your classroom? How?