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A STUDY OF MOTHERS' PERCEPTIONS AND PRACTICES OF KINDERGARTEN
READINESS

by

Kirsten Smith

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development

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2012

ABSTRACT

A Study of Mothers' Perceptions and Practices of Kindergarten Readiness

by

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Utah State University, 2012

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Department: Family, Consumer, and Human Development

This study explored mothers' perceptions about kindergarten readiness and practices in preparing their child for kindergarten. The relationship between maternal educational level and the developmental appropriateness of their perceptions and practices in preparing their children for kindergarten was examined. The relationship between the child's birth status and the developmental appropriateness of mothers' responses was also investigated.

A questionnaire asking parents about their perceptions and practices with their child entering kindergarten was sent home to 60 families who had enrolled their child in the Adele and Dale Young Child Development Laboratory at Utah State University during the 2010-2011 academic year; 33 mothers returned completed questionnaires.

The questionnaire contained statements for the parents to rate in importance and in frequency of their child participating in an activity. A variety of developmental areas such as literacy, math, motor, and social were included in the statements.

The findings from the study suggest that mothers were more developmentally appropriate in their responses to their perceptions of kindergarten readiness than they were in their responses about their actual practices in preparing their child for kindergarten. However, mothers were mostly developmentally appropriate in their responses in all areas. They seemed to understand the importance of literacy and mathematics in young children's lives, but they may not understand how wide the spectrum is for a child learning about literacy and mathematics in developmentally appropriate ways. The participants had low means with their responses to some of the literacy practices, such as with how children should be taught letter and word recognition.

Mothers were most developmentally appropriate in their perceptions of being involved in their child's education. They appeared to understand that being involved in their child's education will help their child transition to and be more successful in school than if they were not involved. Overall, it was found that mothers had a reasonably good understanding of what is developmentally appropriate to prepare children for kindergarten; however, they were not as clear about what is less developmentally appropriate for preparing children for kindergarten. Limitations, implications, and suggestions for future research are discussed.

PUBLIC ABSTRACT

A Study of Mothers' Perceptions and Practices of Kindergarten Readiness

Kirsten Smith

This study was conducted to understand what mothers with children enrolled in a developmentally appropriate preschool program believe and are actually doing to help prepare their children for kindergarten, something of key importance, as kindergarten success is a foundation for later school success. There is very little research on the topic of parental perceptions and practices in kindergarten readiness and the transition into kindergarten.

A survey was sent home to 60 families who had their child enrolled in the Adele and Dale Young Child Development Laboratory at Utah State University during the 2010-2011 school year. In the survey, parents were asked to rate the importance of, as well as how often their child participated in a variety of activities, such as reading stories, playing outside, and building with blocks, to help prepare for kindergarten. Parents were also asked to rate the importance of parent involvement in children's education. The relationship between maternal perceptions/practices and both mothers' educational levels and the child's birth status was also examined. Thirty-three mothers returned completed questionnaires.

Results showed that mothers were mostly developmentally appropriate in their responses about the importance of using literacy and math in their children's lives. It was also found that mothers was most developmentally appropriate in their perceptions of parent involvement, literacy, and social development.

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CHAPTER I

INTRODUCTION

Over the past decade, there has been an increase in discussion about what constitutes developmentally appropriate practice (DAP) in educating young children. Most teachers of young children agree that DAP involves teaching children through play. DAP takes into consideration more than just how children learn. Goldstein (2008) stated that the DAP guidelines

specified early childhood teachers should not only take the developmental norms established by psychology and the specific strengths, interests, and needs of the children being taught into consideration, but should also incorporate the values, beliefs, priorities, and practices shaping the social and cultural contexts of their students' lives into their instructional decisions. (p. 254)

Both parents and teachers need to be aware that there are many aspects of DAP which can be implemented both at school and in the home.

Unfortunately, there are misconceptions of what is developmentally appropriate for young children to be able to do and know. For instance, some parents may believe that worksheets are a good assessment of a child's skills and knowledge. Parents may have different perceptions of what qualities or behaviors young children should possess to be prepared for kindergarten entry. Some of the skills needed when a child is entering kindergarten include emergent literacy, which would be phonological awareness, print awareness, knowing the alphabet, and beginning to form letters (Massetti & Bracken, 2010). Emergent literacy, along with emerging numeracy (recognizing numbers, patterns, and shapes), and social skills (taking turns, following directions, and sharing) are all learning-related skills that children can learn in preschool to help them succeed in later schooling. It also includes social and emotional competencies, such as knowing

how to share, getting along with other children, and having a basic understanding of the emotions he or she feels and how to channel those emotions (Kramer, Caldarella, Christensen, & Shatzer, 2010).

Kim, Murdock, and Choi (2005) stated that there are two main forms of readiness that parents look at to determine if their child is ready to enter kindergarten. The first is “readiness for school” (p. 4). This form of readiness looks at the child’s academic abilities. The second form of readiness is “readiness to learn” (p. 4), which is the biological growth or the developmental maturation of the child. Typically parents focus on one of these two forms of readiness with their child and not both. One problem that many parents face is what, specifically, teachers in their geographic area are looking for when determining if a child is ready for kindergarten. Researchers have shown that what teachers expect children to know and be able to do before they enter kindergarten can change depending on the region and school district in which they live and even depending on the specific school their child will be attending (Kim et al., 2005). It is understandable that parents are unsure of what qualifies as kindergarten readiness when it is known that what teachers expect from children to know and be able to do can vary drastically.

It has been found that parents of preschool children value all of the areas of kindergarten readiness as important and they also view learning social-interaction skills as more important for their children at that age than academic learning (Kim et al., 2005). This finding is somewhat surprising because there is a great push at this time for high academic achievement in young children and less emphasis on developing young children’s social-interaction skills.

There are some parents who are not aware that they can help prepare their child to enter kindergarten, but there are many ways parents can be involved. “Parents can support their children’s schooling by responding to school obligations or becoming more involved in helping their children improve their schoolwork” (Lahaie, 2008, p. 685). Also, parents can help their child prepare to learn by doing things like going to a library, going to the zoo or a museum, by reading books together, singing, or by creating their own art (Lahaie, 2008). Parents can also talk to their child’s preschool and/or kindergarten teacher to find out what they should do at home with their child to help them prepare to enter kindergarten. Being prepared and successful in kindergarten can be predictive of later school success for children (Ray & Smith, 2010).

The purpose of this study was to examine maternal perceptions about their child’s readiness to enter kindergarten and to determine whether these perceptions vary with child’s birth status, and to determine if there was a relationship between the mother’s education level and maternal perceptions and practices of kindergarten readiness.

CHAPTER II

LITERATURE REVIEW

This chapter examines the literature which supports the current study and begins by explaining Bronfenbrenner's ecological model, which is the theoretical foundation for this investigation. Next, literature focusing on developmentally appropriate practice is explored. Then, literature on transition practices and teachers' expectations of young children when entering kindergarten is discussed. Finally, literature exploring the relationship between parent involvement in their children's education and transition into kindergarten is reviewed.

Bronfenbrenner's Ecological Model

In Bronfenbrenner's ecological model there are different levels of a person's, in the case of this study, a child's, life and environment that affect his or her development and growth. The different levels are the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem. The microsystem is the child's most immediate world: his or her immediate family, classmates, teachers, and close friends. It is made up of the things that impact the child the most. This level was used in this study as a way to examine the parents' demographics and kindergarten transition practices.

The mesosystem is how the things in the microsystem work together. For example, how the child's parents and teacher interact may help the child to be more prepared for kindergarten. This level was also used in this study through questions at the

end of the questionnaire that asked the parent how the child's preschool has helped him or her prepare for kindergarten.

The exosystem includes the things or people that the child does not have direct contact with, but that have an impact on the child: parents' workplace or the child's neighborhood. The macrosystem consists of entities like the government, which affect the way a family may live their life, the things they can buy, the kind of health care they receive, the kind of school they have access to. These are things that do have an impact on the child, but not directly. Finally, the chronosystem involves the element of time. This can be the timing of certain events such as entering kindergarten, a parent receiving a promotion at work, a family member passing away, or the birth of a sibling. Figure 1 gives a basic illustration of Bronfenbrenner's ecological model.

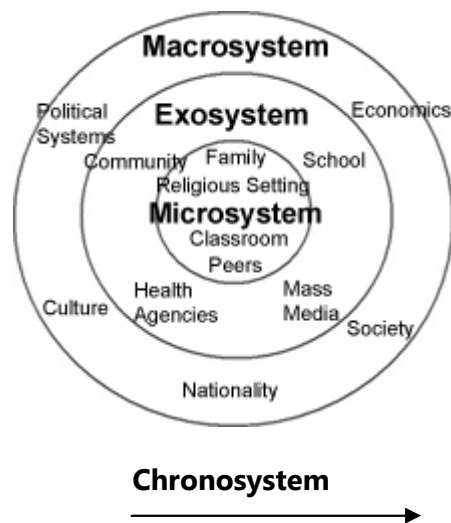


Figure 1. Bronfenbrenner's ecological model. (http://www.sasked.gov.sk.ca/branches/psych_portal/mtp.shtml)

With the help of Bronfenbrenner's ecological model it is easier to recognize that there is more to helping a child transition to kindergarten than just talking to them about it. Parents need to help their child be socially ready to interact with other children in the school setting. The child's teachers, both preschool and kindergarten, need to help the child transition and be ready cognitively and socially. There are many factors in a child's life that influence his or her readiness to enter kindergarten. As shown, Bronfenbrenner's ecological model focuses on these factors and helps us understand where they fit and how much of an influence they have on a child. In the context of Bronfenbrenner's model, the questions used throughout the questionnaire are designed to incorporate both the microsystem and the mesosystem.

Dockett and Perry (2008) stated that children develop and grow in families and communities, not alone in isolation. When working with young children, this is something that needs to be remembered. In order to truly teach a young child and help him or her develop full potential, one must include the family and the community in teaching the child, as Bronfenbrenner's model illustrates. There are several ways this can be done. By staying in communication with the family of the child, the child's education can be expanded to both the home and the school. The community can be used to teach the child through fieldtrips to various places in the community or by having visitors with jobs around where the children live. By using Bronfenbrenner's ecological model it is easier to see all these aspects of the child's life, or the whole child, and incorporate them into the child's learning.

Developmentally Appropriate Practice

Developmentally appropriate practice (DAP) is an instructional philosophy that teachers use to incorporate the whole child into the learning process. There are many different areas to DAP that work together and influence one another. These include individual appropriateness, age appropriateness, sociopolitical appropriateness, and sociocultural appropriateness (Goldstein, 2008):

There is no single correct response to the question of what curriculum content and which instructional practices are developmentally appropriate for an individual child, a certain classroom full of students, a particular school setting, or a specific sociocultural context: every question has many possible answers. (Goldstein, 2008, p. 257)

Each teacher and parent needs to understand that there is no one right way to help prepare a child to enter kindergarten. One must know the child and how he or she learns and then mold what this particular child needs to learn based on that information. Even though each child learns differently, there are some basic guidelines for parents and teachers on what is developmentally appropriate. There is a continuum of what is more developmentally appropriate and less developmentally appropriate, and this is, in part, determined by the needs and interests of the child. In practice, activities being developmentally appropriate or being less developmentally appropriate are not as clear. For the purpose of this study, the activities in the questionnaire were deemed as more or less appropriate based upon the general needs, characteristics, and skills of a preschool child. Because children learn in many different ways and have many different interests, some activities may be more appropriate for one child and less appropriate for another child.

The National Association for the Education of Young Children (NAEYC) publishes guidelines for DAP regularly, as increasingly more research is conducted about what is appropriate for young children. NAEYC's (2009) statement on guidelines for what is developmentally appropriate practice with young children makes several important points about the development of young children and the focus that both parents and teachers should have. It stated that the physical, emotional, social, and cognitive domains of development are all very important and interrelated. Because children are constantly moving, feeling, thinking, and interacting with others and the world around them, it is imperative that parents and teachers consider and foster all the learning and development domains. It is important to know what is developmentally appropriate for young children in terms of their social, cognitive, physical, and emotional skills when helping them prepare for kindergarten. When these areas are understood, teachers can design their curriculum to fit the needs of the children, and parents can mold their daily interactions to best help the child. As children are more prepared for kindergarten the transition into kindergarten becomes smoother. Children developing learning-related skills, such as emergent literacy (print awareness, forming letters, and knowing the alphabet), social skills (following directions, taking turns, and sharing), and emergent numeracy skills (recognizing, numbers, shapes, and patterns) can be an important aspect for children's later school success.

NAEYC (2009) also stated that, although a child's development follows a documented sequence of abilities and knowledge building on one another, there are still individual variations between children. There is "the inevitable variability around the typical or normative course of development and the uniqueness of each child as an

individual” (p. 11). Not only do children vary in their development, they also vary in their aptitudes, temperament, personality, family life, and cultural background. As a child’s development progresses, it moves towards a child’s self-regulation, greater complexity of the child, and representational capacities. Self-regulation is an important component to a child’s development. It is important that children learn to regulate their emotions and focus on tasks or activities they have in front of them. As children age, they become more complex, they begin to move away from only understanding the concrete to also understanding and using abstract concepts and ideas. Children also begin to use other items or abstract concepts to represent something they may know, such as their house. They may begin to use blocks to reconstruct their house, and use terms such as left and right to describe how to get to certain places in the house.

It has been found that a child’s development is optimal when the child has a consistent and secure relationship with responsive and attentive adults and when the child has positive peer relationships. As children have positive experiences, a child is shaped in later years of his or her life in areas such as learning and his or her motivation to learn, take initiative, and/or be persistent. One way a child may have positive experiences is through parent and teacher communication and coordination about what the child needs to learn and develop optimally. This communication and coordination can come through day-to-day interaction and through planned parent-teacher conferences (NAEYC, 2009). By having regular and planned parent-teacher conferences more of the needs of the whole child are met. More than just the child’s microsystem is considered, the child’s mesosystem is then brought into the learning experience.

Goldstein (2008) has also done research on DAP and the importance of using it in the classrooms with young children. She talked about the many dimensions of DAP, such as social, cultural, emotional, and physical, as well as the stress for some teachers as they try to implement all the dimensions that are involved in DAP. A common aspect of DAP that is often overlooked in implementation is the sociopolitical aspect, despite the fact that many early childhood educators implement the sociocultural dimension. The sociocultural aspect of DAP includes books, activities, and discussions about, not only the culture that the children live in, but other cultures as well. The sociopolitical dimension of DAP is following government guidelines on education and incorporating it into the classroom curriculum. Goldstein (2008) offered ideas and advice to early childhood educators on how to better implement DAP activities in their classrooms. She advised all teachers that they need to be flexible in how they run their classrooms.

The responsible teacher must bear in mind instructional plans effective with last year's class might not be best for this year's class, and also acknowledge beloved, tried-and-true activities and lessons might not be interesting, relevant, or thought-provoking for this particular group of children. (p. 258)

The same can be said to parents with their children at home. Each child is very different in the interests he or she may have and the ways he or she may learn. When working with a child at home to develop, for example, social concepts, fine motor development, emergent literacy, and math, different approaches and teaching strategies may need to be used with each child.

In an ideal situation, a DAP classroom's learning experiences are designed for each child's characteristics individually, culturally, and developmentally; and small group activities are planned that help encourage social interactions between peers and

teachers and assist in further learning (Huffman & Speer, 2000). Huffman and Speer (2000) stated that many teachers set up the classroom environment to help children focus on the process of learning, instead of the product, for instance, how the child created an art project versus what he or she created. Also children, with the help of a teacher, are able to choose their activities and use the materials in a hands-on fashion. This concept can be used at home as well. When children get involved in different activities, parents can discuss with the children what they are doing, how they are doing their project, and what their favorite part of it is, rather than just saying good job and hanging it on the refrigerator.

On the other end of the continuum are less developmentally appropriate practices, sometimes referred to as developmentally inappropriate practice (DIP). Typically, DIP is a focus on highly structured, product-oriented, teacher-directed activities. Many teachers use DIP activities in their classrooms because of a lack of resources, staff, or parent support (Hedge & Cassidy, 2009). Hedge and Cassidy (2009) conducted a study in Mumbai, India to better understand if DAP activities should be used in different cultures in the world and if they are used in different parts of the world. They interviewed several teachers in different parts of Mumbai to find out what they do in their preschool classrooms, and whether they implement DAP or if they tend to focus more on DIP.

It was found that the preschool teachers in Mumbai valued play as a means for teaching the children, but did not always have the resources to do so. Some of the teachers reported allowing the children to work at different learning centers of their choice for 30 minutes every day and having a balance to the day of free-play time, teacher-directed time, and group time. Teachers also reported valuing worksheets for the

children in their classes to complete. It was stated that “worksheets enable them to assess or evaluate children’s performance or use it as a recap tool” (Hedge & Cassidy, 2009, p. 373). Teachers said it was difficult to use DAP for a few reasons, one being that many parents did not support the school philosophy of learning through play, they were more academically oriented. Other reasons were that the size of the class was too large to implement play, there was a lack of materials and equipment in the school for the children to use, and there was a need for assistant teachers to help supervise and play with the children. Many schools in the United States do the same as this school in Mumbai, in working hard to maintain a balance with meeting the curriculum and keeping them developmentally appropriate. This study brought to question how much parents really know about what is developmentally appropriate, whether they have the time/resources to implement DAP in the home, or if they just do not know what is developmentally appropriate to do with their child.

Another study of DAP, the Preschool Curriculum Evaluation Research Consortium (PCER; 2008) initiative, was conducted to focus on and gain a better understanding of the impact that the intervention curricula that consists of programs such as Head Start, Even Start, and public preschool has on students’ phonological awareness, early language, reading and pre-reading, early mathematics knowledge, social skills and problem behaviors at the end of both preschool and kindergarten. These domains of skills and knowledge were examined because they are typically foretelling of academic success in the later years of elementary school (PCER, 2008; Ponitz & Rimm-Kaufmann, 2010).

The research initiative was made up of 14 individual evaluations of 14 preschool curricula that were serving children from low-income families, and was conducted by 12

research teams. These research teams chose and implemented the curricula at their individual research sites. All participants and the research sites were chosen by random assignment and were assigned randomly to either a control group or to a treatment group. The teachers from the sites assigned to the treatment group were trained on how to implement the curriculum chosen for them to use by the research team. There was a total of 2,911 children, 315 preschool classrooms, and 208 preschools from 16 different geographical locations. The assessment given to the children was administered individually as a pretest at the beginning of preschool, a posttest at the end of preschool, and another posttest at the end of kindergarten. The assessment measured four academic outcomes: phonological awareness, language, reading, and mathematics (PCER, 2008).

Preschool teachers were given behavior measures to fill out at the beginning and again at the end of the school year for the children in their classes. These behavior measures addressed the child's social competence, classroom performance, and behavior problems using three different scales: the Social Skills Rating System (SSRS; Gresham & Elliott, 1990), the Preschool Learning Behaviors Scale (McDermott, Green, Francis & Stott, 2000), and the SSRS Problem Behaviors Scale (Gresham & Elliott, 1990).

Kindergarten teachers were given a behavior measure to fill out at the end of the school year for each student in his or her class. This consisted of the SSRS Scale, the SSRS Problem Behavior Scale, and the Learning Behaviors Scale (PCER, 2008).

Along with filling out the behavior measures for the children, preschool teachers were interviewed about the frequency and the types of classroom activities, general classroom information, teacher attitudes and beliefs, and teacher background information like demographics, education, qualifications, and teaching experience. For kindergarten

teachers, instead of an interview, a questionnaire was given to them asking for background information, classroom resources and activities, instructional practices, views on kindergarten readiness, and their interactions with the parents of the children in their class. The parents of the children in the sample classrooms were interviewed to gather the information about the parent's and the child's demographics, health status, assessment of the child's accomplishments, the child's social skills, parenting practices, family-child activities, parent involvement with school, and the use of child care (PCER, 2008).

It was found that many of the curricula that were implemented had a positive effect on the phonological awareness, language, reading, and mathematics knowledge of the children. Some of the programs did not have much of an affect in preschool but did have a positive effect on the children in kindergarten. One such curriculum was the Early Literacy and Learning Model (ELLM). This curriculum is a literacy-focused curriculum designed for young children from low-income families and is designed to help make existing classroom curricula better by focusing on the children's early literacy skills and knowledge (PCER, 2008). The results of this study offered another way for parents and teachers to help children learn literacy skills for kindergarten. This study brought to question what other ways there may be to teach young children important skills such as literacy or mathematics that are not commonly used.

A key component to DAP is being aware of what each individual child needs and meeting those needs through the curriculum. At times, activities or the way in which one approaches the activities may need to be changed to meet a child's needs and to help him or her learn what s/he needs to learn. Knowing about all these different curriculum

options can help both teachers and parents see that there are different approaches that can be used to help a child grasp the knowledge of reading or mathematics.

In some countries in Europe, there is a push right now to recognize the importance of the early years of education as an imperative phase of a child's learning, and therefore, the curriculum should focus on the whole child and be appropriate for young children. It can be difficult for the countries to agree on curriculum that is appropriate for young children because there is such variation in age for when children begin school. Northern Ireland has the youngest constitutional school age in Europe: children usually begin primary school at the age of 4 years. Despite the difficulties of differing ages among the different countries in Europe, all of the countries are moving towards a more DAP and play-based approach to teaching in the early school years (Walsh, McGuinness, Sproule, & Trew, 2010).

Walsh and colleagues (2010) conducted a pilot study in more than 100 schools in Northern Ireland over a 2-year period. The purpose was to explore possible effects of a developmentally appropriate play-based curriculum, the Enriched Curriculum (EC), and to see if the curriculum eased the transition of 4- to 5-year-olds into primary schooling. The teaching methods in this curriculum focus on activity- and play-based learning instead of desk work, with the intent of further stimulating the children's creativity, curiosity, engagement with learning, social development, oral language skills, and laying the foundations in numbers with matching, counting, and sorting. There is also an emphasis on the magnitude of outdoor activities and play.

To evaluate the effectiveness of the EC, a multi-method design was employed. The first three years of formal schooling were used in the study. The changes in the

classrooms, specifically the changes the teachers made in their practices, were observed with the Quality Learning Instrument (Walsh et al., 2006). Psychometric measures were used to quantify the children's learning outcomes. The children in the classes a year ahead of the class being observed were used as the control group. There were about 950 children who participated in this study. Parents and teachers were interviewed and given surveys to gather their perceptions of the children's progress with the new curriculum and perceptions on the curriculum itself (Walsh et al., 2010).

There were several notable findings from the study. Many teachers who used the EC believed the EC was appropriate for all children and they discovered that the teachers themselves were rewarded for using the curriculum. Teachers reported that by using the EC, their interactions and discussions with the children in their classes increased and this gave them a greater chance to assess the individual children's needs. The study also found that children were more excited about school and settled into school more easily with the help of the DAP in the new curriculum (Walsh et al., 2010).

The concept of DAP is the basis of the current study. Knowing what is developmentally appropriate for young children helps shape the questions posed in the questionnaire/rating scale to determine what parents deem as important and if what they are doing at home are appropriate for young children. There has been little research on parents and DAP. However, having a better understanding of DAP and how it is used in the classroom can help parents know what to use at home with children and how early childhood educators guide parents. These methods can be changed to fit a home environment rather than a classroom environment. Bredekamp and Copple (1997) stated

that “a growing body of research indicates that more developmentally appropriate teaching in preschool and kindergarten predicts greater success in the early grades” (p. 3).

Transition Practices

Transition practices are an important aspect of developmentally appropriate practice and help children and their parents ease into a new school setting, with a new teacher, and new classmates, helping the children smoothly expand their microsystem and mesosystem. Rous, Hallam, McCormick, and Cox (2010) looked at public school preschool teachers’ practices in helping their students’ transition into kindergarten. The researchers examined a national sample of 2,434 preschool teachers, and gathered through Market Data Retrieval, a commercial mailing list service. The use of 25 transition practices to help students’ transition from preschool to kindergarten smoothly was investigated. Surveys were sent out to the teachers to gather the data for this study. The transition practices that were listed on the survey were divided into five categories: “(a) individualized practices before school starts, (b) whole class practices before school starts, (c) individualized practices after school starts, (d) whole class practices after school starts, and (e) coordination practices” (p. 21). The transitions were also categorized as either low-intensity practices or high-intensity practices. The findings showed that 12 of the 25 transition practices were used by a majority of the teachers. Some of the most common transition practices were sending letters home to the child’s parents, talking with the parents, and holding open houses before and after school started, making written records available for the parents, sending flyers home before school started, and teachers assisting contacts between parents of children in the class. It was

reported that the least commonly used transition practices were those that required personal contact between the child and teacher or parent and teacher before school started. For example, few teachers reported visiting the incoming child's preschool program or classroom, or sending a letter or calling the child prior to school beginning. It was found that training on specific transition practices was related to their use in the public school classrooms.

There are many possible transition practices as shown by Rous and colleagues (2010). Many of the transition practices teachers are not aware of and/or do not use. As teachers are made more aware, they then, in turn, can help parents be more aware. This could also go the other way. As parents become more aware of what is developmentally appropriate for their children and learn what some good transition practices are, they may then have a better idea of what to expect and request from their child's teacher.

The success of a child's transition into kindergarten can be predictive of the child's later success in school (Clark & Zygmunt-Fillwalk, 2008; Ray & Smith, 2010). It is the extent to which the new relationships, competencies, and expectations are made during the transition to kindergarten that is connected to the later school success and development of the child. It was important to know what transition practices are used most commonly for the current study to know what activities to ask parents they are doing at home with their children.

School Readiness

A child's transition into kindergarten can often go more smoothly when the child is ready cognitively, socially, and physically to enter kindergarten. DiBello and Neuharth-Pritchett (2008) identified five domains that should be met with regard to school readiness. Those five domains are: physical well-being and motor development, social and emotional development, approaches to learning, language development, and cognition and general knowledge. These areas of development are being discussed internationally by early childhood specialists as "the most significant domains in the development of young children" (DiBello & Neuharth-Pritchett, 2008, p. 257) and, as each of these areas are met, those working with young children in the preparation of entering kindergarten will be understanding and helping the "whole child" (p. 257).

In another study looking at children's school readiness, Lara-Cinisomo, Fuligni, Ritchie, Howes, and Karoly (2008) qualitatively explored what skills early childhood educators saw as important for children to possess before they enter kindergarten. Four focus groups were set up, with each containing early childhood educators from public center-based programs, private center-based programs, and family child care centers, for a total of 81 participants. To gather the data for this study, the researchers asked open-ended questions, used probing guidelines to find out about the educators' belief systems and ideas about what needs to be done to get a child prepared for kindergarten. Lara-Cinisomo and colleagues grouped the educators' answers into three levels: child, home, and teacher. These three levels are areas that need to be addressed to help prepare a child to enter kindergarten. Some areas for the child that need to be looked after and improved

before entering kindergarten are areas such as health and physical fitness, confidence, security, motivation to learn, social skills, knowing colors, numbers, letters, and shapes. The home environment needs to be an environment that promotes learning. Finally, the teacher-parent relationship needs to be one that contributes to the child's readiness to enter kindergarten and promote learning. Educators stated that parents need to help their children transition at home through discussions as well as prepare them emotionally, socially, and cognitively.

Parents can be instrumental in helping their child prepare to enter kindergarten (Berlin, Dunning, & Dodge, 2011; Burchinal, Vandergrift, Pianta, & Mashburn, 2010; Malsch, Green, & Kothari, 2011). By having a home environment that promotes the child's learning and exploring, the child can prepare for the academic challenges that school will bring. As parents talk to their child and help them understand what school will bring, children may know better what to expect when they enter kindergarten. In the current study, parents were asked what they were doing at home to help prepare their children for the transition into kindergarten. Teachers may also help parents prepare for their child to enter kindergarten. Lara-Cinisomo and colleagues (2008) stated that if parents and teachers collaborate and communicate with one another about the child and his or her preparation and success in kindergarten the child is more likely to have an easier transition.

Barbarin, Downer, Odom, and Head (2010), also looking at school readiness, did a study about the match between home and school in areas such as discipline styles, cultural beliefs, and practices with young children. The researchers' goal was to examine alignment between parents' beliefs about children and their support and control practices

to the child's teachers' beliefs and support and control practices. They stated that children who come from homes that do not match the school in the areas of expectations, rules, discourse styles, values, and modes of control have to balance the differences in each setting. This can at times put a burden on the children. Children who come from homes with similar cultural values, behavior expectations, and adult-child interactions are more likely to successfully adapt to the school environment than those who do not.

The sample for this study came from the National Center for Early Development and Learning's Multi-State Study of Pre-kindergarten (Multi-State Study) and consisted of 310 children, their families, and teachers in preschools from six different states in the United States (Barbarin et al., 2010). It was found that children whose parents and teachers promote autonomy, hold similar child-centered beliefs, and show warmth and support towards the child do experience better outcomes in kindergarten. However, when children have parents and teachers that are matched in the areas of being controlling, unsupportive, and adult-centered, they have a more difficult time transitioning and score lower on readiness indicators.

The researchers stated that teachers of ethnic minority children come to think that if they use strict discipline, imposing order, and frequent correction they are being more helpful to the child by more closely matching the parents' way of interacting and disciplining the child, but this is not always the case for young children. It is important that teachers are aware of the child's background and home life. Some children need a different approach at school than how they are being raised at home (Barbarin et al., 2010).

This study connects back to Bronfenbrenner's ecological model, where, to fully help a child transition into kindergarten, the whole child must be considered. As shown by this study, adult-child interactions can greatly affect the child and how they transition from preschool or home to kindergarten. As children have positive interactions with the adults in their life, they may have a more successful transition to kindergarten (Barbarin et al., 2010). Questions asking parents to rate the importance of their involvement with their child's teacher and classroom were asked in the questionnaire for the current study to better understand if parents recognize the importance of being involved with their child's education.

Children from minority families have performed more poorly in both literacy and mathematics than other children in their classes (Crosnoe & Cooper, 2010; Fantuzzo et al., 2007). It is very important that children learn all that they can in preschool and kindergarten because the things they learn at that time in life help build the foundations of knowledge that children need as they get older and progress through school. Fantuzzo and colleagues (2007) stated that "young children exposed to social and biological risk factors are at greater risk for not developing these foundational competencies, placing them at future risk of poor school performance" (p. 45).

Fantuzzo and others (2007) explored the impact the Head Start program has on young children from low-income families with regard to their school readiness for kindergarten and the long-term effects of the Head Start program. There were a couple of key variables that the researchers were examining. First, the researchers wanted to know if there was a relationship between classroom approaches and emotional and behavioral adjustments for children from low-income families. Second, was there was an

association between children's behavioral dimensions and early mathematics abilities?

Finally, the researchers explored if the previously mentioned variables predicted future academic performance. The sample consisted of 1,764 children who were registered at a large urban school district Head Start program.

Fantuzzo and colleagues (2007) measured the teachers' observations of children's maladaptive, adaptive, and learning behaviors in the preschool classrooms at the beginning of the school year. At the end of the school year they measured children's early mathematic abilities, early academic success, specifically, visual-motor adaptability, and gross motor skills. Language and cognition, classroom learning competence, specifically children's, emergent literacy, social and motor competencies, and numeracy were also measured at the end of the school year.

It was found that children who scored high on regulated behavior took instructional feedback from both teachers and peers better than those who scored low on regulated behavior. The high-scoring children on regulated behavior were also reported to possess low levels of aggressive behavior and reasonably high levels of persistence and attention span with learning tasks with peers and teachers. The findings suggest that if behavior regulation is addressed and modeled for those children who need help with it in preschool, they may perform better in their motor skills, cognitively, particularly in mathematics, and socially in later school years (Fantuzzo et al., 2007).

In another study done on school readiness, Graue, Clements, Reynolds, and Niles (2004) examined the contributions of the curriculum approach and parent involvement in the Title I Chicago Child-Parent centers and the short- and long-term effects socially and

academically on the children who participated in this preschool program. There were 989 children, ages 3 and 4, from 20 different sites, who participated in this study.

Head teachers in the Chicago Child-Parent Centers (CPC) who participated in this study completed a short survey which asked them to assess the organizational structure and the curriculum of the preschool program. The survey had the teachers report the specific instructional materials they used in class and the preschool's teaching philosophy through open-ended questions. The teachers were also asked to rate the extent to which the preschool used developmentally appropriate practices through the focus of children's basic skills, formal reading instruction, fieldtrips, large and small group activities, learning centers, and child- and teacher-directed activities. Parent involvement and participation were also rated by the teachers in the survey (Graue et al., 2004).

It was found that having a balanced and blended curriculum produced the most positive effects for the children. When the program had a mix between child-directed and teacher-directed activities, a basic skills approach, there was a stronger association between a child's kindergarten entry success and the child's high school completion. Children's reading achievement in elementary school and school readiness when entering kindergarten were also strongly correlated when using a balanced and blended curriculum. On the other side of things, a curriculum which used only child-initiated activities or only uses teacher-directed activities had a weaker correlation with children's long-term school performance. Parent involvement and participation in school activities, however, was found to be independently associated with a child's school readiness and performance (Graue et al., 2004).

Publicly funded preschools are becoming more popular in states across the US. They are being implemented to help ensure children's school readiness, and especially to help children who are at risk for school failure because of poverty. The rationale behind these preschool programs is to prepare 4- and 5-year-old children to enter school by introducing them to pre-academic material and to school activities. By being introduced to school activities and pre-academic material, the goal is to help children improve their social-behavioral competence and achievement skills that are related to school upon entering kindergarten. Burchinal and colleagues (2008) explored children's school readiness at preschool sites in six different states.

In each state, a stratified random sample of 40 different state-funded school sites, 240 sites in all, were selected for this sample. From there, one classroom per site was randomly selected, and four children were randomly selected from each of the selected classrooms. There were two observational measures of classroom quality that were used to collect the data for this study. Both measures were used in the fall and the spring for the preschool classes. For the kindergarten classes, one measure was used in the fall and the other measure was used in the spring. The measures individually assessed children's academic achievement, social skills, and behavioral adjustment (Burchinal et al., 2008).

It was found that the instructional quality of the preschool programs moderately predicted academic, social, and language performance of the children for up to one year after preschool. Burchinal and colleagues (2008) stated, "Children's academic gains were related to the extent to which teachers interacted positively with students and promoted the use of language in the classroom and provided scaffolding, coherent instruction, and contingent informative feedback" (p. 150). As the preschool teachers

encouraged and modeled for children how to use language in developing their reasoning skills, to communicate with the other children in the class, provided positive and clear discipline and supervision, interacted frequently with the children in the class, and gave positive and clear feedback, children seemed to learn and maintain their achievements in school longer.

As shown by the studies discussed in this section, a child's school readiness, both socially and academically, is related to the child's successful transition into kindergarten and their continued school success later in life.

Parent Involvement

Parent involvement in a child's transition into kindergarten can be very positive and beneficial for both the parent and the child. Barnett and Taylor (2009) looked qualitatively at parents' activities to assist their children's transition into kindergarten. In this study, the researchers wanted to know if there was a connection between parents' personal positive school experience and parents' involvement in their child's transition to kindergarten. The sample included 76 mothers whose oldest child was about to enter kindergarten. The participants were gathered through recruitment at the elementary schools kindergarten registrations, from Head Start programs, and by informational flyers sent out to the community. The participants were given questionnaires and interviewed to determine what they remembered about when they themselves were in kindergarten and transition practices the participants currently were using with their child. To conduct the interviews, home visits were made to the participants in the summer and fall before the child entered kindergarten. The topics of the questionnaires that were given to the

participants to complete were self-perceptions, transition practices, and school recollections. It was found that “mothers who recalled the school involvement of their parents more positively reported engaging in more academic transition activities with their own children, even after controlling for income, and current self-esteem and self-efficacy” (Barnett & Taylor, 2009, p. 146).

This study shows that if parents had a more positive school experience when they were young, they were more willing to be part of their own child’s schooling and help them transition easier into kindergarten. It was suggested that, even after controlling for income, self-esteem, and self-efficacy, parents who recalled their own parents being more involved in their transition into kindergarten and academic success were more engaged in their own child’s transition activities and academic activities throughout the school year (Barnett & Taylor, 2009).

La Paro, Kraft-Sayre, and Pianta (2003), also looking at parent involvement in kindergarten preparation and readiness, stated that “if parents have positive relationships with their children’s teachers, then teachers and parents can work more effectively together to support children’s educational progress, regardless of children’s skill levels” (p. 148). These researchers examined family and teacher involvement in transition activities with 95 high-risk children from two preschool programs. The teachers were given a questionnaire to complete and the parents were interviewed face-to-face three times during the preschool year and another two times during the kindergarten school year.

It was found that more than 50% of the families interviewed participated in nearly all of the transition activities that were offered to them. The most reported transition

activity for parents was taking their child to the kindergarten classroom before the school year started. The transition activity reported as used the least by parents was attending a kindergarten orientation with their child (La Paro et al., 2003). Preschool teachers reported having all of their children visit a kindergarten classroom and many of the preschool teachers also visited the kindergarten classroom. However, less than half of the kindergarten teachers reported holding a spring conference with parents of preschool children who would be entering kindergarten in the following school year. These findings suggest that, as teachers offer transition practices, such as spring orientation or parent conferences, parents will use them as their schedules allow and will find them helpful in preparing their child to enter kindergarten. By having transition activities like the ones mentioned earlier, parents can feel more involved in their child's transition and readiness for entering school.

From another perspective of parent involvement in kindergarten readiness, Wildenger, McIntyre, Fiese, and Eckert (2008) examined family daily routines, like bedtime, waking time and activities, and dinnertime, and how these routines affect children entering kindergarten. They stated that,

Routines often reflect broader family variables such as organization, flexibility, and warmth and are crucial for the psychological health and adjustment of family members. In particular, regular routines contribute stability and predictability to family life that greatly enhance child well-being and health. (p. 69)

As parents rely on the routines they have established in their families it can lessen some of the stress that can come with major changes in a family's life, like entering kindergarten, which has been labeled as a sensitive period for later school success.

There were two main foci for this study. The first was to see if the children transitioning to kindergarten had regular daily routines in place at home. The second was to examine to what extent these routines change when the child enters kindergarten. There were 132 parents/caregivers of children who were previously registered in early childhood education programs who participated in this study. The participants were sent a survey with a cover letter which asked for the family's demographics, the child's daily routines, and the experience the participants and the child had in preparing to enter kindergarten. In the survey, the participants were asked what the daily routines were for the child and the family and if the family and child were typically late, early, or on time for the routine. They were also asked if the routines would be able to stay the same once the child entered kindergarten or if the routines would need to change (Wildenger et al., 2008).

It was reported that less than half of the family routines were done on time. For instance, in families where parents were both employed, dinner was on time less frequently than with families where the parents were not both employed. Many parents stated that the routines for their children would change considerably when the child enters kindergarten in that the routines would be completed earlier in the day (Wildenger et al., 2008). Wildenger and colleagues stated that "the use of predictable family routines has the potential to serve as part of a family-based intervention plan to help smooth the transition to kindergarten by adding stability to family life at a time when routines might otherwise be disrupted" (p. 73).

Lahaie (2008), also studying parent involvement, examined a connection between school readiness of children of immigrants and parental involvement. Immigration

factors can greatly affect children's learning in school. Children are at a risk to perform poorly in school when their parents do not have a U.S. citizenship and/or do not speak English at home. But even with these challenges, parents can support their children in school by being involved in the classroom as a volunteer or by helping their child with their schoolwork they bring home.

Lahaie's (2008) hypothesis for this study was that differences between immigrants and native-born families with parental involvement are possibly connected to their differing educational outcomes. There are many barriers for parents who come from minority groups such as inflexible work schedules, lack of transportation, limited income, lack of childcare, and even being self-conscious about their level of schooling.

The nationally representative sample for this investigation consisted of 13,078 children total, with 2,678 of that sample being children of immigrants. The sample was pulled from the Early Childhood Longitudinal Study—Kindergarten Cohort of 1998 – 1999 (ECLS-K). Lahaie (2008) used two different samples, the first sample was all children from immigrant families, and the second was all children, immigrant and native born.

A questionnaire was administered over the phone to the participants in either English or Spanish. The questionnaire assessed the child's cognitive learning at home by looking at literacy activities (reading or telling stories to children at home), academic content activities (building projects, art, playing games, singing, learning about nature), and nonacademic content activities (doing chores, playing sports). The questionnaire also addressed cognitive learning outside the home. To do this there were four types of care arrangements that could have been used the year before kindergarten began: parental

care, center-based care, Head Start, and other forms such as a nanny, a babysitter, or daycare. They then looked at the child's schooling: whether it was private or public schooling. The direct parent-school relationship and the parents' country of origin and language was also discussed in the questionnaire (Lahaie, 2008).

Several things were discovered in analyzing the questionnaire responses. In the area of cognitive learning at home, it was found that all the activities listed under this section were notably more frequent with children from native born families than the children from immigrant families, except for how often the parent told stories to the child. It was found that a high percentage of immigrant parents had met with their child's teacher at least one time since school started. Children of immigrant parents who both do not speak English do considerably worse in both math and English in school than the native born children. However, parental involvement can have a very positive effect on children of immigrants as the parents have books, CDs, or music tapes in the home for the children to use (Lahaie, 2008).

When discussing the transition into kindergarten and readiness of young children for kindergarten, the whole child must be taken into account. Different aspects of a child's development, such as cognitive, emotional, and social development need to be examined. Also the child's family, his or her background, the teacher's approach to helping children and the way the teacher interacts with the child, need to be included when assessing the success of the child's transition to kindergarten. Children can have a smoother transition into kindergarten as the different aspects of their development are considered when preparing them to enter kindergarten. Each of the studies discussed helped shape the current study's research objectives which are to examine maternal

perceptions about their child's readiness to enter kindergarten and to determine whether these perceptions vary with child's birth status, to explore how mothers help their children prepare for kindergarten and to examine if these practices vary with child's birth status, and to determine if there is a relationship between the mother's education level and maternal perceptions and practices of kindergarten readiness. There has been very little research done on parents and children preparing for kindergarten, most has been done on teachers and children preparing for kindergarten. By exploring these objectives, more direction can be given to what should be examined with parents, as well as the resources that parents need to help them prepare their children for kindergarten.

CHAPTER III

METHODS

The research design is descriptive, and also investigated how different variables were related to mothers' perceptions of their child's readiness to enter kindergarten. Mothers' perceptions for their child to be ready to enter kindergarten are described and ways in which mothers help their children prepare for kindergarten are explored. How mothers' perceptions differ in relation to their educational level and the birth status of the focus child in the questionnaire are also examined.

Participants

Participants included 33 mothers of children who had enrolled their child during the 2010-2011 academic year in Utah State University's Adele and Dale Young Child Development Laboratory, a developmentally appropriate half-day preschool. All children would be entering kindergarten in the following academic year. In all, 60 families received questionnaires and letters asking a parent to complete and return the survey. Only mothers responded. Of the 33, 13 mothers were completing the questionnaire for a first-born child, and 20 of the mothers were completing the questionnaire for a later-born child. There were 5 mothers who reported their highest education as a high school degree, 21 mothers had a bachelor's degree, and 7 of the mothers who responded had a master's degree. Family sizes ranged from two to five children.

Instrument

The instrument used was a questionnaire developed specifically for this study (see Appendix A). The questions used were taken from an existing questionnaire designed to learn what practices kindergarten teachers value and view as important in children when they enter kindergarten (Burts, Buchanan, & Benedict, 2001). It included a demographic section at the beginning of the questionnaire asking about the parent's gender, age, educational background, number of children in the family, birth status of the child the questionnaire was filled out for, and ethnicity. The next part of the questionnaire contained questions measured with a 5-point Likert scale. Prior to administration, professional early childhood educators examined the questionnaire for face validity. The first section of the questionnaire asked mothers what they considered to be important for their child to do in preschool in preparation for kindergarten. Response ratings for this section ranged from one (not at all important) to five (extremely important). Chronbach's alpha for the first section of the questionnaire was 0.678. The second section of the questionnaire had parents rate the importance of various activities they may have done at home with their child to help them prepare for kindergarten. On this section the ratings ranged from 1 (almost never - less than monthly) to 5 (very often - daily). Chronbach's alpha for the second section of the questionnaire was 0.668. A higher mean score represented a DAP and a lower mean score represented a less developmentally appropriate practice. Of the 39 questions in the questionnaire, 11 of them were reverse coded, to keep the results consistent that a higher mean score representing a more developmentally appropriate practice.

In the final part of the questionnaire there were three open-ended questions that mothers were asked to answer. The three questions were “What do you feel is most important for your child to know or to do in order to be ready to enter kindergarten?,” “What do you feel your child’s preschool IS doing in order to help your child prepare to enter kindergarten?,” and “What do you feel your child’s preschool COULD be doing to help your child prepare to enter kindergarten?”

There were two threats to internal validity that had been identified. The first is history; the participants’ area of education or experience with young children and with the education system in their geographic area may have played a part in how they answered the questions on the questionnaire. To help control for that, in part, mothers were asked what their educational background was. The relationship between the mother’s educational level and what they know or feel is developmentally appropriate for their child was explored. For example, if the mother had a degree in education or human development then perhaps they already knew what is developmentally appropriate for children. By the same token, if the mother has a degree in another unrelated field, they may not be as aware of DAP. The second threat to internal validity was maturation. There could be a maturational effect with the mothers if they have already had children attend kindergarten. The mothers may have already learned what is expected of children when they start kindergarten and this would help them prepare specifically for kindergarten. In the questionnaire mothers were asked how many children were in the family and the birth status of the child who would be entering kindergarten to help control for this threat.

Procedure

A letter explaining the study (Appendix B) was sent home with the questionnaire to mothers whose children were enrolled at the Child Development Laboratory in January prior to the school year when the child entered kindergarten. It included a self-addressed stamped envelope. On the cover of the questionnaire there was a guide for the mothers to create a code to maintain the anonymity of the participants should follow up data collection become necessary.

Human Subjects

The study was approved by the Institutional Review Board prior to implementation. The questionnaire responses were anonymous. Consent was obtained from the participants by the return of the filled out questionnaires. There were no anticipated risks to the participants. The data are currently kept locked in a secure location.

CHAPTER IV

RESULTS

This chapter discusses the results for each of the three research objectives. Descriptive analyses will be presented first to show mothers' perceptions and practices for children's kindergarten readiness. *ANOVA* and *t* test results will then be presented to further explore the relationships between mothers' perceptions and practices for kindergarten readiness and the specific demographics of the participants.

Demographics

All 33 of the participants were females between the ages of 26 years and 43 years of age. One of 33 participants was Hispanic, the other 32 were White. Of the participants, 5 had a high school degree, 21 had a bachelor's degree, and 7 had a master's degree. There was a lot of variability in the discipline area where degrees were earned. The four most common areas were Elementary Education/Early Childhood Education; Family, Consumer, and Human Development; Business; and Nursing. The number of children in each family ranged from 2-5, with children's ages ranging from 2 months to 18 years. Of the 33 participants, 13 of children having the questionnaire filled out for them were the first-born and 20 of the children were later-born.

Research Objective 1

The first research objective was to examine maternal perceptions about their child's readiness to enter kindergarten and to determine whether these perceptions vary

with child's birth status. Means were calculated for all questions and analyses were conducted at the item-level. Several items were reverse-coded such that a higher mean score indicated a higher degree of developmental appropriateness of parents' responses (with possible range from 0-5). The question with the highest mean, where parents were most developmentally appropriate ($M = 4.88, SD = .33$) was "It is ____ for me as a parent/guardian to be involved in my child's education." The question with the lowest mean, where parents were least developmentally appropriate ($M = 2.45, SD = .94$) was "Instruction in letter and word recognition is ____ in preschool" (reverse-coded).

To explore the relationship between maternal perceptions and whether or not the target child was first-born or later-born, the means for each group were compared using an independent sample t test. There were no statistically significant differences between the maternal perceptions of the two groups. However, the two questions with the biggest differences were, first, "It is ____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags)." The means between the two groups were 3.92 ($SD = .95$) for the first-born group and 3.50 ($SD = .83$) for the later-born group, with a difference of .42. In the case of this item, perceptions of the parents of the first-born group are more developmentally appropriate than the later-born group.

The second notable question says, "It is ____ for activities to be responsive to my child's interests." The mean for parents who were responding for their first-born child was 4.31 ($SD = .75$). The mean for parents responding for later-born children was 4.05 ($SD = .76$). Where the first-born group's mean was .26 higher than the later-born group,

Table 1

Items with Biggest Difference in Means Between Parents of First-Born and Later-Born Children

Item(#)	Born	Mean ^b	SD
Workbooks are ____ for my child to do before entering kindergarten. (7) ^a	First	4.07	.86
	Later	3.55	1.15
It is ____ for my child to color with pre-drawn forms. (10) ^a	First	3.84	1.07
	Later	3.35	1.23
It is ____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags). (3)	First	3.92	.95
	Later	3.50	.83
It is ____ for my child to dictate stories to me. (12)	First	4.08	.86
	Later	3.80	.83

^a Reverse coded ; ^b 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important
Findings not statistically significant

once again parents of the first-born group are slightly more developmentally appropriate than the later-born group in seeing the importance of responding to their child's interests. Table 1 shows the four items with the biggest mean differences between mothers of first-born children and mothers of later-born children.

Tables 2 and 3 display the four items with the highest means (the most developmentally appropriate responses) and the four lowest means (the least developmentally appropriate responses) from the first section of the questionnaire (what parents see as important for their children to know and be able to do when they enter kindergarten). The means and the standard deviations for each of the items are also listed. Each table also shows a mean and standard deviation of the combined responses to the four items in that category.

Of note from these two tables are the total means for each table: in Table 2, the total mean is 4.80; and in Table 3, the total mean is 3.04. A mean of 3.04 for Table 3, the

least developmentally appropriate items, is still fairly high. A higher mean indicates a more developmentally appropriate response. The Table 2 mean of 4.80 is also very high, suggesting parents' perceptions being mostly developmentally appropriate. It was also interesting there is more variability in the responses mothers gave to the questions in the least developmentally appropriate items. There is not much variability in the responses

Table 2

Maternal Perceptions of Kindergarten Readiness: Most Developmentally Appropriate

Items

Item (#)	Mean ^a	SD	R
It is _____ for me as parent/guardian to be involved in my child's education. (15)	4.88	.33	1
It is _____ to read stories to my child daily. (11)	4.85	.36	1
It is _____ to provide many opportunities for developing my child's social skills (i.e. cooperating, helping, and talking) with their peers. (13)	4.79	.42	1
It is _____ for strategies like setting limits, problem solving, and redirection to be used to help guide my child's behavior. (16)	4.70	.53	2
Total	4.80	.30	2

^a 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important
Findings not statistically significant

Table 3

Maternal Perceptions of Kindergarten Readiness: Least Developmentally Appropriate

Items

Item (#)	Mean ^b	SD	R
Instruction in letter and word recognition is _____ in preschool. ^a (2)	2.45	.94	3
As an evaluation of children's readiness for kindergarten, achievement tests are _____. ^a (1)	2.73	1.01	4
It is _____ for my child to write by inventing their own spelling. (9)	3.42	.97	3
It is _____ for my child to color with pre-drawn forms. ^a (10)	3.55	1.18	4
Total	3.04	.68	4

^a Reverse coded ; ^b 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important
Findings not statistically significant

for the most developmentally appropriate items.

Items in Part 1 of the questionnaire were then grouped into categories based on conceptual areas: literacy perception, types of school work perception, and parental involvement. Table 4 shows which questions were included in each category. The literacy perception category contained six questions about reading and writing activities that parents may see as important. The types of school work perception category includes six questions about the various forms of school work children parents perceived children could and/or should do both at home and at school. The parent involvement category consists of two questions about the parent's participation in the child's education.

The mean for the literacy perceptions category was 3.69, while the mean for the types of school work perceptions was also high at 4.05. The highest mean of the three was for the parental involvement category, at 4.67. All three of these means suggest that parents' perceptions in each category for kindergarten readiness are developmentally appropriate.

Research Objective 2

The second research objective was to explore how mothers help their children prepare for kindergarten and to examine if these practices varied with child's birth status. Analyses of means were conducted at the item-level for activities that are provided at home. The question with the highest mean was, "Do movement activities using large muscles (e.g., balancing, running, jumping)." The mean for this question was 4.58, with

Table 4

Mothers' Perceptions of Kindergarten Readiness: Categories with Items

Category	Item (#)	Mean ^b	SD	R
Literacy perceptions	• Instruction in letter and word recognition is ___ in preschool. (2)	3.69	.35	1.50
	• It is ___ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags). (3)			
	• It is ___ that children have the ABC's memorized when entering kindergarten. (4)			
	• It is ___ for my child to write by inventing their own spelling. (9)			
	• It is ___ to read stories to my child daily. (11)			
	• It is ___ for my child to dictate stories to me. (12)			
Types of school work perceptions	• It is ___ for activities to be responsive to my child's interests. (5)	4.05	.55	2.00
	• It is ___ for children to work individually at desks or tables most of the time. (6)			
	• Workbooks are ___ for my child to do before entering kindergarten. (7)			
	• It is ___ for children to create their own learning activities (e.g. cut their own shapes, decide on the steps to perform an experiment, plan their own creative drama, art, and computer activities). (8)			
	• It is ___ for my child to color with pre-drawn forms. (10)			
	• It is ___ for my child to have outdoor time. (14)			
Parent involvement	• It is ___ for me as parent/guardian to be involved in my child's education. (15)	4.67	.44	2.00
	• It is ___ for me as parent/guardian to be actively involved with my child's teacher and school program. (17)			

^a Reverse coded; ^b 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important

a standard deviation of .87, showing that parents do have their children frequently engage in many large motor activities. The question with the lowest mean, 2.39, with a standard deviation of .86, was “Have the opportunity to learn about people with special needs (e.g., a character in a book).”

When examining mean differences in mothers responding for their first-born child and responding for a later-born child, there were two questions whose means were most notable. The first question, “Get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent to another room).” The mean for parents of first-born children was 2.69 ($SD = .95$) and the mean for parents of later-born children was 3.05 ($SD = 1.15$), suggesting parents of later-born children may use time-out more than parents of first-born children. This difference in the means is the second biggest comparing first-born and later-born children in this study.

The biggest mean difference between the two groups (.66) was for the question “Circle, underline, and/or mark items on worksheets.” The mean for parents of first-born children was 4.31 ($SD = .95$) and the mean for parents of later-born children was 3.65 ($SD = 1.23$). This item was reverse coded. Having children work on worksheets is not developmentally appropriate for young children. Since the mean for parents of first-born children was higher it suggested that parents of first-born children may have their children working on worksheets less frequently than parents of later-born children. Table 5 shows the four biggest mean differences on the individual items between mothers of first-born children and mothers of later-born children.

Table 5

*Items with Biggest Difference in Means Between Parents of First-Born and Later-Born**Children*

Item(#)	Born	Mean ^b	SD
Circle, underline, and/or mark items on worksheets. (11) ^a	First	4.31	.95
	Later	3.65	1.23
Practice handwriting on lines. (14) ^a	First	4.31	.75
	Later	3.70	1.22
Solve real math problems using real objects. (21)	First	3.08	.95
	Later	2.55	1.05
Use flashcards with ABCs, sight words, and/or math facts. (12) ^a	First	4.08	.86
	Later	3.65	1.18

^a Reverse coded ; ^b 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)
Findings not statistically significant

Tables 6 and 7 illustrate the four questions with the highest means and the four questions with the lowest means on the second section of the questionnaire (what parents are doing with their children to prepare them for kindergarten). The questions with the highest means are the most developmentally appropriate in terms of what parents are doing with their children to prepare for kindergarten. The lowest means show activities that parents are doing less frequently, but which are also important for kindergarten preparation. Each table also shows a mean and standard deviation of the four items within that category.

Both of the total means for Tables 6 and 7 are lower than the total means for Tables 2 and 3. This suggests that parents' perceptions of kindergarten readiness are mostly developmentally appropriate, but, for some reason, parents may not act on those perceptions as frequently.

Table 6

Maternal Practices of Kindergarten Readiness: Most Developmentally Appropriate Items

Item (#)	Mean ^a	SD	R
Do movement activities using large muscles (e.g., balancing, running, jumping). (8)	4.58	.87	4
Has his/her work displayed. (3)	4.42	.71	2
Sing, listen, and/or move to music. (7)	4.33	.85	4
Play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks). (5)	4.00	.87	3
Total	4.33	.56	4

^a 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)
Findings not statistically significant

Table 7

*Maternal Practices of Kindergarten Readiness: Least Developmentally Appropriate Items**Items*

Item (#)	Mean ^b	SD	R
Have the opportunity to learn about people with special needs (e.g., a character in a book). (17)	2.39	.86	4
Participate in rote counting. ^a (13)	2.56	1.24	2
Solve real math problems using real objects. (21)	2.76	1.03	4
Do activities that integrate multiple subjects (reading, math, science, social studies, etc.). (22)	2.88	1.17	4
Total	2.62	1.08	4

^a Reverse coded; ^b 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)
Findings not statistically significant

The questions from Part 2 of the questionnaire were then divided into categories, as with Research Objective 1. The categories were literacy practices, types of school work practices, math practices, and guidance, with means of 2.99, 3.29, 2.95, and 3.09 respectively. The literacy practices category contained four questions of what parents were doing at home to help their children learn to read and write. The types of school work practices category included four questions about the different learning opportunities

children had at home. The math practices category consisted of two questions about activities that could be used at home to help children learn math concepts. The guidance category had two questions of what parents did at home with regard to discipline and guidance. Table 8 illustrates the questions in each category along with each category's mean and standard deviation. The category with the mean suggesting the most developmentally appropriate practice on the part of mothers was in the area of types of school work.

Research Objective 3

The final research objective was to determine if there was a relationship between the mother's education level and maternal perceptions and practices of kindergarten readiness. Maternal education was divided into three levels: high school, bachelor's, and master's. For most of the demographics, such as gender, age, ethnicity, and the number of children in each family, the sample variability was too small to investigate any statistical differences.

After examining the means from Parts 1 (perceptions) and 2 (practices) of the questionnaire, the means were divided by the mothers' educational levels. Then the overall four highest means and the four lowest means from each part of the questionnaire were determined. In Part 1 of the questionnaire, mothers with a high school degree had the highest mean (5.00) of all groups for any question: "It is ____ to provide many opportunities for developing my child's social skills (i.e., cooperating, helping, and

Table 8

Mothers' Practices for Kindergarten Readiness: Categories with Items

Category	Item (#)	Mean ^b	SD	R
Literacy practices	• Experiment with writing by drawing, copying, and using their own invented spelling. (4)	2.99	.45	2.00
	• Use commercially-prepared phonics activities. ^a (10)			
	• Use flashcards with ABC's, sight words, and/or math facts. ^a (12)			
	• Practice handwriting on lines. ^a (14)			
	• Select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiments, etc.). (2)			
Types of school work practices	• Circle, underline, and/or mark items on worksheets. ^a (11)	3.29	.42	1.80
	• Sit and listen for long periods of time until they become restless and fidgety. ^a (16)			
	• Have the opportunity to learn about people with special needs (e.g., a character in a book). (17)			
	• Use manipulatives (e.g., pegboards, Legos, and Unifix Cubes). (9)			
Math practices	• Participate in rote counting. ^a (13)	2.95	.63	2.33
	• Solve real math problems using real objects. (21)			
	• Receive rewards as incentives to participate in activities which they are reluctant participants. (18)			
Guidance practices	• Get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent to another room). ^a (19)	3.09	.82	3.50

^a Reverse coded; ^b 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)

talking) with their peers.” Mothers with a bachelor’s degree had the next two highest means (4.95). The first question was “It is ____ to read stories to my child daily,” and the second question that had a mean of 4.95 was “It is _____ for me as parent/guardian to be involved in my child’s education.” This question also had another of the highest means (4.80) for mothers with a high school degree. The final highest means was (4.80) for mothers with a high school degree in response to the question “It is ____ for my child to have outdoor time.”

Mothers with a high school degree and a master’s degree had the lowest mean (2.00) in the first part of the questionnaire for the same question “Instruction in letter and word recognition is ____ in preschool.” Mothers with a bachelor’s degree had the lowest mean (2.57) for the question “As an evaluation of children’s readiness for kindergarten, achievement tests are ____.” Mothers with a high school degree had the next lowest mean (2.60) for the previous question. Mothers with a high school degree also had a mean of 2.60 for the question “It is ____ for my child to color with pre-drawn forms.” All of the items with the lowest means were reverse coded. Table 9 shows the four highest means and Table 10 shows the four lowest means from the first part of the questionnaire.

The means for the second part of the questionnaire, asking parents what they do with their children to help prepare them for kindergarten were more varied. Mothers with a master’s degree had the highest mean (5.00) in response to the question “Do movement activities using large muscles (e.g., balancing, running, jumping).” Mothers with a bachelor’s degree also had one of the highest means (4.57) for the previous question.

Table 9

Mothers' Perceptions: Highest Item Means with Educational Level

Item (#)	Educ.	Mean ^a	SD	R
It is ____ to provide many opportunities for developing my child's social skills (i.e. cooperating, helping, and talking) with their peers. (13)	H.S. degree	5.00	.00	0
It is ____ to read stories to my child daily. (11)	Bach. degree	4.95	.22	1
It is ____ for me as parent/guardian to be involved in my child's education. (15)	Bach. degree	4.95	.22	1
It is ____ for me as parent/guardian to be involved in my child's education. (15)	H.S. degree	4.80	.45	1
It is ____ for my child to have outdoor time (14)	H.S. degree	4.80	.45	1

^a 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important
Findings not statistically significant

Table 10

Mother's Perceptions: Lowest Item Means with Educational Level

Item (#)	Educ.	Mean ^b	SD	R
Instruction in letter and word recognition is ____ in preschool. (2) ^a	H.S. degree	2.00	1.00	2
Instruction in letter and word recognition is ____ in preschool. (2) ^a	Mast. degree	2.00	1.15	3
As an evaluation of children's readiness for kindergarten , achievement tests are _____. (1) ^a	Bach. degree	2.57	.87	4
As an evaluation of children's readiness for kindergarten, achievement tests are _____. (1) ^a	H.S. degree	2.60	1.52	3
It is ____ for my child to color with pre-drawn forms. (10) ^a	H.S. degree	2.60	1.34	3

^a Reverse coded; ^b 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important
Findings not statistically significant

Mothers with a master's degree had the next highest mean (4.71) in response to the question "Sing, listen, and/or move to music." The last of the highest means (4.60) was for mothers with a high school degree in response to the question "Has his/her work displayed." The last question of the highest means (4.57) was mothers with a master's degree answering the question "Play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks)."

All four of the lowest means in the second part of the questionnaire were fairly close together. The lowest mean (1.29) was for mothers with a master’s degree in response to the question “Participate in rote counting.” The next of the lowest means (2.00) was from mothers with a high school degree responding to the question “Solve real math problems using real objects.” The next mean (2.20) was also for mothers with a high school degree in response to the question “Do activities that integrate multiple subjects (reading, math, science, social studies, and so forth).” The last of the lowest means (2.24) was from mothers with a bachelor’s degree in response to the question “Have the opportunity to learn about people with special needs (e.g., a character in a book).” Table 11 shows the four items with the highest means and Table 12 shows the four items with the lowest means from the second part of the questionnaire.

Table 11

Mothers’ Practices: Highest Item Means with Educational Level

Item (#)	Educ.	Mean ^a	SD	R
Do movement activities using large muscles (e.g., balancing, running, jumping). (8)	Mast. degree	5.00	.00	0
Sing, listen, and/or move to music. (7)	Mast. degree	4.71	.48	1
Has his/her work displayed. (3)	H.S. degree	4.60	.54	1
Do movement activities using large muscles (e.g., balancing, running, jumping). (8)	Bach. degree	4.57	.67	2
Play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks). (5)	Mast. degree	4.57	.53	1

^a 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)

Findings not statistically significant

Table 12

Mothers' Practices: Lowest Item Means with Educational Level

Item (#)	Education	Mean ^b	SD	R
Participate in rote counting. (13) ^a	Mast. degree	1.29	.48	1
Solve real math problems using real objects. (21)	H.S. degree	2.00	1.00	2
Do activities that integrate multiple subjects (reading, math, science, social studies, etc.). (22)	H.S. degree	2.20	1.09	2
Have the opportunity to learn about people with special needs (e.g., a character in a book). (17)	Bach. degree	2.24	.53	2

^aReverse coded ; ^b 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)

Findings not statistically significant

Table 13 shows the means, standard deviations, and ranges for the three maternal educational levels with each of the kindergarten readiness categories, as discussed under Research Objectives 1 and 2. One-way analyses of variance examined the relationship between maternal responses in these categories and level of education. No statistically significant relationships emerged. The difference between the maternal responses in the math category approached significance with $F(32) = 3.19, p = .055$. Mothers with a bachelor's degree had a higher mean ($M = 3.15, SD = .57$) than did mothers with a high school degree ($M = 2.60, SD = .64$) or a master's degree ($M = 2.61, SD = .65$). This suggests that mothers with a bachelor's degree may do the most with their children when preparing them for kindergarten with regard to math activities.

There were three open-ended questions at the end of the questionnaire that mothers were asked to answer. The three questions were "what do you feel is most important for your child to know or to do in order to be ready to enter kindergarten?," "what do you feel your child's preschool IS doing in order to help your child prepare to enter kindergarten?," and "what do you feel your child's preschool COULD be doing to

Table 13

*Maternal Perceptions and Practices: Educational Levels with Kindergarten Readiness**Categories*

Developmental area	Education level	<i>N</i>	Mean ^a	<i>SD</i>	<i>R</i>
Research objective 1					
Literacy perceptions	High school	5	3.50	.31	.83
	Bachelor's	21	3.77	.37	1.50
	Master's	7	3.62	.27	.67
	Total	33	3.69	.35	1.50
Types of school work perceptions	High school	5	3.83	.68	1.50
	Bachelor's	21	4.12	.56	2.00
	Master's	7	4.02	.45	1.33
	Total	33	4.06	.55	2.00
Parent involvement	High school	5	4.70	.45	1.00
	Bachelor's	21	4.71	.29	1.00
	Master's	7	4.50	.76	2.00
	Total	33	4.67	.44	2.00
Research objective 2					
Mean ^b					
Literacy practices	High school	5	3.15	.45	1.25
	Bachelor's	21	3.04	.38	1.25
	Master's	7	2.75	.61	1.75
	Total	33	2.99	.45	1.75
Types of school work practices	High school	5	3.20	.32	.80
	Bachelor's	21	3.35	.45	1.80
	Master's	7	3.23	.44	1.20
	Total	33	3.29	.42	1.80
Math practices	High school	5	2.60	.64	1.67
	Bachelor's	21	3.16	.57	2.00
	Master's	7	2.62	.65	1.67
	Total	33	2.96	.64	2.00
Guidance practices	High school	5	3.30	.84	2.00
	Bachelor's	21	2.62	.69	3.50
	Master's	7	3.07	.45	1.00
	Total	33	2.82	.71	3.50

^a 1 = Not at all important, 2 = Not very important, 3 = Fairly important, 4 = Very important, 5 = Extremely important

^b 1 = Almost never (less than monthly), 2 = Rarely (monthly), 3 = Sometimes (weekly), 4 = Regularly (2-4 times a week), 5 = Very often (daily)

help your child prepare to enter kindergarten?" Table 14 shows the three open-ended questions with the three highest responses to each question.

In response to the first question, "What do you feel is most important for your child to know or to do in order to be ready to enter kindergarten?" the majority of mothers responded by identifying with different types of learning. The most common

responses were 18 mothers saying literacy, 19 mothers reporting social skills, and 10 mothers responding with recognizing numbers. In answer to the second open-ended question, “What do you feel your child’s preschool IS doing in order to help your child prepare to enter kindergarten?” 25 mothers stated social skills, 4 mothers reported literacy, and 4 mothers said problem-solving. Not many mothers responded to the third question “what do you feel your child’s preschool COULD be doing to help your child prepare to enter kindergarten?” Of those who did write a response, most said they wanted to see more emphasis on recognizing and writing words.

Table 14

Mothers Responses to Open-ended Questions

Question and Response	Number
What do you feel is most important for your child to know or to do in order to be ready to enter kindergarten?	
Social Skills	19
Literacy	18
Recognizing numbers	10
What do you feel your child’s preschool IS doing in order to help your child prepare to enter kindergarten?	
Social Skills	25
Literacy	4
Problem Solving	4
What do you feel your child’s preschool COULD be doing to help your child prepare to enter kindergarten?	
Recognize and write words	7
Identify letters with names and sounds	4
More academic – teacher directed	2

CHAPTER V

DISCUSSION

The purpose of this study was to examine maternal perceptions about their child's readiness to enter kindergarten and to determine whether these perceptions vary with child's birth status, to explore how mothers help their children prepare for kindergarten and to examine if these practices vary with child's birth status, and to determine if there was a relationship between the mother's education level and maternal perceptions and practices of kindergarten readiness.

To investigate these research objectives, a questionnaire was distributed to 60 families who had enrolled their 4- and 5-year-old children in the Child Development Laboratory at Utah State University during the 2010-2011 academic year, the year prior to the child entering kindergarten. One parent per household was asked to complete and return the questionnaire with the self-addressed stamped envelope that was included with the questionnaire. All of the 33 questionnaires that were returned were completed by mothers.

Research Objective 1

The first research objective was to examine maternal perceptions about their child's readiness to enter kindergarten and to determine whether these perceptions vary with child's birth status. Initially, means were calculated for each item in part one of the questionnaire. The highest mean calculated (4.88) was for the question "It is ____ for me as parent/guardian to be involved in my child's education." The higher the mean, the

more developmentally appropriate the mother's response. This mean suggests that mothers recognize the importance of being involved in their child's education in order to help their child succeed. It has been found that mothers who have positive relationships with their children's teachers work more successfully at helping and supporting children in their educational progress (La Paro et al., 2003). Also, NAEYC (2009) stated that a child's development is most advantageous when the child has consistent and secure relationships with attentive and responsive adults. When parents are involved in their child's education, they may know more of what the child is learning in school and can have a better understanding of how to help the child succeed. The parents can do their part at home by helping the child further comprehend and remember, and can also reinforce what is being learned at school. Children can have a smoother transition into kindergarten as parents are more involved in doing transition and kindergarten readiness activities with their children.

Bronfenbrenner's ecological model also explains the importance of parent involvement in a child's education by showing that there is more to a child than what you see. Each person has a microsystem, which is the child's most immediate world: their immediate family, classmates, teachers, and close friends. There is also the mesosystem, which is how the things in the microsystem work together. In order for a child to have a successful transition into kindergarten, the things in the child's mesosystem, like the parents and the teachers, need to communicate and work together.

The lowest mean found (2.45) was for the question "Instruction in letter and word recognition is _____ in preschool." This item was reverse coded. When parents responded, many said it is important for children to receive instruction in letter and word

recognition in preschool, which is not considered as developmentally appropriate for this age group. Where it is important that children receive a well-rounded education when preparing to enter kindergarten (NAEYC, 2009), parents' responses to this question suggest that parents may be more focused on the academics of their child's education than they need to be for the age and developmental level of their child. Parents may also see that, in general, there is more of a focus on academics in kindergarten than there is in preschool, and they may feel that the need to emphasize academics such as worksheets and formal instruction in letter and word recognition with their child.

The questions from the first part of the questionnaire were divided into different categories based on their content. The categories were literacy perceptions, types of school work perceptions, and parent involvement. The literacy perceptions and types of school work perceptions categories each contained six questions where mothers were asked to rate the importance of activities that help prepare their children for kindergarten. The parent involvement category contained two questions asking mothers to rate the importance of different forms of involvement in their child's education.

There were some interesting trends found when examining the four most developmentally appropriate responses and the four least developmentally appropriate responses (Tables 2 and 3). In the four most developmentally appropriate responses, it was found that two of the responses are about social development, one is about parent involvement, and the fourth is about literacy. In the four least developmentally appropriate responses two are about literacy and the other two are about types of school work. The literacy responses stood out because they are in both the least developmentally appropriate and the most developmentally appropriate responses. This

suggests that parents understand the importance of literacy in preparing their child for kindergarten, but they may not understand the full spectrum of literacy in kindergarten preparation. Ponitz and Rimm-Kaufman (2011) found, in their study of literacy development, that teachers who were more experienced were more likely than new teachers to provide children with teacher-managed meaning-focused activities, instead of having children read books on their own. This is something that can also be applied at home. If parents will sit down and read a book with their child, it may be more effective in the child's literacy development, than having the child look at a book on his/her own. It was found that mothers in the current study saw the importance of reading with their child. The second highest mean (4.85) for individual items in the entire study was in response to the importance of reading with their children.

Of note from the four most developmentally appropriate and the four least developmentally appropriate findings, there is more variability in mothers' responses in the least developmentally appropriate items than in the most developmentally appropriate items. This suggests that there is a fairly good understanding of what is developmentally appropriate in preparing children for kindergarten, but there is more uncertainty of what is less developmentally appropriate for preparing children for kindergarten.

Mothers' responses were also examined based on if the child they were responding for was a first-born child or a later-born child. There were some interesting trends found in these responses as well, despite the lack of statistical significance. With mothers' perceptions, the means were slightly higher overall for mothers of first-born children than for mothers of later-born children in reporting both developmentally appropriate and developmentally inappropriate activities. The means with the largest

gaps between mothers of first-born children and mothers of later-born children were examined. There were two items that stood out because of the large differences between the means. The first of these two questions was, “Workbooks are ____ for my child to do before entering kindergarten.” Mothers of first-born children had a mean of 4.07 and mothers of later-born children had a mean of 3.55. This item was reverse coded. Having children use workbooks is less developmentally appropriate for young children to do to learn the concepts they need to know for kindergarten. NAEYC (2009) stated that for children to have successful outcomes in school they need to be a part of meaningful, active, and connected learning. Children need to experience and have hands-on learning to fully grasp the way the world works. By using workbooks, children are not getting that hands-on experience. It would be more beneficial for young children to learn math by using actual objects, rather than figuring out math problems on a worksheet, or to learn their colors and the names of colors by seeing labels on the colors around the classroom, or to compare and contrast real objects rather than pictures of objects.

The second question that stood out was, “It is ____ for my child to color with pre-drawn forms.” Mothers of first-born children had a mean of 3.84 and mothers of later-born children had a mean of 3.35. This item was reverse coded because it is a less developmentally appropriate activity. NAEYC (2009) said that “children’s experiences shape their motivation and approaches to learning, such as persistence, initiative, and flexibility; in turn, these dispositions and behaviors affect their learning and development” (p. 15). It is important that children explore their own creativity in their art work, or to create their own rules for games in order to have those experiences they need to learn about the world around them.

An interesting finding from the four questions with the largest gaps between the means of mothers of first-born children and mothers of later-born children is that two of the questions are more developmentally appropriate and two of the questions are less developmentally appropriate. It suggests that mothers may not be completely aware of what children do in kindergarten until they have children enter kindergarten, where less developmentally appropriate activities may be conducted. Once they see what is done in kindergarten, they may feel they need to do things like worksheets or color with pre-drawn forms to prepare other children for kindergarten.

Research Objective 2

The second research objective was to explore how mothers help their children prepare for kindergarten and to examine if these practices vary with child's birth status. Means were again calculated to meet this objective. The question with the highest mean for this section (4.58) was "Do movement activities using large motor muscles (e.g., balancing, running, jumping)." As with the previous objective, a higher mean signifies a more developmentally appropriate practice when preparing children for kindergarten. Despite the lack of statistical significance, this question suggests mothers encourage their children to go out and play actively. Lara-Cinisomo and colleagues (2008) stated that there are many areas of development that need to be considered and improved before a child enters kindergarten, one of which is the child's physical development. Ray and Smith (2010) stated that it is vital for children to play to learn more of the world around them. As they play they can learn by experiencing key things in life such as science

concepts. As children play with a ball outside, for example, when they throw the ball in the air and it comes back down, they begin to learn the basic concept of gravity.

When comparing the means from the first research objective and the means for the second research objective, the means from the first research objective are slightly higher than for the second. This suggests that parents may see the importance of practices in helping prepare their children to enter kindergarten, but they do not always do those things they know to be important for their children. There are many possible interpretations for why parents felt it was important to prepare their child for kindergarten at home, but were not always doing these same activities. One possibility is a lack of time to do all that parents know they can do to help their child prepare for kindergarten. Wildenger and colleagues (2008) found that families who have a lot in their schedules, such as both parents being employed, less frequently stick to their family routines. There may be things such as the parents' work, or other children's school or extracurricular activities that may make it more difficult for parents to help prepare their children for kindergarten. Another possibility is that mothers may understand that kindergarten preparedness is important for their child, but they may not fully understand how important it is that children do kindergarten preparation activities at home as well as in preschool. Thus mothers are not doing very many school readiness activities with their children.

As with the first research objective, the questions in the second part of the questionnaire were divided into categories based on their content. The categories were literacy practices, types of school work practices, math practices, and guidance practices. The literacy practices category had five questions asking parents to rate how often they

do different kinds of literacy activities that can be done to help children prepare for kindergarten. The types of school work practices category contains four questions asking parents to rate how often they do a variety of things like worksheets, learning centers, drawing, and so forth. The math practices and guidance practices categories each had two questions asking parents to rate how often they participate in math activities and different forms of guidance with their children when helping them prepare for kindergarten.

When looking at the trends found in Tables 6 and 7, which list the four most developmentally appropriate responses and the four least developmentally appropriate responses by parents, there were some interesting findings. All four of the most developmentally appropriate responses came from different areas. There is one about large motor movement, one about school work, one about music, and the last is about math. There are different trends in the least developmentally appropriate responses. There are two questions from the math section, one about guidance practices, and one about social awareness. It was interesting to see a question about math in the most developmentally appropriate responses and two questions about math in the least developmentally appropriate responses. This suggests that mothers responding to these questions may not fully understand the how big the math spectrum is when helping a child prepare for kindergarten. Ray and Smith (2010) said that one way to help children develop their math skills is to read picture books with their children. As they read picture books, children can learn key math concepts that are necessary to know in kindergarten. Mothers in the current study reported using rote counting frequently in helping their children in kindergarten preparation, and using real objects to solve real math problems

less frequently. The item asking mothers to rate the importance of rote counting was one of the items that was reverse coded. To use real objects to solve real math problems is more developmentally appropriate for teaching children how to count and solve math problems. These responses further show that mothers do understand the importance of helping their children learn math, but they may not be aware of the wide range of options they have to use to teach their children mathematics and to show them that math is all around us in the world.

Mothers' responses in the second part of the questionnaire were divided by whether they were responding for a first-born child or for a later-born child, as was done for Research Objective 1. The trend that stood out the most for this section was that mothers of first-born children had higher means than mothers of later-born children more often than the reverse. There may be many reasons for this, one being how much time mothers have. Mothers of first-born children may have more time to spend doing some of the activities asked about in the questionnaire than mothers of later-born children may have. Crosnoe and Cooper (2010), when looking at economically disadvantaged families, stated that parenting and family adjustment were reliable mediators in children's success in math and reading in kindergarten and first grade. As the parents were involved in their children's education, no matter the family circumstances, the children were more successful in school than if the parents had not been involved.

Even though there was no statistical significance, there were two items that stood out the most because they had the largest gap between the means for mothers of first-born children and mothers of later-born children. The first item was "Circle, underline, and/or mark items on worksheets." Mothers of first-born children had a mean of 4.31 and

mothers of later-born children had a mean of 3.65. This item was reverse coded.

Mothers may see that children are doing worksheets in kindergarten as they have older children go through school and then think they need to have their younger children do worksheets at home as part of their preparation for kindergarten. While it is important for children to draw, color, and write letters, children will learn best through their play (NAEYC, 2009). As they write and draw in their play they will better master those fine motor skills they need to develop to be able to write and draw.

The second item of note was “Practice handwriting on lines.” Mothers of first-born children had a mean of 4.31 and mothers of later-born children had a mean of 3.70. This item was also reverse coded. As with the previous item, there are more appropriate ways for children to learn to write than to have them sit and practice on set lines. Children first need to learn how to correctly form letters before they should be expected to write on lines. When children are given activities they cannot complete successfully, they lose interest in the activity and are less likely to try and complete it successfully later (NAEYC, 2009). If mothers have older children who have gone through kindergarten, and they see that children do, for instance, practice writing on set lines, they may think that this is an appropriate activity for their other children to get ready for kindergarten.

Another interesting finding from mothers’ responses for first-born children and later-born children is that three of the four items with the largest mean gaps were reverse coded because they are less developmentally appropriate activities. As with Research Objective 1, this suggests that mothers see what is done in kindergarten classrooms with older children and may think that they need to be doing the same things, such as using

flashcards to learn letters and numbers, practicing writing on lines, and using worksheets at home to help prepare children for kindergarten.

Research Objective 3

The third research objective was to determine if there was a relationship between the mother's educational level and maternal perceptions and practices of kindergarten readiness. The questions in the questionnaire were divided by the content into the categories of literacy perceptions, types of school work perceptions, parent involvement, literacy practices, type of school work practices, math practices, and guidance practices. The relationship between mothers' educational level and these categories was then examined.

Mothers' educational levels were divided into high school degree, bachelor's degree, and master's degree. Interestingly, an analysis of variance showed that mothers with a bachelor's degree had the highest mean (3.16) among these groups in the math practices category, approaching significance at $p = .55$. Ray and Smith (2010) stated that when parents help their children gain a strong number competence and maintain a strong rate of growth in math knowledge, they may be helping to improve their children's mathematics knowledge and skills throughout their school career. The mean for the math practices category suggests that mothers do have a good understanding of the importance of their children having a strong knowledge of math in order to succeed in school.

It was interesting to see the differences between the category total means when looking at mothers' educational levels, even though there was no statistical significance. The literacy perceptions category total mean (3.69) was higher than the literacy practices

category total mean (2.99). There could be a few reasons why there is this difference in the means. One reason could be that mothers understand the importance of incorporating literacy into their child's life, but are not aware of the spectrum of ways to incorporate literacy. Ray and Smith (2010) suggested children learn to associate letters with their sounds, learn word patterns, and participate in invented spelling to further their literacy development. Children can learn letters with sounds and word patterns in a variety of ways. Parents can put labels of what things are around the house to help expose children more to words and letter patterns. As parents read with their children they can point out the words they are reading so that their children can see the word and hear it at the same time.

The math practices mean (2.96) and the guidance practices mean (2.82) were both fairly low, suggesting that mothers are doing less developmentally appropriate activities, or not doing the developmentally appropriate activities very frequently. Mothers may not be doing some of the developmentally appropriate activities as frequently as they should because they may not know their importance or that there are a wide range of activities they could be doing. Malsch and colleagues (2011) found that parents needed more information of what some transition practices are and the wide range of things they could be doing at home to help prepare their children for kindergarten. One way to help children learn math concepts is for parents to help their children solve real math problems using real objects. As parents play with their children, they can help their children understand basic addition and subtraction by talking about how many legos, blocks, or cars each person has and how that changes as they share and trade the items.

It is also interesting that when the items were divided into the different categories, mothers with a bachelor's degree had the highest means of the different educational levels. But when looking at the items individually, mothers with a bachelor's degree did not have the highest mean as the group means suggest. This may be because the means for the individual items for mothers with a bachelor's degree had less variability than the means for the individual items for mothers with a master's degree and mothers with a high school degree.

There were three open-ended questions at the end of the questionnaire. Two of the questions had some interesting responses that correspond with the other findings of this study. Mothers were asked what they feel is most important for their child to know or to do in order to be ready to enter kindergarten. There were three answers that were the most common: social skills, literacy, and recognizing numbers. Mothers also stated the importance of children recognizing colors and following directions before they enter kindergarten.

In response to the second question, "What do you feel your child's preschool IS doing in order to help your child prepare to enter kindergarten," mothers responses were very similar to their responses to this question as to the first question. Mothers most commonly said their child's preschool is doing well at preparing their children for kindergarten in their social skills, literacy development, and math development. These responses were also consistent with the other findings in the current study.

Limitations

The findings of this study are not generalizable beyond the current study because the sample was not very diverse, responses had little variability, and the sample size was small. A replication of this study in another area of the United States, or even another country, would be useful to see how the results differ and if they are related at all to different demographics of the area. In addition, if there could have been more questionnaires completed and returned, the findings may have been more robust.

The data may have been more variable if preschools of varying quality had been included, or if a wider spectrum of socioeconomic statuses or educational levels were represented in the sample. Because the parents in the sample made the choice to enroll their child in the Adele and Dale Young Child Development Laboratory, they may have been already more aware of what is developmentally appropriate for their child than many parents might be.

Some of the terms used in the questionnaire may be another limitation to this study. It is possible that the language used in the items, such as rote counting, pre-drawn forms, sight words, or phonics may have been unfamiliar to mothers. This may have contributed to why some of the items that contain these terms had larger ranges, as parents may not have understood what these activities were, not necessarily because mothers are doing these activities with their children at home.

Implications

There are many implications of this research. Mothers in the current study were aware of some of what developmentally appropriate activities are for their children, but they did not seem to be aware of the full spectrum of ways to teach young children in a developmentally appropriate way and to prepare them for kindergarten. An implication is that parents need to be informed of the ways that they can help their children transition into kindergarten. There are a variety of ways that parents can prepare their children for kindergarten. Parents can read books with children, helping them with emergent literacy; they can solve math problems using real objects to help children gain a concrete understanding of math. Parents can also do real science experiments with their children, for example, charting how a butterfly grows from a caterpillar, or by testing what will happen when combining something like dry ice and bubble solution (Ray & Smith, 2010). Kindergartens and preschools could also help inform parents of ways they can help prepare their children for kindergarten. Schools could distribute pamphlets that contain, for example, information about transition practices that can be done at home, as well as lists of preschools and other educational resources and facilities in the area.

An additional implication for the current study is the importance of literacy development. Ponitz and Rimm-Kaufman (2011) stated that a primary task for children in elementary school is to learn to read and if children fall behind in their literacy development, continuing through school can become very challenging. It is important that parents understand the importance of literacy for young children and find a variety of ways to incorporate it in children's play to help them be more prepared for kindergarten.

Mothers in the current study reported doing some literacy activities that are developmentally appropriate, such as reading to their child and exposing them to different forms of print. They also reported doing some literacy activities that are not developmentally appropriate, such as using ABC flashcards. This suggests that mothers may need guidance in terms of what activities are developmentally appropriate for young children in learning literacy and what activities are less appropriate.

One implication is when a child is transitioning into kindergarten, it is important for both the parents and the teachers to take into account the whole child. Parents and teachers need to work together in preparing children for kindergarten by communicating with each other about what the child needs and how those needs can be met both at home and at school (Dockett & Perry, 2008). Berlin and colleagues (2011) stated that when parents are engaged in their child's transition to kindergarten, children benefit greatly. In this sample, parents clearly understand how important their involvement in their child's education is for their child's success.

An additional implication is the importance of developmentally appropriate practice (DAP) and taking into consideration that each individual child has different needs and interests (NAEYC, 2009). It is important for DAP to be included in the home as well as in school. Parents can do this by helping children learn in developmental areas such as math, science, social, and literacy and focusing on individual children's needs and interests.

Conclusion

Although, there were no statistically significant findings, there were some interesting trends that emerged, such as parents being aware of the many things children should know and be able to do when they enter kindergarten. But, just because parents are aware of what should be done with children to prepare them and ease their transition into kindergarten, it does not always mean they do those things. There are many reasons that can contribute to parents not doing the tasks they value to prepare their children: time, resources, or knowledge of how to do them. By replicating this study in other areas and with larger samples, we may gain a better idea of what parents value and do to prepare their children for kindergarten.

The mothers in the current study were found to have a good understanding of the importance of literacy and math development for young children when preparing to enter kindergarten. However, it was also found that mothers did not know of the full range of ways to teach young children about either literacy or math. There are a wide variety of ways to teach young children concepts of math and literacy that are developmentally appropriate. It is important that parents are informed of the wide array of developmentally appropriate activities that can be easily done in the home. Ray and Smith (2010) have given many activity ideas for helping a child prepare and transition into kindergarten. For instance, they suggested that finding patterns in the child's environment, or participating in strategic counting are both ways that math concepts can be practiced with young children while doing daily things. To better understand science

concepts, it is recommended that parents and teachers have children participate in actual science experiments.

Teachers and parents need to be in communication with each other when helping children prepare for kindergarten. Teachers can help parents by informing them of things they can do at home that will be a benefit to children for kindergarten. As parents stay involved in their children's schooling, children will have a smoother transition into kindergarten and greater school success (La Paro et al., 2003).

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APPENDICES

Appendix A
Questionnaire

Dear Parent:

We are interested in better understanding parents' perceptions about what their children should know and be able to do when entering kindergarten. This information is important for us to know so that we may continue to provide children with appropriate curriculum in the lab setting. Therefore, we ask you to please complete the attached questionnaire.

To guarantee that your responses to this questionnaire remain anonymous when you have completed the questionnaire please place it in the provided addressed and stamped envelope. Please answer the following questions:

What is your gender? Male Female

What is your age? _____

Please circle the highest degree which you have earned:

High school diploma Bachelor's Degree Master's Degree Doctoral Degree

In what discipline is your highest degree? _____

List your children's gender and their ages. Please do not list any names.

Child #1. Gender: _____ Age: _____

Child #2. Gender: _____ Age: _____

Child #3. Gender: _____ Age: _____

Child #4. Gender: _____ Age: _____

Child #5. Gender: _____ Age: _____

Child #6. Gender: _____ Age: _____

Continue on Next Page

Check the one category that best describes your race/ethnicity:

- _____ 1. Asian/Pacific Islander _____ 5. American Indian or Native Alaskan
_____ 2. Black, not Hispanic _____ 6. White, not Hispanic
_____ 3. Hispanic _____ 7. Multiple Origins
_____ 4. Other

Thank you so much for your feedback. If you have any questions, please contact me at 797-1532 or Shelley.Lindauer@usu.edu.

Sincerely,

Shelley L. Knudsen Lindauer, Ph.D.
Director, Adele and Dale Young Child Development Laboratory

As you think about your child(ren) entering kindergarten in the fall, consider the following statements:

	Not at all Important	Not very Important	Fairly Important	Very Important	Extremely Important
1. As an evaluation of children's readiness for kindergarten, achievement tests are _____.	1	2	3	4	5
2. Instruction in letter and word recognition is _____ in preschool.	1	2	3	4	5
3. It is _____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags).	1	2	3	4	5
4. It is _____ that children have the ABC's memorized when entering kindergarten.	1	2	3	4	5
5. It is _____ for activities to be responsive to my child's interests.	1	2	3	4	5
6. It is _____ for children to work individually at desks or tables most of the time.	1	2	3	4	5
7. Workbooks are _____ for my child to do before entering kindergarten.	1	2	3	4	5
8. It is _____ for children to create their own learning activities (e.g. cut their own shapes, decide on the steps to perform an experiment, plan their own creative drama, art, and computer activities).	1	2	3	4	5
9. It is _____ for my child to write by inventing their own spelling.	1	2	3	4	5
10. It is _____ for my child to color with pre-drawn forms.	1	2	3	4	5
11. It is _____ to read stories to my child daily.	1	2	3	4	5
12. It is _____ for my child to dictate stories to me.	1	2	3	4	5
13. It is _____ to provide many opportunities for developing my child's social skills (i.e. cooperating, helping, and talking) with their peers.	1	2	3	4	5
14. It is _____ for my child to have outdoor time.	1	2	3	4	5
15. It is _____ for me as parent/guardian to be involved in my child's education.	1	2	3	4	5
16. It is _____ for strategies like setting limits, problem solving, and redirection to be used to help guide my child's behavior.	1	2	3	4	5
17. It is _____ for me as parent/guardian to be actively involved with my child's teacher and school program.	1	2	3	4	5

All children have different ways of learning at different points in their lives. We are interested in what experiences your child is having at home.

	Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4 times a week)	Very Often (daily)
1. Build with blocks.	1	2	3	4	5
2. Select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiments, etc.).	1	2	3	4	5
3. Has his/her work displayed.	1	2	3	4	5
4. Experiment with writing by drawing, copying, and using their own invented spelling.	1	2	3	4	5
5. Play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks).	1	2	3	4	5
6. Explore science materials (e.g., animals, plants, wheels, gears, etc.)	1	2	3	4	5
7. Sing, listen, and/or move to music.	1	2	3	4	5
8. Do movement activities using large muscles (e.g., balancing, running, jumping).	1	2	3	4	5
9. Use manipulatives (e.g., pegboards, Legos, and Unifix Cubes).	1	2	3	4	5
10. Use commercially-prepared phonics activities.	1	2	3	4	5
11. Circle underline, and/or mark items on worksheets.	1	2	3	4	5
12. Use flashcards with ABCs, sight words, and/or math facts.	1	2	3	4	5
13. Participate in rote counting.	1	2	3	4	5
14. Practice handwriting on lines.	1	2	3	4	5
15. Color, cut, and paste pre-drawn forms.	1	2	3	4	5
16. Sit and listen for long periods of time until they become restless and fidgety.	1	2	3	4	5
17. Have the opportunity to learn about people with special needs (e.g., a character in a book).	1	2	3	4	5
18. Receive rewards as incentives to participate in activities which they are reluctant participants.	1	2	3	4	5
19. Get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent to another room).	1	2	3	4	5
20. Draw, paint, work with clay, and use other art materials.	1	2	3	4	5

21. Solve real math problems using real objects. 1 2 3 4 5

22. Do activities that integrate multiple subjects (reading, math, science, social studies, etc.). 1 2 3 4 5

What do you feel is most important for your child to know or to do in order to be ready to enter kindergarten?

What do you feel your child's preschool IS doing in order to help your child prepare to enter kindergarten?

What do you feel your child's preschool COULD be doing to help your child prepare to enter kindergarten?

Appendix B

Letter of Information



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USU IRB Certified Exempt: Jan. 26, 2011
Exempt Certification Expires: 01/25/2014
Protocol Number: 2791
IRB Password Protected per IRB Administrator

LETTER OF INFORMATION

A Study of Parents' Perceptions of Kindergarten Readiness

Introduction/ Purpose Dr. Shelley L. Knudsen Lindauer and Kirsten Smith in the Department of Family, Consumer, and Human Development at Utah State University are conducting a research study to find out more about parents' perceptions of kindergarten readiness. You have been asked to take part because you have a child who is enrolled in the Child Development Laboratory for the 2010-2011 academic year. There will be approximately 40 total participants in this research.

Procedures If you agree to be in this research study, you will be asked to fill out a 30 minute questionnaire that asks what you feel your child should know and be able to do when s/he enters kindergarten, what you are doing at home to help your child prepare for kindergarten, what your child's preschool is doing to help him/her prepare to enter kindergarten, and what you feel your child's preschool could do better to help your child prepare to enter kindergarten. The questionnaire includes a self-addressed stamped envelope for you to return the completed questionnaire to us. Please do not include your name or any identifying information on the questionnaire to insure anonymity.

Risks Participation in this research study may involve some added risks or discomforts. These include a possible increase of concerns about a child's kindergarten readiness. There is a small risk of loss of anonymity but we will take steps to reduce this risk.

Benefits There may or may not be any direct benefit to you from these procedures. The investigators, however, may learn more about what parents think they should do and what they are doing to prepare their children to enter kindergarten. The investigators also may learn more about how a parent's demographics affect what they do with their child to help prepare him/her for kindergarten.

Explanation & offer to answer questions Kirsten Smith is available to answer any questions about this research study. You may reach her by email at kirstensmith2@msn.com. If you have other questions or research-related problems, you may reach Dr. Shelley L. Knudsen Lindauer at (435) 797- 1532.

Voluntary nature of participation and right to withdraw without consequence Participation in this research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence or loss of benefits.

Confidentiality Research records will be kept confidential, consistent with federal and state regulations. Only Shelley Lindauer and Kirsten Smith will have access to the data which will be kept in a locked file cabinet in a locked room. No personal, identifiable information will be collected that would link your response to the questionnaire. The data will be kept indefinitely.

IRB Approval Statement The Institutional Review Board for the protection of human participants at Utah State University has approved this research study. If you have any questions or concerns about your rights or a research-related injury and would like to contact someone other than the research team, you may contact the IRB Administrator at (435) 797-0567 or email irb@usu.edu to obtain information or to offer input.

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Appendix C

Table of DAP/DIP Items

Explanation of Questionnaire Items

Item	DAP/DIP	Why
Part 1		
1. As an evaluation of children's readiness for kindergarten, achievement tests are ____.	DIP	Tests are generally not an accurate reflection of what a child knows.
2. Instruction in letter and word recognition is ____ in preschool.	DIP	It is best to teach letter and word recognition through the children's interests and integrate this activity throughout the curriculum.
3. It is ____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags).	DAP	Children learn best through play and exploring the world around them. Using functional and environmental print helps give them that opportunity.
4. It is ____ that children have the ABC's memorized when entering kindergarten.	DAP	There are many ways through play to teach the alphabet to children in the course of their daily play activities.
5. It is ____for activities to be responsive to my child's interests.	DAP	Children learn best through activities that meet their needs and interests.
6. It is ____ for children to work individually at desks or tables most of the time.	DIP	Hands-on learning and exploring with others helps children learn most effectively.
7. Workbooks are ____ for my child to do before entering kindergarten.	DIP	Children need concrete examples of math and science to truly understand and explore concepts.
8. It is ____for children to create their own learning activities (e.g. cut their own shapes, decide on the steps to perform an experiment, plan their won creative drama, art, and computer activities).	DAP	If children create their own learning activities, they will be learning through their individual interests.
9. It is ____ for my child to write by inventing their own spelling.	DAP	This can help children better understand the phonics of literacy.
10. It is ____for my child to color with pre-drawn forms.	DIP	Pre-drawn forms can hinder a child's creativity.
11. It is ____ to read stories to my child daily.	DAP	Reading to children gives them a great exposure to all dimensions of literacy!
12. It is ____ for my child to dictate stories to me.	DAP	This helps children recognize letters and words.
13. It is ____ to provide many opportunities for developing my child's social skills (i.e. cooperating, helping, and talking) with their peers.	DAP	Having social skills, such as cooperating with others, or taking turns can help make the transition into kindergarten smoother.
14. It is ____ for my child to have outdoor time.	DAP	Outside is a great place for children to learn more about science, as well as gaining more confidence in their large motor development, increasing their social skills, and expanding their understanding of the environment they live in.
15. It is ____ for me as parent/guardian to be involved in my child's education.	DAP	Children have greater school success when their parent/guardian is involved.
16. It is ____ for strategies like setting limits, problem solving, and redirection to be used to help guide my child's behavior.	DAP	If children can learn in preschool and kindergarten where limits are, it can help make following directions easier later in school.
17. It is ____ for me as parent/guardian to be actively involved with my child's teacher and school program.	DAP	When parents are in communication with their child's teacher, they can know better how to help the child at home.

Part 2		
1. Build with blocks.	DAP	Children can learn so much from building with blocks, such as gravity, creativity, and sharing.
2. Select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiments, etc.).	DAP	Children can gain more interests as they are exposed to a variety of learning areas.
3. Has his/her work displayed.	DAP	This can give children a sense of accomplishment and confidence.
4. Experiment with writing by drawing, copying, and using their own invented spelling.	DAP	Experimenting with writing helps children with their emergent literacy skills, recognizing letters and their sounds.
5. Play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks).	DAP	Playing with manipulative toys can help children recognize patterns, shapes, and how to problem solve.
6. Explore science materials (e.g., animals, plants, wheels, gears, etc.).	DAP	Children can make the most sense of science as they explore it in a hands-on way.
7. Sing, listen, and/or move to music.	DAP	Music can help children's listening skills, following directions, and hearing patterns in music.
8. Do movement activities using large muscles (e.g., balancing, running, jumping).	DAP	As they use their large motor muscles, children will strengthen them and increasingly develop small motor skills as well.
9. Use manipulatives (e.g., pegboards, Legos, and Unifix Cubes).	DAP	This can help children strengthen their small motor skills and their eye-hand coordination.
10. Use commercially-prepared phonics activities.	DIP	Commercially-prepared activities do not allow children to learn through their individual interests.
11. Circle underline, and/or mark items on worksheets.	DIP	This can be too hard for children to do in preschool and kindergarten, it can frustrate them with learning in school, and is focused only on one right answer.
12. Use flashcards with ABCs, sight words, and/or math facts.	DIP	Children will learn better through seeing literacy and math in their environment and play.
13. Participate in rote counting.	DIP	Counting while doing everyday things can give children concrete examples of numbers.
14. Practice handwriting on lines.	DIP	This may be too hard for children to do at this age and can discourage them from wanting to write.
15. Color, cut, and paste pre-drawn forms.	DIP	Working with pre-drawn forms can frustrate children when it is not perfect and make them want to give up.
16. Sit and listen for long periods of time until they become restless and fidgety.	DIP	Children will learn best as they are active and exploring the world through their interests.
17. Have the opportunity to learn about people with special needs (e.g., a character in a book).	DAP	Children may be more accepting of people as they learn about others.

18. Receive rewards as incentives to participate in activities which they are reluctant participants.	DIP	Children may begin to expect some kind of reward for doing many things, if this is done very often.
19. Get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent to another room).	DIP	It is more beneficial to explain to children what they should be doing, give them suggestions for other things to do, and redirect them to something better.
20. Draw, paint, work with clay, and use other art materials.	DAP	This exposes them to different kinds of art and sensory activities and gives them the opportunity to find new interests.
21. Solve real math problems using real objects.	DAP	This gives children a concrete example of math.
22. Do activities that integrate multiple subjects (reading, math, science, social studies, etc.).	DAP	Integrating multiple subjects lets children see how different subjects can be interrelated.

(Bredekamp & Copple, 1997; Goldstein, 2008; NAEYC, 2009; Ponitz & Rimm-Kaufmann, 2010; Ray & Smith, 2010)