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Kindergarten Readiness: Using Age or Skills in Assessing a Child's Readiness

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Submitted in Partial Fulfillment of the Requirement for the Degree Master of Science in Education: Curriculum and Instruction

> Division of Education School of Business, Education, and Leadership

> > San Rafael, CA

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Signature Sheet

This thesis, written under the direction of the candidate's thesis advisor and approved by the chair of the master's program, has been presented to and accepted by the Faculty of Education in partial fulfillment of the requirements for the degree Master of Science. The content and research methodologies presented in this work represent the work of the candidate alone.

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This project developed from my experience as a kindergarten teacher and parent of four children. Two of my four children have "late" birthdays. I struggled with my decision about whether or not to send them to kindergarten. I looked for guidance from other parents, pre-school teachers, kindergarten teachers and my pediatrician. The advice I received was varied, and much of it felt like opinion that was not based on much substantial information. When I began teaching kindergarten, I observed many families facing the same dilemma. Out of these struggles came my motivation to provide objective information as guidance for parents facing this decision.

I want to acknowledge the guidance and assistance of the faculty of the Division of Education, Dominican University of California. I owe much gratitude to Dr. Linda Sartor for her many hours of review and editing on my project. Thank you also to my classmates for their input, suggestions, and editing. I feel fortunate to have engaged in such a supportive cooperative learning process.

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ABSTRACT

Currently, age is the primary indicator of kindergarten readiness. A concise list of readiness skills to guide parents and teachers when deciding if a child is ready for kindergarten is lacking. The literature reveals that older age kindergarten entrance is not a predictor of academic success, nor is age an accurate indicator of readiness. In this study, responses from approximately 22 kindergarten teachers to a readiness questionnaire identify and develop a succinct list of the skills these professionals view as most significant for kindergarten readiness.

According to the teachers in this study, the ability to sit and listen for approximately 15 minutes is a very necessary readiness skill. Additionally, respect for peers, following directions, appropriate classroom behavior, and personal responsibility were also consistently identified as indicators of kindergarten readiness. While most teachers in the sample would prefer incoming kindergarten students to have already turned five before entering school, age and academic skills were not identified as necessary for kindergarten readiness in this study.

INTRODUCTION

It is perhaps a safe assumption that all parents want to provide the most comprehensive and positive academic experience for their children. When a parent brings a child to school for his/her first day of kindergarten, most parents and teachers understand the significance of a good beginning. Because a child's early academic experiences and perceptions are so pivotal to on-going success, determining if and when a child is ready to enter kindergarten is a major decision.

How does a parent or teacher know when a child is ready, or for that matter, not ready for kindergarten? In practice, the standard guideline that has been provided by schools to parents for determining readiness is the child's age. Each state has a cut-off date by which a child must turn five in order to be enrolled in kindergarten that year. However, these cut-off dates are not the same across states.

Parents of children with late birthdays often will opt to delay entry, believing such a decision will gain an advantage for their children, expecting that a child at the older end of the age-range of students in his/her class will do better than at the younger end. In fact, Stipek (2002) reports that 9% of all students in her study experienced delayed entry by one year. Yet, at least two research studies (Graue & DiPerna, 2000; Stipek, 2002) have found that age is not a predictor of academic success, and actually, there may be longterm negative consequences for students who experience delayed entry into kindergarten. Graue and DiPerna found that by third grade, there is no measurable academic advantage to delayed entry and Stipek's (2002) research concluded that redshirted students (students

whose kindergarten entries were delayed by one year) ultimately have a higher incidence of dropping out of high school.

What measures exist that may be helpful for parents and teachers determining a child's readiness? There are various developmental theories, as well as differing opinions as to what skills are necessary for kindergarten readiness. The research of Dockett and Perry (2004) revealed a variation in perspectives regarding readiness as expressed by teachers, parents, and students themselves. Not only did these three groups differ on their perceptions of factors contributing to readiness, but also they subscribed to a variety of different developmental theories when describing a "ready" student.

There are readiness tests, developmental screening tests, and transitional classrooms, but these methods of determining readiness are inconsistently administered within states, counties and even school districts. Currently, the only standard measure of readiness is age, which is not even consistent from state to state. Since school entry is an important and defining experience for all students, there is a need for a succinct, consistent developmental profile of kindergarten readiness. Parents, teachers, administrators, policy-makers and pediatricians responsible to those children could all benefit from such a profile. Kindergarten readiness cannot be determined solely by a birth date. A comprehensive developmental profile will help to ensure each child has the best opportunity for a positive, successful academic experience.

Purpose Statement

The purpose of this qualitative study is to identify a succinct list of skills that could be used as indicators of a child's readiness to begin kindergarten, as identified by a

small study sample of kindergarten teachers. This list of readiness skills could serve as a guide to parents and educators when deciding whether to send a child to kindergarten or delay her/his entry by one year.

Assumptions

I chose to research kindergarten readiness because of my interest in and strong feelings about this topic. Therefore, I attempt to identify the assumptions and preconceptions I bring to this study.

I assume that the majority of parents seek the best education available to their children. I believe that parents want their children to have every possible advantage while making sure to avoid any disadvantageous circumstances. In general, I feel the decision about when to begin kindergarten is motivated by a parent's desire to provide a strong educational foundation so their children will do well in life.

I also believe that parents are often misguided in making the decision about whether or not their child is "ready" for kindergarten. Because cut-off dates determine school entry, many parents use age as the primary measure of a child's readiness. It is my assumption that age as the primary indicator of readiness is not an effective means of determining a child's readiness for school.

As a kindergarten teacher, I witness this confusion regarding this decision each school year. This past school year, I had a student whose birthday fell on the California cut-off date of December 2nd. If this child had been born one day later, she would have been unable to attend kindergarten until the following school year. This child was bright, enthusiastic and independent. In pre-school, she had learned her numbers and letters and

could print her first name, but her mother was concerned that as the youngest in the class, her daughter would be at a disadvantage. The mother arrived at the end of the first day of school anxious, concerned and contemplating pulling her child out to wait until the following school year. After my reassurance, the mother reconsidered. Though this mother agreed to allow the child to continue, her anxiety and doubt remained. By midyear this student was reading and was one of the most independent and dynamic members of the class. Nonetheless, the mother asked to conference with me to discuss possible retention of this child. We were able to agree that her child was performing well on all levels, but with no other standard measures of readiness available to her, I fear this will always be a source of doubt and anxiety for this parent.

Parents of children with birthdays close to the cut-off date are more likely to delay their child's entry. It is my opinion that these parents believe that being an older kindergarten student gives a child an academic and social advantage. When faced with whether their child should enter age-appropriately and be one of the youngest in the class or wait a year and be one of the oldest, I believe many parents opt for older rather than younger. I believe this decision is made using no other criteria other than age. While many parents will say they wish to give their child another year to mature, I do not believe their children necessarily have maturity problems or delays. Additionally, because there are few, if any, other readiness indicators available to parents, confusion and doubt surround this decision. In my opinion, it is unfortunate, that parents treat kindergarten entry as a potentially competitive situation rather than the individual event I perceive it to be.

As kindergarten approaches, some parents are aware that their child is lacking in skills they can see in their child's peers. Because of this concern, I believe parents delay kindergarten entry. It is my belief that those children who appear "unready" may, in fact, have some kind of need that could be identified and addressed within the school environment.

Among the theories of development including the maturationist, the environmentalist, and the constructivist/interactionist theories (NCREL, 2004), I believe that no single theory can be used in assessing a child's kindergarten readiness. Development will vary among children at kindergarten age, which is why it is important to consider a range of readiness and not focus on just one specific indicator.

There does not currently exist an agreed upon profile of readiness skills. Pediatricians are unfamiliar with kindergarten curriculums, parents perpetuate illinformed information among themselves as fact, and educators have not come together to provide a single source of guidance or direction for the community. I assume that if succinct information regarding readiness skills was available as well as birth-date cut-off, there would be less confusion. This direction would result in more balanced classrooms and earlier and more efficient recognition of special needs in children.

Finally, I do not believe that age is in any way a predictor of kindergarten readiness. I do not believe that an older student in a classroom will necessarily perform or function better or more easily than her/his younger peer. I also believe that other kindergarten teachers might disagree with me on this issue. I assume that the questionnaires I will be using to collect my data will reflect this. I am confident that some of the kindergarten teachers in my sample will believe that holding out some children benefits them.

In summary, I believe that the pursuit of advantage is the biggest force behind delayed entry for most parents and that delaying entry for non-developmental reasons is detrimental to most children. Those children who are ready but delay entry are not challenged enough when they do enter school and may become bored, and this dynamic affects the academic and social balance of the classroom for all students. I assume that a succinct set of skills to guide and direct decisions about kindergarten entry will result in a more balanced kindergarten environment that better meets the needs of all.

REVIEW OF LITERATURE

Current literature on kindergarten readiness examines the relationship between age and academic achievement as well as comparative perceptions of teachers, parents, and students regarding readiness skills. This literature review provides a clear, explicit picture of the importance and effects of age on readiness. Furthermore, the literature reviewed here examines the effects of delayed entry, not only as children enter school, but also as they progress through school.

This literature review first examines the relationship between age and academic performance. The research of Grissom (2004), Stipek (2002), Graue and DiPerna (2000), and Crosser (1998) will provide evidence that delaying school entry and using age as an indicator of readiness does not, in fact, result in better academic performance, and may even result in long-term negative academic and social consequences.

With an understanding of the effects of age on academic performance, the study done by Dockett and Perry (2004) exploring the varying perspectives of readiness identified by parents, teachers, and students will be examined. These perceptions and their relationship to theories of development will be reviewed.

Relationship between age and academic achievement

A number of studies have looked at the relationship between age when entering kindergarten and academic performance, and the conclusions are generally consistent with only slight variations in perceptions of early academic success. The research of Grissom (2004), Stipek (2002), and Graue and DiPerna (2000) do not support any longterm advantage to delayed entry, while Crosser (1998) found delaying entry had some

advantages for boys with summer birthdays. This review explores these studies and that discrepancy.

The purpose of Grissoms' (2004) research was to examine the relationship between age of entry into kindergarten and academic achievement. Grissom's study focused on the question of whether older students perform better than their younger classmates. This study took place in California and evaluated data from STAR and SAT/9 tests administered in the spring of 1998 through 2002. California's kindergarten cut-off date is December 2, meaning that a child must be five years old on or before December 2 of that year in order to enroll in kindergarten.

In Grissom's (2004) study the youngest group tested in spring 2002 were second grade students, and the youngest students were those who turned seven close to the December 2 cut-off. The youngest second graders would be eighty-five months old, meaning they had November 1994 birthdays. Second graders who were ninety-six months old had December 1993 birthdays and were therefore the oldest normal age peers in the study. Any second grader ninety-seven months or older had been in one way or another retained, so that the full age range went from eighty-five months to one hundred nine months, and all scores were included in the study. Because Grissom (2004) wanted to determine if age and academic achievement are content dependent, the research looked at both SAT/9 and STAR scores in reading and math.

Grissom found that the mean total reading score for age-normal peers for this second grade represented a positive relationship between age and achievement. In other words, as age normal peers got older, on average, their test scores also got higher.

Grissom found these results to also apply when examining math scores, indicating that

the results were not content dependent. Additionally, Grissom found that for students ninety-seven months or older, those who had been retained, there is a negative relationship between age and achievement. As these retained students got older, on average, their test scores went down (Grissom, 2004).

Grissom (2004) proceeded to test the linear relationship between age and achievement by regressing total reading scores on age in months. The results indicated that for the age normal students, there is a strong statistical relationship between age and mean achievement. Grissom concluded that for each additional month of age, the child's average total reading score increased by half a point. However, when looking at the regressed reading scores for retained students, there is a strong negative statistical relationship between age and achievement. For each additional month of age for retained students, average total reading scores decreased by one point (Grissom, 2004). These results indicate that at the second grade level there was a positive relationship between age and achievement for normal age peers, and a negative relationship between age and achievement for retained students. The next area of investigation was to look at whether or not these trends continued as students got older.

In order to determine if the findings associated with the second grade group would be maintained over time, Grissom (2004) performed these same evaluations on SAT/9 and STAR test scores of spring 2002 for sixth grade students. The age normal range for this group of students is one hundred thirty-three to one hundred forty-four months. Retained students were one hundred forty-five months or older. In accordance with the second grade results, Grissom's findings again establish a positive relationship between age and achievement. Once again, a negative age/achievement relationship was found for retained students. These findings were also consistent for math results, again indicating the findings were not content dependent, and were consistent across two different grade levels.

Grissom (2004) also tested the significance of age and achievement by regressing the mean total reading score in months. While the results showed a statistically significant positive relationship, once again, it was less than that in grade two. Grissom found that the positive relationship between age and achievement for age normal peers decreased as the children got older. For the retained students, the statistically negative relationship between age and achievement remained the same.

Finally, Grissom again performed these evaluations on test scores of tenth grade students. He concluded that while there is a statistical significance, there no longer exists a positive linear relationship between age and achievement for age normal peers. Grissom showed that the oldest age normal peers did not have the highest average test scores and the variance in their test scores was very small. According to Grissom, whatever academic advantage older students had over younger peers when entering school was gone by grade ten (Grissom, 2004).

Showing results a couple of years earlier, Stipek (2002) had asked a similar question; does delaying kindergarten entry for younger students by one year give them an advantage and/or increase their chances for academic success? Stipek compared the academic performance of same age students who were in different grade levels. Stipek's study involved 237 children in three geographical locations and included 80 schools and 150 classrooms. Stipek examined academic achievement as well as children's perceptions

of themselves and of school. The study provided data on students from kindergarten through third grade.

Each student in the study (2002) was given the Peabody Picture Vocabulary Test, starting at age sixty months, again at the end of kindergarten or first grade, and again at the end of third grade. Students were also given a combination of math and literacy assessments. Teachers and students were also asked to rate their math and reading performance. Stipek first examined students broken into three age groups: 1) old (six by December 31 of entry year), 2) intermediate (five by December 31 of entry year), 3) young (five after December 31). The second comparison Stipek made compared two groups of students the same age, but a year apart in school.

Stipek's (2002) first analysis of the students in kindergarten, found that the older kindergartners scored significantly higher than the younger students on reading and math assessments, but teacher performance ratings showed no difference for the various groups. As far as student ratings, the only difference among the groups had the oldest students reporting more positive feelings toward the teacher than the other two groups. Stipek later compared these students on these same measures when they were in third grade and the previous academic advantage of the older students in math and literacy had disappeared, although the student's teacher ratings were consistent with prior findings.

Stipek's (2002) second analysis matched fifty-four pairs of children who were the same age, gender, and race, but were in different grades; one group in kindergarten and one group in first grade. The results found that the younger students (those who were young first graders) were performing at a significantly higher math level than their sameaged peers in kindergarten, but not performing at a higher level in literacy.

One final comparison by Stipek (2002) involved the same analyses as previously described, but this time all students were in third grade, and they were one year apart in age, although at the same grade level with the same amount of school experience. This analysis did not yield the same math advantage as seen in the younger first graders versus the older kindergartners, and all evaluations by third grade showed no significant differences on any of the measured variables.

Crosser (1998) also conducted research on this question of age and academic success. Crosser's study differed from Grissom's (2004) and Stipek's (2002) studies in that Crosser only looked at students with late summer birthdays. Crosser (1998) matched two groups of students on gender and like intelligence, one group had delayed kindergarten entry while the other group had not. Crosser compared the performance of both groups on standardized tests and found that the older boys who had delayed entry had an advantage in reading, but found no significant statistical advantage in female reading or either male or female math performance. Unlike, the research of Grissom and Stipek, Crosser did find an advantage to delayed entry for older boys, but cautioned that the small-scale of the study requires replication before advocating this practice.

Graue and DiPerna (2000) also compared age and academic performance. A representative stratified random sample of more than 350 Wisconsin school districts with elementary schools was developed. Each district provided information regarding its 1995-1996 school year third grade students, such as date of birth, school, enrollment date, gender, race/ethnicity, enrollment history, special education placements, free/reduced lunch eligibility, and results on the Wisconsin Third Grade Reading Test. Once the sampling group had been established, Graue and DiPerna evaluated the means on the

reading test and found that those students who had delayed kindergarten entry by a year did not have an academic advantage over their younger peers. Graue and DiPerna found that the various entry and promotion groups in the study were statistically and practically the same level in their test results. These findings indicating that by third grade there are no measurable academic advantages to delayed entry is consistent with the findings of Grissom (2004) and Stipek (2002).

The review of these studies just noted all have consistent findings. Grissom (2004) concludes that the results of his study argue against delayed school entry and that when students are one year older than their peers their academic performance declines as they get older. Stipek (2002) found that school is a more potent contributor than maturation to academic performance. Furthermore, children who entered school relatively young did not appear to be disadvantaged academically in the long-run. Graue and DiPerna (2000) surmise that "the risk of summer birthday is small with the youngest children who were normally entered and promoted performing at the same level as children who had been given an additional year to grow. In fact, the summer birthday children compare quite favorable in this analysis" (p. 525). Although Crosser (1998) did find some evidence of academic advantage in reading for boys who delayed entry, she nonetheless concludes:

"there is no clear-cut evidence that delaying kindergarten for the youngest entrants will provide some magical academic advantage. Because there is so little entrance age evidence, and because some of that evidence is conflicting there does not appear to be a strong academic basis for delaying kindergarten entrance for summer born children (Crosser, p.2)."

Developmental theories and kindergarten readiness skills

A number of theories form the thinking behind what characteristics make a child ready for kindergarten. Among those theories are the maturationist theory, the environmentalist theory, and the constructivist/interactionist theory (NCREL, 2004).

The maturationist theory of development views development as a biological process that happens in stages over time. Maturationists subscribe to the position that before children can be successful in school, they need to reach a certain level of maturity and that with time will come readiness (Marshall, 2003). Maturationists believe that development needs to precede learning and that certain levels of maturity must develop before learning can happen (Graue & DiPerna, 2000). The maturationist theory leads parents and educators to delay school entry for some children with late birthdays, believing that their lack of various academic skills will naturally develop given time.

Another developmental theory is the environmentalist theory. Environmentalists believe that behavior, development, and learning are shaped by the child's environment. According to environmentalists a child is ready for kindergarten when the child can appropriately respond to her/his school and/or classroom. Examples of appropriate environmental responses for kindergarten ready children include following directions, following rules, and engaging in group activities. Environmentalists believe that children learn best in a structured, directed, adult-lead classroom with restrictions on student behavior and actions (NCREL, 2004).

The third developmental theory affecting perspectives on kindergarten readiness is the constructivist/interactionist theory. Constructivists/interactionists believe that learning happens for children when they interact with the people and environments

around them. Constructivists/interactionists believe that instruction and interaction with others results in learning and that age has very little to do with readiness to learn. Constructivists/interactionists see no need for delayed entry because they believe that delaying entry will only deprive the child of stimulating, beneficial interactions with trained teachers and thus lost opportunities for learning (Marshall, 2003).

By examining these three different theories of development, it is clear that different perspectives will produce different criteria for kindergarten readiness. Dockett and Perry (2004) conducted a study investigating the "perceptions, expectations and experiences" of teachers, parents and children regarding kindergarten readiness (p. 171). In their study, Dockett and Perry gathered data from questionnaire responses and interviews with approximately 300 parents, teachers, and children in New South Wales, Australia. Dockett and Perry found that all three groups had different perspectives on what kindergarten readiness looks like, and within each group surveyed no single theory of development emerged, but rather a combination of multiple theories.

In the study, (2004), teachers' three most important readiness indicators were adjustment (defined as adjustment to the school environment, including social and organizational adjustment), disposition (defined as feelings and attitudes about learning), and skills (e.g. dressing themselves, listening attentively, etc.). Teachers' views about kindergarten readiness encompassed all three developmental areas. Adjustment would fall into the environmentalist theory of development, while disposition is a constructivist based perspective, and skills fits into the thinking of the maturationists.

When parents told what they think children need for kindergarten readiness, their three most mentioned categories were adjustment, educational environment defined as

concerns for child/teacher interactions-- would teacher and/or school appropriately meet the needs of their child, and disposition. Once again, parents' opinions about what factors make a child ready for kindergarten borrowed from multiple theories, with adjustment and educational environment most closely aligned with an environmentalist approach, and disposition most closely a constructivist perspective.

According to Dockett and Perry (2004), when children were asked to define or describe important factors for kindergarten entrance, they most frequently mentioned disposition, rules defined as fitting in with the school and its expectations, and physical defined as physical needs or characteristics, safety issues, health and age. Again all three developmental theories are represented with disposition a constructivist perspective, rules falling within the environmentalist perspective, and physical falling within the maturationist perspective.

While the parent, teacher, and children's perspectives on readiness did overlap in some categories, the data indicates school readiness looks different to each group.

Bearing in mind the different developmental theories as well as the various perspectives on readiness characteristics and issues, the question of kindergarten readiness is a complex topic. Considering the developmental theories as well as the skills most often stated as readiness indicators, clearly it is not possible to subscribe to one theory of development and consider a child kindergarten-ready when she/he meets the criteria of the developmental theory. Because perspectives and theories on school readiness are not easily reconciled into a measurable process, various tools have been developed to help measure when a child is kindergarten ready. These tools include school readiness tests

(Stipek, 2002), developmental screening tests (Hills, 1987), and transitional classrooms (Marshall, 2003).

Some schools and districts use readiness tests to help them evaluate incoming kindergarten students. Although labeled "readiness" tests, these tests serve a variety of functions. Readiness tests are used to help identify special needs that might require intervention and they also help to guide teachers in their planning of instruction. These readiness tests assess perceptual skills, auditory memory, visual matching, listening, language, academic knowledge (alphabet, color recognition, counting) and social interaction skills (Stipek, 2002).

Criticisms of these readiness tests address cultural bias and poor validity (Stipek, 2002). Developmental research emphasizes that development itself is an uneven process and assessment at any given time is not representative of what skills a child may possess only a short time later (Stipek, 2002). Additionally some of the items tested require teaching (i.e. colors, shapes, letters, numbers) and this unfairly advantages children who have had rich pre-school or home learning experiences (Stipek, 2002).

As pointed out in the review of the Dockett and Perry (2004) research, many of the readiness characteristics teachers find important, for example school disposition, which could be described as expressing curiosity in learning new activities, and skills issues (such as the ability to communicate needs and wants and to be responsible for him/herself), are not measured on these readiness tests. Ironically, the attributes measured on these readiness tests—skills such as counting, identifying colors and shapes, writing and painting, and knowledge of the alphabet—(Stipek, 2002) would have fallen under the category of "knowledge" in the Dockett and Perry (2004) study, and according to Dockett

and Perry, "knowledge" ranked seventh out of nine categories of significance to kindergarten readiness for teachers. Furthermore, readiness tests are based in the maturationist theory of development, a theory not universally endorsed or accepted by educators.

Another measure of kindergarten readiness is the developmental screening test. Developmental screening tests supply information about a student's performance in a broad range of areas related to normal development and assess the child's potential for learning and/or acquiring additional knowledge and skills. Critics of developmental screening tests believe that this measure alone does not provide a deep enough profile of the child and it is believed that information from a variety of sources, such as parents and teachers, is vital to making an informed conclusion regarding a child's school readiness (Hills, 1987).

Another method for dealing with kindergarten readiness, or in this instance, perceived lack of readiness, is the transitional classroom. A transitional classroom is designed to accommodate students who do not appear developmentally ready to "move on" (Marshall, 2003). A transitional classroom usually has a "dumbed-down curriculum" in hopes of the students gaining benefits from an additional year of maturity (Marshall, 2003, p. 6). A comparison of children in a transitional first grade (with children selected for, but not placed in the transitional class) showed no significant differences in second grade performance (Marshall, 2003). Additionally, Marshall refers to the work of Matthews, May, and Kundert in 1998 that found that students identified as unready by the Gesell Readiness Test and placed in a transitional kindergarten or pre-first grade class

showed no significant difference in social development ratings in first grade when compared to a control group.

A 2000 study conducted by West, Prakash and Denton looking at state education departments and their policies and practices regarding screening or assessment of kindergarten-age children concluded that test information is most likely best used to evaluate student needs and to guide instruction rather than to make decisions about readiness and whether children should or should not enter school (NCES, 2003).

The research reviewed here concludes that using age, readiness tests, developmental screening tests, and transitional classrooms does not adequately answer the question of kindergarten readiness. Other sources to help determine readiness are needed.

This research study addresses these needs in a number of ways. The Dockett and Perry (2004) research compared perspectives of teachers, parents, and children. This research is a compilation of criteria generated from actual experiences specifically of kindergarten teachers. The data collected from the teachers in this sample will be developed into a clear, objective guide that can be used by parents, teachers, pediatricians and policy-makers in place of opinion, past-practice and emotion. This study does not compare perspectives, but comes together and creates a list of informed, objective skills compiled from the practices and experiences of kindergarten professionals. The Dockett and Perry (2004) research was compiled into eight categories; knowledge, adjustment, skills, disposition, rules, physical, family issues, and educational environment. The findings of this study are reflected in a more specific list of skills and not such broad

categories. These skills are not ranked for comparison, but intended to narrow and identify clear skills necessary for kindergarten readiness.

It is intended that the skills identified in this research can be applied to all incoming kindergarten students. The criteria generated from this research will not require performance measures. The experience of the teachers in the sample will generate a list of skills they have found to be developmentally appropriate and necessary for kindergarten readiness.

METHOD

As stated, the purpose of this research is to identify skills that indicate a child's readiness for kindergarten. Currently the most frequently used measure determining when a child is ready to enter kindergarten is the state cut-off date as it relates to a child's fifth birthday. This measure of readiness is insufficient. This review of the literature, exploring the advantages and disadvantages of kindergarten "redshirting" or delayed kindergarten entry, leads to the conclusion that age is not an accurate predictor of academic success or kindergarten readiness. This research intends to identify kindergarten readiness skills. Through this research, a comprehensive, succinct list of skills that will help parents and educators make this challenging decision is developed.

Data Collection Strategies

Participants and site

Approximately 22 kindergarten teachers participated in this study. Kindergarten teachers have experience working with students beginning and progressing through their first year of school. The experiences of this group provide unique insights for identifying skills that are necessary for success in kindergarten. The participants teach in a unified

suburban school district that serves approximately 7,600 students. The district is comprised of eight elementary schools, three middle schools, and two high schools. The district serves a predominantly white, middle-class population. There is a growing Latino population, reaching 30% at some school sites. Permission to administer questionnaires to the kindergarten teachers was obtained through a formal letter written to each site's principal. I am one of the kindergarten teachers in this district.

Information collected

This study determined which skills the kindergarten teachers in this district believe are significant indicators of kindergarten readiness through their responses to a questionnaire (see Appendix). After receiving permission to administer the questionnaires from each principal, a cover letter explaining this research, a questionnaire, and a selfaddressed stamped envelope to return completed questionnaires was left in each kindergarten teachers' mailbox. Once the questionnaires were completed and returned they were reviewed in order to establish overlapping skills for kindergarten readiness as identified by the kindergarten teachers in the study.

This school district begins the new school year the last week of August. Permission from the principals was granted prior to the first week of school, and cover letters, questionnaires, and return envelopes were left for the teachers shortly after gaining access. The questionnaires took approximately 15 minutes to complete, so as not to unduly burden teachers during the very busy beginning school year.

Data Analysis Strategies

Data was collected using a questionnaire administered to approximately 22 kindergarten teachers. After collecting the finished questionnaires, data was reviewed two to three times in order to gain a sense of familiarity and understanding of the responses. During this initial "read-through" overlapping themes were developed.

Once the data had been thoroughly reviewed the data was coded and as overlapping themes developed, those skills were highlighted and assigned an identifying term. For example, if a questionnaire contained the response, "It is my opinion that a child must be able to get along with his/her classmates in order to be ready for kindergarten," this sentence could be labeled as *get along* in the margin. After all responses on all questionnaires were coded they were reviewed and merged into

"like" categories/themes. From these categories and themes a succinct list of the most important readiness skills, as identified by the kindergarten teachers in this study, was developed.

ETHICAL STANDARDS

This study complies with all ethical standards of research as determined by the American Psychological Association. Furthermore, this project was reviewed and approved by the Dominican University of California Institutional Review Board and assigned IRB Approval Number 4000.

FINDINGS

This research identified a succinct list of five skills, as specified by the kindergarten teachers in the sample that imply kindergarten readiness. Overwhelmingly all teachers who participated in the study identified the ability to listen and pay attention for 15 to 20 minutes as a necessary kindergarten skill. In addition to this skill, the teachers in the study identified the need for incoming kindergarten students to respect and get along with peers, follow 1 to 3 step directions, have appropriate classroom behavior and to have personal responsibility such as organization and the ability to verbally communicate needs.

DESCRIPTIONS

Analysis of Themes

The questionnaire given to the kindergarten teachers in this sample was predominantly open-ended. Approximately 25 questionnaires were distributed and 22 were completed.

One question on the questionnaire asked the teachers, What skills do you feel are the most important indicators of kindergarten readiness in a student? The questionnaire did not provide choices or options, but asked the teachers to draw from their own perspectives and experience and generate a profile of skills that indicate kindergarten readiness.

The question, *Please tell me the extent of your agreement or disagreement with this statement. California's cut-off date of December* 2nd *is appropriate. (Strongly agree, Agree, Undecided, Disagree, Strongly Disagree)* was also asked. Consistently the teachers in the sample pointed out that California's state standards and kindergarten curriculum have become increasingly academic and challenging. Many of the teachers suggested that a change to early September would be a preferable cut-off date as a response to the increased academic nature and expectations of the state's kindergarten curriculum. Because California's kindergarten curriculum is no longer primarily focused on socialization, but on academics, the vast majority of respondents to this questionnaire

believe that all in-coming kindergarten students should be 5 years old in order to best manage the academic requirements facing them.

While most respondents suggested that starting kindergarten at 5 years old is preferable to beginning at 4 years old in order to best manage the academic nature of kindergarten only approximately one-third of those same respondents listed academic skills as a significant indicator of kindergarten readiness. The most frequently identified readiness indicators were related to listening and attention skills, peer interactions, following directions, social behaviors and personal responsibility.

Approximately one-third of the respondents identified some print awareness and the ability to write his/her name as important indicators of kindergarten readiness. So, while most teachers would like to see an older-age requirement for kindergarten entry so as to better meet academic requirements, when identifying skills that indicate kindergarten readiness teachers identified non-academic skills as their most important indicators of kindergarten readiness.

DISCUSSION

Summary of Major Findings

Participants in the study were asked whether they strongly agreed, agreed, were undecided, disagreed or strongly disagreed with California's kindergarten cut-off date of December 2nd. Of the respondents 73% disagreed or strongly disagreed with the cut-off date. Most teachers in the sample suggested an early August or September cut-off so that all in-coming kindergarten students would be 5 years old upon entering school. Overall the teachers in the sample believed that the increased academic nature of the state's kindergarten curriculum would be better met by students who were 5 coming into kindergarten. As one respondent stated, "I feel that the kindergarten standards are ageappropriate for a 5-6 year old student, but not for one who is 4."

Conversely, 27% of the respondents strongly agreed, agreed or were undecided regarding the appropriateness of California's cut-off date. As one teacher observed, "There are certain readiness skills which are important to have in place, but I don't find a significant correlation between a child's age and the acquisition of these skills."

The purpose of this research is to establish a clear, concise list of 5 to 7 skills, as defined by kindergarten teachers that imply readiness for kindergarten. The responses to this survey clearly identified 5 readiness skills that most to all of the participants identified as necessary indicators of kindergarten readiness. Approximately 17 different skills were identified throughout the survey with 5 skills identified by 50 to 100% of the teachers in the sample. Following is a summary of the skills identified in the questionnaires and the percentage of respondents who identified each skill on their questionnaire.

Identified Skill	Percentage
Ability to listen/pay attention for 15 to 20 minutes	100
Respects/gets along with peers	86
Ability to follow 1 to 3 step directions	77
Demonstrates appropriate classroom behavior (follow rules; respects	68
teacher)	
Demonstrates personal responsibility/ability to communicate personal	50
needs	
Some print awareness	36
Can write name	36
Potty-trained	23
Can hold a pencil	23
Can separate from parents	23
Positive attitude toward school	18

Can identify numbers 1 through 10	18
Can identify colors	9
Large motor development	9
Draws identifiable objects	9
Can identify shapes	5
Went to pre-school	5

To summarize major findings, a succinct list of the 5 most important indicators of kindergarten readiness as identified by the kindergarten teachers in the study is as follows:

- 1. Ability to listen and pay attention for 15 to 20 minutes
- 2. Respect/get along with peers
- 3. Ability to follow 1 to 3 step directions
- 4. Appropriate classroom behavior (e.g. follow rules, respect teacher)
- 5. Demonstrate personal responsibility/able to communicate personal needs

Using this list parents and decision makers should be able to better assess a child's readiness for kindergarten. According to the experience and perspective of the kindergarten teachers in this sample with these skills in place an appropriate and successful kindergarten experience should follow.

Comparisons with Existing Literature

As pointed out in the *Review of Literature* section, the research of Grissom (2004) concluded that delaying kindergarten entry did not result in long-term academic advantage for older students. The 5 most frequently identified readiness indicators in this sample clearly do not relate to academic preparation. In fact, all 5 of the readiness indicators on this list focus on social and environmental abilities and skills.

Approximately 36% of the respondents to this questionnaire did identify the ability for students to write their own name, and to have some print awareness as indicators of readiness. These skills are academic indicators as opposed to social indicators, but 100% of the respondents to this survey identified the ability to listen and to pay attention for 15 to 20 minutes, a non-academic skill, as necessary for kindergarten readiness.

The research of Grissom (2004) concluded that when students are one year older than their peers their academic performance declines as they get older. I have come to think of this phenomenon as what I will call the lazy learner syndrome. The lazy learner syndrome as I define it, relates to older students who come to kindergarten already exposed to and competent in many of the skills and concepts taught in kindergarten. These students do not need to engage or challenge themselves academically because kindergarten is essentially a review for them. Because they are not challenged with new concepts they find it difficult to sit and focus, to get along with peers who are academically and socially one year behind them and to have appropriate classroom behavior, three of the most essential skills identified in this research. As one of the respondents in this sample pointed out, "the younger students exhibit a better work ethic and try harder while the older students are complacent and tend not to try as hard." The younger students are not only learning new concepts, but are learning to learn. The older students are internalizing a sense of prior understanding with learning and when the concepts do become challenging and new they are inadequately prepared to work at learning. When these older children become challenged they become frustrated because they are accustomed to learning coming without effort, while the age-appropriate students have been accustomed to working at learning.

Grissom's research comparing academic performance at various grade levels concluded that any academic advantage older students had when entering school was gone by grade ten (Grissom, 2004). I speculate that as learning becomes more challenging older students become frustrated and resistant resulting in a decline in their academic performance as compared with their younger grade-level peers.

One final comparison of this research to the existing literature looks at the work of Dockett and Perry. In Dockett and Perry's 2004 research investigating the "perceptions, expectations and experiences" of teachers, parents and children regarding kindergarten readiness (p. 171) they found that teachers' three most important readiness indicators were adjustment (defined as adjustment to the school environment, including social and organizational adjustment), disposition (defined as feelings and attitudes about learning and skills (e.g. dressing themselves, listening attentively). The skills identified by the kindergarten teachers in this sample tend to reflect the skills identified by the teachers in the Dockett and Perry (2004) research. The list of skills compiled from this research is a more specific list of skills than the Dockett and Perry (2004) categories, but a comparison of this list of skills with Dockett and Perry's (2004) shows that the most important skills to teachers for kindergarten readiness are non-academic, social skills. From this information one can infer that teachers believe that the academics can be taught if the social readiness is in place. Furthermore, it would follow that teachers are not looking for students to enter kindergarten already skillful at the concepts to be taught, but are looking for students to come to kindergarten ready and eager to learn.

Limitations of Study

The greatest limitations to this study are its size and scope. This questionnaire was distributed to approximately 25 teachers. 22 of the 25 teachers completed and returned questionnaires. While the response rate was favorable, the sample size is small making it hard to generalize the findings.

Additionally, all of the teachers in this sample teach in the same suburban school district. While many may have prior experience in other districts, the current homogenous teaching environment limits the findings of this study. Furthermore, it is likely that some of the teachers have not had experience in any other district or with any other demographic, thus further limiting their ability to look at kindergarten readiness skills from a more universal perspective.

A larger sample size from varying demographics would generate results more reliably applicable to "all" incoming kindergarten students.

Implications for Further Research

Because of the limitations of size and scope of this study a need for a larger sample from a broader demographic exists. A larger scale study would enable a succinct list of skills to be generated that would be applicable to a larger range of students. If the size and scope of responses were larger and yielded similar findings to these then those could be more accurately assigned to all incoming kindergarten students.

Additionally, sixteen of the twenty-two respondents in this sample disagreed or strongly disagreed with the December 2nd cut-off date in California. This number warrants research into what date more California kindergarten teachers would feel is more appropriate and why.

Finally, research regarding the theory of the *lazy learner syndrome* would be beneficial. If we can identify what skills are the best indicators of kindergarten readiness it could also be beneficial to identify any unanticipated long-term negative effects of delaying kindergarten entry. Because the effects of delayed entry are not always recognized for a number of years, and because the negative effects, such as frustration and resistance are never identified or associated with delayed entry, this is an important area requiring further study.

Overall Significance of the Study

This study is significant because it was able to generate a succinct list of five indicators of kindergarten readiness. Those indicators, as identified by this research are:

- 1. Ability to listen/pay attention for 15 to 20 minutes
- 2. Respect/get along with peers
- 3. Ability to follow 1 to 3 step directions
- 4. Demonstrate appropriate classroom behavior (e.g. follow rules, respect teacher
- 5. Demonstrate personal responsibility/communicate personal needs

All of the respondents to this questionnaire independently identified the ability to listen and pay attention for 15 to 20 minutes as a necessary skill when entering kindergarten. The significant consistency of the top five responses indicates that the teachers in this sample have a clear vision of kindergarten readiness.

While teachers have a profile of what a child needs to have a successful start to school parents and other decision-makers do not have the same experience or perspective

to assist them in assessing a child's readiness. Because kindergarten teachers are shoulder-to-shoulder with kindergarten students every moment of their kindergarten experience it seems fitting that they should be up-front in profiling what needs to be in place for a child when entering kindergarten.

Concurrently, by identifying what skills are indicators of readiness it is also possible to identify skills unnecessary for kindergarten readiness. Clearly, lack of knowledge of kindergarten concepts is not viewed as a reason to delay a child's kindergarten entry. Additionally, the skills identified by the teachers in this sample are not necessarily age-dependent or academically based. Because kindergarten entry decisions are often made according to birthdays, cut-off dates and curriculums, this specific, succinct list should help to practically guide this decision.

With this specific list of indicators in mind and the knowledge of short-term and long-term effects on children of delaying entry, hopefully those making this important decision will be better informed. With this information generated by kindergarten teachers guiding parents in this challenging process, potentially all children can begin their academic careers appropriately and positively affording the most ideal climate of learning for each student in each kindergarten classroom and beyond.

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APPENDIX

Questionnaire
How long have you been teaching?
How many years have you taught kindergarten?
Please tell me the extent of your agreement or disagreement with this statement. California's cut-off date of December 2 nd is appropriate. Strongly agree Agree Undecided Disagree Strongly disagree
Please explain your response in more detail.
What skills do you feel are the most important indicators of kindergarten readiness in a student?
What do you advise parents to do if their "age-appropriate" child is not "ready" for kindergarten?
Thank you very much for your time.