

Rowan University

Rowan Digital Works

---

Theses and Dissertations

---

5-6-2009

## Determining whether the age children enter kindergarten affects academic and social development

Adrienne Sarosky  
*Rowan University*

Follow this and additional works at: <https://rdw.rowan.edu/etd>



Part of the [Educational Psychology Commons](#)

---

### Recommended Citation

Sarosky, Adrienne, "Determining whether the age children enter kindergarten affects academic and social development" (2009). *Theses and Dissertations*. 667.  
<https://rdw.rowan.edu/etd/667>

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact [graduateresearch@rowan.edu](mailto:graduateresearch@rowan.edu).

DETERMINING WHETHER THE AGE CHILDREN ENTER KINDERGARTEN  
AFFECTS ACADEMIC AND SOCIAL DEVELOPMENT

by  
Adrienne Sarosky

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Arts Degree  
of  
The Graduate School  
at  
Rowan University  
May 6, 2009

Approved by

Advisor

Date Approved 5-6-09

© 2009 Adrienne Sarosky

## ABSTRACT

Adrienne Sarosky

### DETERMINING WHETHER THE AGE CHILDREN ENTER KINDERGARTEN AFFECTS ACADEMIC AND SOCIAL DEVELOPMENT

2008/09

Dr. Roberta Dihoff

Master of Arts in School Psychology

The purpose of this study was to determine whether the age children enter kindergarten has an effect on their behavior and academic and social development. This study examined age eligible children with summer birthdays who delayed kindergarten entry by one year and age eligible children with summer birthdays who started kindergarten on-time. It was hypothesized that the older kindergarten students or age eligible children who delayed kindergarten entry would perform better academically, have better social skills, and have less problem behaviors. The Social Skills Improvement System (SSIS) Rating Scale was used for this study. The SSIS assessed academic competence, social skills, and problem behaviors. Results indicated that delayed entry kindergarten students did significantly better academically. Results also indicated that there were no significant differences between delayed entrants and on-time entrants in terms of social skills and problem behaviors.

## ACKNOWLEDGMENTS

I would like to thank my family and friends for supporting me and keeping me positive while completing my thesis. I would also like to thank Dr. Dihoff, Dr. Klanderman, and Dr. Epifanio for their guidance. Finally, I would like to thank the Somers Point and Linwood School Districts for giving me the opportunity to use their schools for my research.

## TABLE OF CONTENTS

Acknowledgments	ii
List of Graphs	v
CHAPTER	PAGE
I. Introduction	1
Need	1
Purpose	3
Operational Definitions	3
Limitations	4
Summary	5
II. Literature Review	6
Overview	6
Effects of Redshirting	11
Short-term effects	11
Long-term effects	13
Research Limitations	18
Retention and Redshirting	19
Summary	20
III. Methodology	22
Sample	22
Measures	23
Design	24
Hypotheses	24

	Procedure	24
	Summary	25
IV.	Results	26
	Introduction	26
	Hypotheses	26
	Results	27
	Summary	28
V.	Discussion	29
	Introduction	29
	Conclusions	29
	Limitations	30
	Discussion	31
	Future Research	32
References		34

## LIST OF GRAPHS

GRAPH	PAGE
Graph 4.1 Academic Competence Mean Scores of On-time Entrants (5) and Delayed Entrants (6)	27

## CHAPTER 1

### Introduction

#### Need

For years parents have questioned whether or not their children are ready for kindergarten. More often, parents of children with birthdays close to the cutoff date question their children's readiness for kindergarten. Parents are concerned that if their child is not ready they won't be able to meet the academic expectations of kindergarten or be accepted by their peers. For these reasons parents have begun "redshirting" their children, or delaying entrance into kindergarten by a year (Katz, 2000). About 10% of children in the United States are redshirted (Stipek, 2002). Redshirting gives children another year to mature (Lincove & Painter, 2006). It also gives them the potential advantage of being the oldest in kindergarten instead of the youngest (Lincove & Painter, 2006). The practice of redshirting is not always a decision that parents make by themselves. Sometimes educators recommend delaying kindergarten (Laidig, 1998). Redshirting usually occurs in children with summer birthdays, because summer birthdays fall close to the cutoff date (Lincove & Painter, 2006). Boys are redshirted more often than girls since boys usually mature slower than girls (Lincove & Painter, 2006). Also children of middle class families are more likely to be redshirted than children of lower income families because lower income families can not afford to have their child stay at home or attend day care for another year (Lincove & Painter, 2006).



Since the trend of redshirting an age gap has developed in kindergarten classrooms. Some kindergarteners are almost a full year younger or older than their classmates. This gap has parents, teachers, and administrators questioning if either group of students benefits more in terms of academic and social development. Is it more beneficial to delay an age eligible child's entrance into kindergarten by a year and have them be one of the oldest students in the class or is it more beneficial to have an age eligible child enter kindergarten on-time even if they will be one of the youngest students in the class? Some researchers believe that academic achievement is higher among older students, but the advantage usually fades by the end of elementary school (Lincove & Painter, 2006). However, other researchers have stated that the age children enter kindergarten should not be regarded as a major determinant of their school achievement ("Age of Entry," 2007). Also some studies have found age-of-entry has no affect on social development ("Age of Entry,"2007).

It is evident that results vary among researchers. Hopefully by pursuing more research it can be determined whether or not age-of-entry has an effect on academic and social development. Determining this will limit the concern among teachers, parents, and administrators. It may also lessen the age gap among students in kindergarten classrooms, which in return may lessen the variation of skill levels in kindergarten classrooms. This may make it easier for kindergarten teachers to teach effectively. Lastly, it may help state legislators and school administrators decide on a universal cutoff data, instead of having cutoff dates range among school districts and states.

## Purpose

This study was designed with the intent of determining whether the age children enter kindergarten affects academic development, social skills, and behavior. This study focused on age eligible children with summer birthdays who delayed kindergarten entry by one year and age eligible children who started kindergarten on-time.

## Hypothesis

It was hypothesized that kindergarten students who delayed kindergarten entry by one year would score higher on academic competence than students who entered kindergarten on-time. The second hypothesis was that student who delayed kindergarten entry by one year would have better social skills than students who entered kindergarten on-time. The third hypothesis was that student who delayed kindergarten entry by one year would have fewer problem behaviors than student who entered kindergarten on-time.

## Operational Definitions

### Academic competence:

The ability to do academics adequately.

### Age eligible:

The age a child is eligible to enter kindergarten ("Age of Entry," 2007).

### Age-of-entry:

The age a child is when they enter kindergarten ("Age of Entry," 2007).

### Cutoff date:

The date set by either state legislators or school districts to determine when a child is eligible to start kindergarten.

#### Problem behaviors:

Behaviors that interfere with the acquisition or the performance of socially skilled behaviors (e.g. bullying, hyperactivity, arguing, poor self-esteem) (Gresham & Elliot, 2008).

#### Redshirting:

The practice of delaying the entry of age eligible children into kindergarten by one year in order to allow more social, academic, and physical growth (Katz, 2000).

#### Social skills:

These are specific behaviors that a person exhibits in order to perform a social task proficiently (e.g. listening, sharing, communication) (Cook et al., 2008).

#### Limitations

A few limitations that should be taken into consideration with regards to this study include: first, the sample size is relatively small, therefore may not be representative of the general population. Secondly, the sample was homogenous in terms of socioeconomic status and race because the population of the sample is predominantly Caucasian and middle class. Thirdly, the study did not control for experiences prior to kindergarten, such as child care. Lastly, it is important to note that the data obtained on the students' academic skills, social skills, and behavior was based on questionnaires completed by their teachers. Therefore, the assumption was made that teachers had no bias towards their students while completing the questionnaire.

## Summary

Chapter 2 will include a comprehensive review of the literature on kindergarten age entry. There will also be a review of the history of redshirting as well as a review of cutoff dates throughout the United States in the past years. Chapter 3 will discuss what participants, procedures, and measures were used for the present study. Chapter 4 will present the results of the research conducted on kindergarten age entry and social and academic performance. Lastly, chapter 5 is a summary of the present study's findings as well as implications for future research.

## CHAPTER 2

### Literature Review

Chapter two reviewed readiness and how it relates to the trend of redshirting and discrepancies with readiness. Chapter two also reviewed chronological age as the determinant of readiness and cutoff dates. Following this the population of students who are most often redshirted is reviewed. Then the chapter took an extensive look at the research that supports redshirting as well as the research that goes against redshirting. Lastly, chapter two listed limitations of the research on delaying kindergarten, and reviewed the relationship between retention and delaying kindergarten. Chapter two concluded with a brief summary of the chapter, and an introduction to the current study.

#### Overview

Approximately 9% of kindergarten students are redshirted each year (West, Meek, & Hurst, 2000). Some parents redshirt or delay their child's entrance into kindergarten in order to give their child an edge over their classmates. These parents believe that older students outperform younger students (Casico, 2008). However most parents redshirt their children because they are uncertain about whether their child is ready academically and socially for kindergarten. How is readiness defined? Typically readiness is defined as a set of skills needed to learn, work, and function successfully in school (Raforth, Buchenauer, Crissman, & Halko, n.d.). Teachers try to measure readiness through test scores or particular skills and abilities (Graue, 1998).

However these indicators aren't always valid. Some researchers argue strongly for kindergarten screening tests (Warder, 1999). While other researchers believe there are too many screening tests to choose from and multiple tests are used in just one state (Warder, 1999). Another reason kindergarten screening tests are considered inaccurate is because children have short attention spans, and usually inconsistent performance on demand (Raforth et al., n.d.). Children are also rapidly developing. What they don't know one month they may know very well the next month. In regards to skills and abilities Raforth et al. (n.d.) stated that skills and abilities teachers look for to indicate readiness include the ability to count to ten, write their own name, tie their shoes, identify shapes and colors, play with others, follow simple rules, follow a daily schedule, listen, and "work independently." Guignon (1997) stated that parents put more emphasis on academic skills like reading and writing. With various ways of determining readiness and teachers and parents having different expectations there are a number of students who are considered unready by their teachers (Ackerman & Barnett, n.d.) When a national survey was done with teachers asking them to rate their students on readiness results were not promising. Teachers said that 48% of their students were not ready for the current kindergarten curriculum (Katz, 2000). Teachers also stated that 46% of their students lacked the ability to follow directions, 36% lacked academic skills, and 34% did not have the ability to "work independently" (Katz, 2000).

The majority of school districts use chronological age as the determinant of readiness. "Some researchers believe chronological age in the most convenient way to determine readiness for school entry," (Gray, 1985, p.1). "Chronological age has the advantage of being easy and potentially equitable," (Carlton & Winsler, 1999). Other

researchers believe differently, Stipek (2003) states that chronological age will always be a weak indicator of readiness. Mathews, May, and Kundert (1999) believe that basing readiness on chronological age constitutes for 50% of school failures. Besides having discrepancies towards using this system to determine readiness another issue is deciding on a cutoff date that children must turn 5 by to enter kindergarten. Cutoff dates vary from state to state and school district to school district. In 1984 forty states had cutoff dates set by state legislators (Gray, 1985). Among those forty states there were 17 different dates (Gray, 1985). Seven states allowed school districts to determine the cutoff date (Gray, 1985). In 1990 forty-two states established a cutoff date and in 2005 forty-five states established a cutoff date (Colasanti, 2007). There are still a few states that school districts determine the cutoff date, such as, New Jersey. However, New Jersey is currently trying to establish September 1<sup>st</sup> as their cutoff date (Weil, 2007). Cutoff dates among states have a span of six months (Weil, 2007). Indiana's cutoff date for kindergarten is July 1<sup>st</sup> while Connecticut's cutoff date is January 1<sup>st</sup> (Weil, 2007). The date most often chosen by states and school districts is September 1<sup>st</sup> (Narahara, 1998).

There are a few reasons why there is such a range in cutoff dates.. One reason is that kindergarten has become the new first grade. Kindergarten use to be a place where children learned to play and share. Children had played oriented curriculum and were socialized into the culture of schooling (Logue, 2007). They learned to share, take turns, resolve conflicts with peers, participate in group activities, and adjust to a routine and rules (Logue, 2007). Kindergarten has undergone a major curriculum change because there is no longer a focus on social skills but instead a focus on academic skills (Narahara, 1998). With the curriculum of first grade being pushed down to kindergarten

state legislators and school administrators want students to be older. The change in curriculum is a response to standardized testing. America's schools put a lot of emphasis on educational testing therefore kids are being tested younger and younger in schools. If children are being tested in third grade then they must prepare for these tests in second and first grade, or even the end of kindergarten (Weil, 2007). Pushing back kindergarten birthday cutoff dates means children will be older when they take standardized tests in third grade and some researchers believe this will increase scores. Another reason there is such a range in cutoff dates is that some school want to eliminate the problems with the children who are the youngest in the class by requiring children to be older before they enter kindergarten (Carlton & Winsler, 1999). Finally another reason there is such a span among cutoff dates is because states and school districts are allowed to decide on the cutoff date and they are basing their decisions on different factors. Maybe the country as a whole should consider a uniform cutoff date.

It has been established that approximately 10% of the population is redshirted or delays kindergarten by one year. According to Crosser (1998) 64% of the children who are redshirted are boys. Since boys usually mature slower parents believe that they need an extra year to mature in order to succeed in school. Crosser (1998) also stated that 73% of the children who are redshirted are white. Redshirting seems to occur more in affluent communities and these communities usually have a higher population of White Americans and fewer African Americans and Hispanics Americans ("The Elementary," 1997). Another commonality of children who are redshirted is that their birthdays are around the same part of the year. Approximately 70% of children who are redshirted are born between July and December (Crosser, 1998). McClure (n.d.) agrees that children



with birthdays in the second half of the year are delayed more often than those in the first half especially those children who have birthdays that fall during the summer months. According to Crosser (1991) children born during June, July, August, and September make up a large percentage of the children who are redshirted. The last commonality among children who are redshirted is socioeconomic status. As stated previously children who are redshirted more often come from wealthy communities (Oshima & Domleski, 2006). In 2007 a national survey on redshirting indicated that 92% of lower income families planned to enroll their children into kindergarten on time, 3% planned to delay entry, and 1% planned early enrollment (Frazier, 2008). In comparison to higher income families whom 88 % planned to enroll their children into kindergarten on-time, 8% planned to delay enrollment, and the other 2% of higher income families planned on early enrollment (Frazier, 2008) . Children from higher income families have the option of keeping their child home another year if they feel they are not ready because they can afford to. However, lower income families regardless of whether their children are ready may have to enroll them into school once they are age-eligible because they can not afford to keep them home another year (Narahara, 1998). Meanwhile if a child has a parent who is a single working parent or living conditions are bad it is probably more beneficial to enroll them in school even if they are not ready because school will be a better environment for them and they will be more likely to learn in school then out of school for another year.

With a almost a ten percent of the school population delaying entrance into kindergarten it is important to determine what effects redshirting has on the academic, behavioral, and social development of students. Is redshirting beneficial or damaging to

development or does it have no affect at all? If it does have an affect are the effects long-term or short-short and who does it affect more?

### Effects of Redshirting

#### Short-term effects

According to Zill and West (2001) older kindergarteners are closer to being able to read and do math than younger kindergarteners. Older kindergarteners were more likely to pass the first level of a reading proficiency test than younger kindergarteners. Older kindergarteners were also more likely to be able to count beyond ten, recognize shapes, and compare lengths of objects than younger kindergarteners (Zill & West, 2001).

Forty minority kindergarten students from a low socioeconomic neighborhood in Chicago were divided into two groups, a younger group and an older group. Once the groups were divided each group of kindergarteners was administered a Developmental Test of Visual-Motor Integration. The test was administered once at the beginning of the year and once at the end of the year. Results of the study indicated that the older kindergarteners performed significantly higher (Narahara, 1998).

A study done in 1993 demonstrated that there were significant differences in teachers' negative feedback towards delayed entry kindergarteners and on-time entry kindergarteners. When kindergarteners of delayed entry were compared to kindergarteners of on-time entry the study found that teachers gave less negative feedback to students who delayed entry (West, Meek, & Hurst, 2000). For example, 17% of students with delayed entry received negative feedback from their teachers that they were "not learning up to their capabilities" (West, Meek, & Hurst, 2000). While 24%

percent of students with on-time entry received negative feedback from their teachers stating that they were “not learning up to their capabilities” (West, Meek, & Hurst, 2000). Twenty-five percent of delayed entry kindergarteners were given negative feedback that they were having “problems concentrating in class” in comparison to 30% of on-time entry kindergartners (West, Meek, & Hurst, 2000).

Weil (2007) found that in a survey of 22,000 kindergarteners done by the National Center for Education Statistics there were many advantages to being an older kindergarten student (Weil, 2007). Some of the advantages of being an older kindergartener are the following: more likely to be reading, have a greater ability to read two-digit numbers, have better motor skills and writing skills. In regards to social skills older kindergarteners are more socially adapt (Weil 2007). Being more socially adapt is important because social skills are an essential to academic performance, behavior, developing relationships, and becoming involved in extracurricular activities (“Social Skills,” 2008).

All of these studies agreed delaying kindergarten by a year or redshirting is beneficial. Studies indicated that being older in kindergarten resulted in better reading and arithmetic abilities, motor skills, social skills, and even less negative feedback from teachers. However, some researchers believe there are negative aspects to delaying kindergarten entry. According to the article, *The Elementary School Performance and Adjustment of Children Who Enter Kindergarten Late or Repeat Kindergarten: Findings from National Surveys* the practice of delaying kindergarten entry leads to an upward shift in the expectations that teachers have for their students which will give younger students an unfair advantage (“The Elementary,” 1997). Redshirting also led to a greater

gap in the ages of students within a class. This gap in ages makes it even more difficult for teachers to accommodate all the different levels of abilities (Katz, 2000).

After taking an extensive look at the immediate and short-term effects of redshirting research has indicated that redshirting may be beneficial. The following studies will focus on the long-term effects of redshirting.

#### Long-term effects

Researchers investigated whether delaying kindergarten entry has a long-term effect on academic achievement. The participants were 253 seventh, eighth, and ninth grade students. Of the 253 students 190 of them had entered kindergarten on-time while 63 of them delayed entry. Students' cognitive abilities were measured using a standardized test that they took in fifth and sixth grade. Each on-time entrant was matched with a delayed entrant of similar intelligence and the same gender. Results of the study indicated that boys who had delayed kindergarten entry were academically more advanced than boys who entered kindergarten on-time. The area redshirted boys were the most advanced in was reading. However results indicated no advantage for girls in reading or math (Crosser, 1998).

A study was done with a 191 students in order to determine if students who were redshirted had better reading and math scores than students who were not redshirted. Students were divided into four groups. The first group had the "redshirts", the second group had the students with birthdays from September to January, and the third and fourth groups were made up of students with birthdays in the middle of the school year. Students' academic abilities were measured using the Iowa Tests of Basic Skills. Results indicated that "redshirts" had gained no advantage over other students (Narahara, 1998).

Another study also investigated whether there is a correlation between redshirting and reading ability. In this study 119 third graders from a public school in New Jersey were investigated. Students' abilities were measured using the Metropolitan Achievement Test. The results of the study found a significantly small correlation between third graders who were redshirted in kindergarten and reading (Narahara, 1998).

Research that was done in Kentucky studied students' math, reading, and language test score. Researchers looked at their scores in first, fourth, and eighth grade. Results indicated that students who were older had slightly higher scores than those who were younger. This was only apparent in first and fourth grade. By eighth grade the slight advantage that older students had, had diminished (The Elementary, 1997).

There are some researchers that have found no advantage to delaying kindergarten. A Delaware school district found no correlation between age-of entry and reading and math scores in the second and fourth grade. Another school also found no correlation between age-of-entry and standardized reading and math test scores in the second and fourth grade (The Elementary, 1997). However, some researchers believe that age-of-entry has an academic and social advantage, but that it only lasts until the third grade. Researchers at Michigan State University and the University of Illinois are among those who claim delayed-entry students lose whatever edge they had by the third grade ("Delaying the start," 2008). March (2005) also stated that while academic achievement is greater in older students in the primary grades the advantage disappears over time.

A study was done on 352 kindergarteners from the 1988, 1989, and 1990 classes of two elementary schools located in a rural school district located in New York. Each

student was placed in a group. The groups were “age appropriate group,” the “young group,” and the “academically redshirted group.” Students’ reading achievement and mathematic achievement were measured in the second, third, and fourth grade using standardized tests. Results indicated that redshirted students did not achieve any better than age appropriate students or young students in reading in second and third grade. However redshirted students scored significantly higher than young students in fourth grade. With regards to math there were no significant effects (March, 2007).

Another study was done with a pool of 21,260 kindergarten students. Of the 21,260 students 3,862 were termed “younger” because they had summer birthdays in June, July, and August. Approximately another 2,693 students were termed “older” because they had fall birthdays in September, October, and November. Students’ math and reading abilities were measured. They were tested twice, once in the fall and a once in the spring. Results of the study indicated that there was a significant difference among the two groups. The older group performed better in both reading and math. This edge was significantly higher until third grade and then it leveled off between third and fifth grade and no difference existed by eighth grade (Oshima & Domaleski, 2006). Weil (2007) does not agree that the effect of being older diminishes in middle school. In a study of nearly a quarter-million students across 19 countries younger students were found to perform 4-12 percentiles lower than older students in third and fourth grade and 2-9 percentiles lower in seventh and eighth grade. In the British of Columbia older students were about 10% more likely to go to college and in the United States almost 12% more likely to get a four-year college or university (Weil, 2007).

The results of the previous studies indicate the research on the long-term effects of delaying kindergarten with regard to academics is very mixed. Some researchers believe the effects are short lived and only last until third grade while other researchers believe it is a determining factor in whether a student decides to enroll in college. The following research will look at long-term effects with regard to social and behavioral skills.

Some studies suggest that adolescents who are among the oldest of their classmates are more likely to be involved in risky behaviors. Examples of risky behaviors are, smoking, drinking, using drugs, engaging in high-risk sexual activities, having suicidal intentions, and engaging in violent behaviors. A study was done in order to determine whether increased behavior problems were affiliated with students who delayed school entry or were retained. The study involved 9,079 participants. Participants were 7 to 17 years-old. Approximately 26% of the 9,079 were considered older for their grade. Students were considered old for their grade if they were retained or delayed kindergarten entry. Behavior problems were measured using the standardized behavior Problem Index (BPI). The study concluded that being among the oldest without being retained is associated with increased behavior problems. This is particularly evident in adolescents. While this study included Blacks and Hispanics the results of having elevated behavior problems only pertains to white students. Increased behavior problems are associated with emotional distress, social-deviance, and health-risk behaviors; therefore, other domains of competency may be affected (Byrd, Weitzman, & Auinger, 1997). Bettis (2008) agrees that redshirted students can end up having more social and emotional problem in high school. Cromwell (2006) also agrees that older

students have more behavioral difficulties, but also believes we have created an aging population in schools. The percentage of 12<sup>th</sup> graders who are 19, 20, and 21 has doubled from 1984 to 1994. In 1984 only 4% of 12<sup>th</sup> graders were 19, 20, and 21. In 1994 7% of 12th graders were 19, 20, and 21. The increase in the age of the school population is a response to more students delaying kindergarten entry, but also because of the increase in special education students (Cromwell, 2006).

According to Katz (2000) there are an increasing number of redshirted students in special education. It may be possible that students who were redshirted in kindergarten and considered immature socially and academically may have been misdiagnosed. They actually may have had special needs that needed interventions, but because of misdiagnosis did not receive those interventions and instead delayed kindergarten entry. Then a couple years later that same student is being classified as special education Katz (2000).

Lastly, Marshall (2003) also agreed that there are negative social outcomes associated with delaying entry into kindergarten entry. Marshall (2003) believes there are more drawbacks than advantages. Some of the drawbacks include students feeling like they have failed or been retained. Redshirted students may have a negative attitude towards school. Students who are redshirted are more likely to dropout out of high school. One study also found younger students to be more prone to dropping out, being referred for special services and special education, have discipline problems, and score lower on achievement tests (Miller, 1995). Dropout rates of redshirted students who come from higher income families have lower dropout rates than redshirted students who come from lower income families (Marshall, 2003).



Marshall (2003) stated that with regards to self-concept, peer acceptance, and teacher ratings of behavior there has been no evidence of differences between redshirted students and on-time-entry students. There is also no difference between the two groups when considering self-reported school adjustment, loneliness, perceptions of competence, or acceptance (Marshall, 2003). However reviews of literature have found that younger students are more likely than older students to be rejected or neglected. Younger students were also less likely to be picked by their peers as somebody who is well liked and exhibits prosocial behavior (Marshall, 2003).

In the previous summaries on the social and behavioral aspects of redshirting much of the research goes against redshirting. The social effects are also mostly negative however according to Marshall (2003) there are some positive social outcomes for redshirted students, such as being more likely to be picked by their peers as someone who is well liked.

#### Research Limitations

When considering the effects of delayed kindergarten entry on academic, social, and behavioral development researchers dispute that experiences prior to enrolling in kindergarten should be considered. Researchers believe this is not always considered and may be a reason why the research pertaining to the effects of delaying kindergarten entry is so mixed. Two researchers Ackerman and Barnett (n.d.) stated that inconsistency among research may be a reflection of uncontrolled factors that may influence students who were older upon entering kindergarten. These factors can be a number of things including family and child characteristics and prior social and educational experiences either at home or in preschool programs (Ackerman & Barnett, n.d). Children who have

quality child care experiences prior to enrolling kindergarten tend to be more advanced than those who do not have quality child care experiences (Downer & Pianta, 2006). Ethnic and racial background should also be considered when doing research on redshirting (Rathbun & West, n.d.) Downer and Pianta (2006) included some other elements that should be considered which include the relationship between the child and parents, the home environment, the education of the mother, and the family's income. Winter (2008) stated that over the years researchers have continually underscored the effect income has on academic abilities. Particularly the effect low income has on academics. "Poverty is a pervasive condition that has long been associated with unfavorable social, health, and educational outcomes for children," (Winter, 2008). Some statistics on the effects of poverty on academic success indicated that in 2005 40% of children under the age of six lived in lower income households and they were more likely than children who lived in higher income households to have poor academic performance and also more likely to have social/emotional problems (Fantuzzo et. al., 2005).

### Retention and Redshirting

Retention in kindergarten with relation to delayed entry in kindergarten. Most parents delay their children's entrance into kindergarten because they feel they are not ready. If their child were to enter kindergarten and could not meet the standards of the classroom and fall behind then they may be retained in kindergarten. The practice of delaying kindergarten may be a way of avoiding retention and its negative effects. Jones and Sutherland (2001) believe that redshirting or delaying kindergarten is an approach to dealing with the educational concern of retention. Over the years research has indicated

that retention is ineffective in increasing the academic abilities of children who are academically delayed (Position Statement, 1999). Graue, Kroger, and Brown (2002) study found that despite an extra year in kindergarten retainees still were not meeting the expectations of kindergarten. Another study found that children who are retained are more likely to have self-esteem issues and dislike school (Canter & Carey, 1998). Children who are retained are more likely to dropout of school once they reach high school (Canter & Carey, 1998). Another study done in 1987 indicated that students who are retained are twice as likely to dropout as students who are not retained (Frey, 2005). While the research on dropping out of school for retainees is similar to the research on dropping out for “redshirts” it is the only negative effect that retention and redshirting share. Research comparing retainees and redshirts indicates that while there is only a slight but significant difference redshirts actually perform better in school than retainees. Redshirts are also less likely to receive negative feedback from their teachers on academics and behavior and they are less likely to repeat the first or second grade (West, Meek, & Hurst, 2000). Should the practice of retaining no longer be if it entails mostly negative effects? Redshirting could potentially be the new approach to retention.

### Summary

In summary the research reviewed has offered a comprehensive overview of redshirting or delaying kindergarten entry. Through the years parents, administrator, and teachers have questioned its potential advantages and disadvantages. There is evidence in more recent research that redshirting is beneficial, but the benefits of it usually only last until the third grade. Recent research also indicates redshirting may cause behavioral problems in adolescence. However many questions still remained unanswered, therefore

more research is essential. In the present study kindergarten students with summer birthdates who entered school on-time were compared with kindergarten students with summer birthdates who delayed entry by a year. Students' academic competence, social skills, and problem behavior were rated by their teachers using the Social Skills Improvement Scale (SSIS) rating scales (Greshaman & Elliot, 2008). The purpose of the current study was to determine the advantages and disadvantages of redshirting and also to determine if redshirting should be done in confidence by teachers, administrators, and parents as a means to help improve children's' academic and social development.

## CHAPTER 3

### Methodology

#### Sample

The participants for this study were Kindergarten teachers and Kindergarten students from two small school districts in Southern New Jersey. One of the school districts was located in Somers Point. Somers Point has a population of 11,614. The population is composed of 85% White, 7% Black or African American, 6% Hispanic or Latino, and 2% other races. The median household income is 42,222. The other school district was located in Linwood. Linwood has a population of 7,172. The population is composed of 95% White, 2% Native Hawaiian and other Pacific Islander, 1% Black or African American, 1% Hispanic or Latino, and 1% other races. The median household income is 60,000.

Kindergarten students who participated were born within four months of the cutoff date of their school. The cutoff date at both school districts was October 1st; therefore all kindergarten students who participated were born in June, July, August, or September of 2002 or 2003. A total of 47 kindergarten students met the criteria for the study. All 47 of these students' parents or guardians received a consent form for their child to participate in the study. Of the 47 kindergarten students 26 of them were given consent to participate in the study. There were a total of 18 females and 8 males. Out of the 26 kindergarteners 20 were on-time entrants and 6 were delayed entrants into kindergarten. Of the 20 on-time entrants 14 were females and 6 were males. Of the 6 delayed entrants 4 were females and 2 were males.

## Measures

The Social Skills Improvement System (SSIS) Rating Scale was used for this study. The SSIS is a revised version of the Social Skills Rating System (SSRS), (Gresham & Elliot, 1990). The SSIS assesses academic competence, social skills, and problem behaviors. The subdomains of the social skills scale are communication, cooperation, assertion, responsibility, empathy, engagement, and self-control. The subdomains of the problem behaviors scale are externalizing, bullying, hyperactivity/inattention, internalizing, and autism spectrum. The subdomains of the academic competence scale are reading and math performance, motivation, parental support, and general cognitive functioning. Teachers rated students' social skills and problem behaviors using a 4-point scale of never, seldom, often, and almost always. Teachers rated academic competence on a 5-point scale. A "1" indicated the student is in the lowest 10% of the class, a "2" is the next lowest 20% of the class, a "3" is the middle 40% of the class, a "4" is the next highest 20% of the class, and a "5" is the highest 10% of the class. The SSIS is the revised version of a widely used rating scale which indicates it is a reliable and valid source. The SSIS was analyzed for internal consistency reliability, test-retest reliability, and interrater reliability. The analysis indicated that the SSIS was reliable in all three subscales. Research has indicated the SSIS is also valid therefore significant inferences can be drawn from the results of the rating scale (Gresham & Elliot, 2008).

## Design

The independent variable of this study was entrance into kindergarten. The independent variable had two levels, delayed entry and on-time entry. The dependent variables were academic competence, social skills, and problem behaviors. In order to analyze the data three separate independent t-tests were used. The first independent t-test compared academic competence scores of delayed entrants and on-time entrants. The second independent t-test compared the social skills scores of delayed entrants and on-time entrant. The third independent t-test compared the problem behavior scores of delayed entrants and on-time entrants.

## Hypotheses

It was hypothesized that kindergarten students who delayed kindergarten entry by one year would score higher on academic competence than students who entered kindergarten on-time. The second hypothesis was that student who delayed kindergarten entry by one year would have better social skills than students who entered kindergarten on-time. The third hypothesis was that student who delayed kindergarten entry by one year would have fewer problem behaviors than student who entered kindergarten on-time.

## Procedure

First permission was obtained from both school districts in order to run the study. To acquire permission a letter was sent to each school district describing the study and the purpose of the study. Once permission was obtained envelopes were placed in the mailboxes of participating teachers. Enclosed in the envelopes was a description of the study, instructions on how to administer the survey, consent forms, surveys, and a thank you card with a five dollar gift card. Teachers distributed consent forms to all of the

students who met the criteria of the study to take home to their parents or guardians. Each child received two consent forms. One form was for their parents or guardian to keep and the other was for their parent or guardian to sign and return. Once teachers received all the signed consent forms they proceeded to complete a survey on each child whose parent or guardian consented to their participation. In addition to the survey teachers had to fill out a form for each student. The form asked for the student's birthdate, age, and gender. The survey used for the study was the Social Skills Improvement System (SSIS), (Gresham & Elliot, 2008). Once all the surveys were completed teachers placed the signed consent forms and completed surveys in an envelope stamped and addressed to the investigator. Once the investigator received the completed surveys the surveys were scored.

### Summary

Chapter three discussed the sample of participants that were used for this study which was kindergarten teachers and students in Southern New Jersey. Chapter three also discussed the measure and design used for the study. The measure used for this study was the SSIS. The SSIS included three subscales which were academic competence, social skills, and problem behaviors. The data obtained from the SSIS Rating Scale was analyzed using three independent sample t-test. Chapter three also restated the three hypotheses. Lastly, chapter three described the procedure that needs to be followed so other researchers can replicate the study.



## CHAPTER 4

### Results

#### Introduction

The purpose of this study was to investigate whether the age children enter Kindergarten has an effect on behavior, academics, and social skills. Particularly this study examined children with birthdays that fell within four months of the cutoff date of their school district. The cutoff date for both school districts in this study was October 1st; therefore, the participants for this study were born in the months of June, July, August, and September. Social skills, problem behaviors, and academic competence were compared between students with summer birthdays that entered Kindergarten during their age eligible year and students with summer birthdays that delayed Kindergarten entry for one year after their age eligible year.

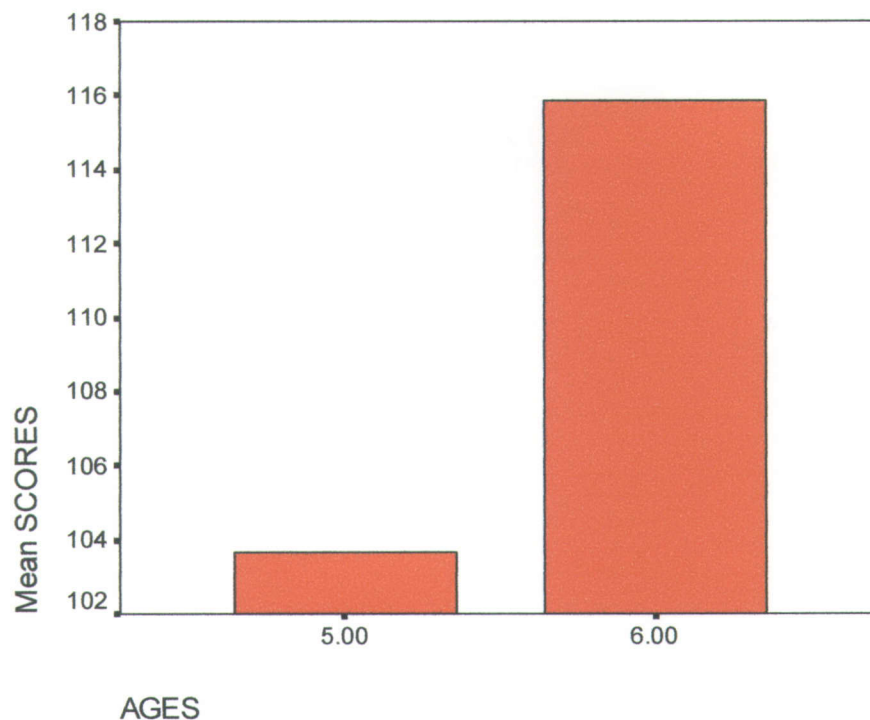
#### Hypotheses

There were three hypotheses for this study. The first hypothesis was that Kindergarten students who delayed Kindergarten entry by one year would score higher on academic competence than students who entered Kindergarten on-time. The second hypothesis was that students who delayed Kindergarten entry by one year would have better social skills than students who entered kindergarten on-time. The third hypothesis was that students who delayed Kindergarten entry by one year would have fewer problem behaviors than students who entered Kindergarten on-time. Overall the researcher expected delaying Kindergarten entry by one year to be beneficial.

## Results

A two-tailed, independent t-test was performed for each hypothesis. In the first hypothesis pertaining to academic competence,  $t = 2.487(df)$ ,  $p = .032$ . These results were significant and indicated that delayed entrants or six-year olds were academically more competent than on-time entrants or five-year olds. These results supported the hypothesis and agreed with previous research. Graph 4.1, below is a representation of the mean scores of academic competence of on-time Kindergarten entrants or five-year olds and delayed Kindergarten entrants or six-year olds.

Graph 4.1 Academic Competence Mean Scores of On-time Entrants (5) and Delayed Entrants (6)



In the second hypothesis, pertaining to social skills,  $t = 1.982(df)$ ,  $p = .076$ . These results were not significant and indicated that there is no difference between the social skills of on-time entrants and delayed entrants.

In the final hypothesis, which pertained to problem behaviors,  $t = -1.184(df)$ ,  $p = .264$ . These results were not significant and indicated that neither on-time entrants nor delayed entrants displayed more problem behaviors.

#### Summary

Chapter four discussed the results found by the researcher in this study. In the first hypothesis significant results were found for academic competence. In the second hypothesis the results were not significant for social skills, and the third hypothesis pertaining to problem behaviors also did not have significant results. These findings will be discussed in further detail in the following chapter.

## CHAPTER 5

### Discussion

#### Introduction

The purpose of the present study was to add to the current body of research on delaying kindergarten entry or redshirting and to determine whether it is beneficial or not. The researcher studied kindergarten students with summer birthdays that delayed kindergarten entry one year past their age eligible year, therefore, being the oldest in their class. The researcher also studied kindergarten students with summer birthdays that entered kindergarten on-time, therefore, being the youngest in their class. Teachers rated their students using the Social Skills Improvement System (SSIS) Rating Scale. The scale measured academic competence, social skills, and problem behaviors. The researcher analyzed the scores from the SSIS with independent t-tests.

#### Conclusions

The researcher had a total of 26 participants, 20 of the participants were on-time entrants and 6 participants were delayed entrants. A randomized number generator was used to randomly select 6 on-time entrants from the pool of 20. This was done in order to analyze the data using independent t-tests. Independent-t tests have the most validity and reliability when there are an equal number of participants in each group.

It was hypothesized that the older kindergarten students or age eligible students who delayed kindergarten entry for one year would be more academically competent than younger kindergarten students or students who entered kindergarten on-time. The study

found a significant difference between, the two groups, delayed kindergarten entrants and on-time kindergarten entrants. Delayed kindergarten entrants were more academically competent. This result agreed with the hypothesis of the researcher.

The second hypothesis stated that delayed kindergarten entrants would have better social skills than on-time kindergarten entrants. Results indicated that there was not a significant difference between groups. However, it should be taken into consideration that  $p = .076$  for social skills. This was close to .05 and when  $p < .05$  it is considered significant, therefore, social skills were almost significant. Had the results been significant they would have agreed with the hypothesis of the researcher that delayed kindergarten entrants would have better social skills than on-time kindergarten entrants.

The third hypothesis stated that delayed kindergarten entrants would have fewer problem behaviors than on-time kindergarten entrants. Results indicated that there was not a significant difference between the two groups.

#### Limitations

While this study was able to add significant information to the body of research on kindergarten entry there are still a few limitations that need to be considered. One limitation was the small sample size. The participant pool was originally twenty-six, but was decreased to twelve in order to have more reliable and valid two-tailed, independent t-tests. With a small sample size the findings of this study can not be generalized to the entire population. The sample size may be the reason why the results for social skills and problem behaviors were not significant.

A second limitation of this study was the gender of the sample. There was not an equal distribution of males and females. The sample was predominantly female. Therefore, the results can be generalized more to females than to males.

A third limitation was that this study did not control for experiences prior to kindergarten, such as preschool. One of the schools in this study had a preschool located in the school; therefore, the students at that school were more likely than the students at the other school to have attended preschool.

A final limitation of this study was that the participants for this study were from a suburban area in Southern New Jersey. This can impact generalizing the results of the study to kindergarten students in urban areas. Urban areas are generally more diverse and the suburban area of Southern New Jersey used for this study, according to statistics, is predominantly Caucasian.

## Discussion

In chapter two Zill and West (2001) stated that older kindergarteners were closer to being able to read and do math than younger kindergarteners. Older kindergarteners were also more likely to count beyond ten, recognize shapes, and compare lengths of objects. According to Narahara (1998) older kindergarten students outperformed younger kindergarten students on a test administered at the beginning of the school year and again at the end of the school year. This research from chapter two agreed with what the researcher found in this study that academic competence is higher among older kindergarten students than younger kindergarten students.

Chapter two also stated that in a survey of 22,000 kindergarten students there were many advantages to being an older kindergarten student (Weil, 2007). One

advantage was that older kindergarten students are more socially adapt (Weil, 2007).

While the researcher of this study hypothesized that older kindergarteners would have better social skills the results of the study indicated no significant differences between the two groups.

The research in chapter two that focused on problem behaviors stated that delayed kindergarten entrants were more likely than on-time kindergarten entrants to have increased behavior problems, particularly in adolescence (Byrd, Weitman, & Auinger, 1997) However, according to Marshall (2003) there were no differences between teacher's ratings of on-time kindergarten entrants and delayed kindergarten entrants in regards to behavior. The research of Marshall agrees with the results of this study because no significant results were found between the two groups pertaining to problem behaviors. However, this went against the hypothesis of the researcher for this study that delayed kindergarten entry students would have fewer problem behaviors than on-time kindergarten entrants. The research of Byrd, Weitman, and Auinger also went against the hypothesis of the researcher.

#### Future Research

Future researchers may want to consider replicating this study with a larger sample size. A larger sample size would make the distribution of males and females more equal. It would create more ethnic diversity. Also income differences would be more likely. With a larger sample size the results will have more validity and reliability and could be generalized to the entire population.

Future researchers may want to focus their research on academic achievement in delayed kindergarten entrants and on-time kindergarten entrants. Since the researcher of this study was able to find significant results with such a limited pool of participants.

Something else for future researchers to consider would be to do more longitudinal research. Longitudinal research is limited on this topic. It would be beneficial to replicate this study and continue with follow-up assessments of academic competence, social skills, and problem behaviors every two or three years and continue the follow-up assessments until the end of high school.



## REFERENCES

- Ackerman, D. J., & Barnett. (n.d.). Prepared for kindergarten: What does “readiness” mean?
- Age of entry to kindergarten and children’s academic achievement and socialemotional development. (2007). *Early Education Development*, 18(2), 337-368
- Byrd, R. S., Weitzman, M., & Auinger, P. (1997). Increased behavior problems associated with delayed school entry and delayed school progress. *Pediatrics*, 100(4), 654-661
- Canter, A., Ph.D., & Carey, K. (n.d.). Retention and promotion. *Helping Children at Home and School: Handouts form Your School Psychologist*
- Carlton, M. P., & Winsler, A. (1999). School readiness: The need for a paradigm shift. *School Psychology*, 28(3), 338-352
- Casico, E. (2008). How and why does age at kindergarten entry matter? *FRBSF Economic Letter*
- Colasanti, M. (2007). Kindergarten entrance ages: A 30 year trend analysis
- Cook, C. R., Gresham, F. M., Kern, L., Barreras, R. B., Thornton, S., & Crews, S. D. (2008). Social skills training for secondary students with emotional and/or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 16(3), 131-144
- Cromwell, S. (2006). Starting kindergarten late: How does it affect school performance. Retrieved November 11, 2008, from <http://www.education-world.com>
- Crosser, S. (1998). He has a summer birthday: The kindergarten entrance age dilemma (Report No. EDQ-PS-98-7). Champaign, IL: Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Services No. ED423078)

- Crosser, S. L. (1991). Summer birth date children: Kindergarten entrance age and academic achievement. *Journal of Educational Research*, 84(3), 140-146
- Delaying the start of kindergarten a good move? New research says maybe not (2008, August 25) *Orlando Sentinel*
- Downer, J. T., & Pianta, R. C. (2006). Academic and cognitive functioning in first grade: associations with earlier home and child care predictors and with concurrent home and classroom experiences. *School Psychology Review*, 35(1), 11-30
- Frantuzzo, J. W., Rouse, H. L., McDermott, P. A., Childs, S., & Weiss, A. (2005). Early childhood experiences and kindergarten success: A population-based study of a large urban setting. *School Psychology Review*, 34(4), 571-588
- Frazier, M. (2008). Few parents delay kindergarten past age 5. Retrieved September 15, 2008, from <http://www.startelegam.com>
- Frey, N. (2005). Retention, social promotion, and academic redshirting: What do we know and need to know? *Remedial and Special Education*, 26(6), 332-346
- Graue, E. (1998). What's wrong with Edward the unready? Our responsibility for readiness. *Young Children*, 12-16
- Graue, E., Kroeger, J., & Brown, C. (2002). Living the 'gift of time'. *Contemporary Issues in Early Childhood*, 3(3), 338-345
- Gray, R. (1985). Criteria to determine entry into school: A review of the research
- Gresham, F. M., & Elliot, S. N. (1990). Social skills rating scale.
- Gresham, F. M., & Elliot, S. N. (2008). Social skills improvement system rating scales manual. Minneapolis, MN: NCS Pearson, Inc.
- Guignon, A. (1997). What is the right age to start kindergarten? Retrieved September 15, 2008, from <http://www.educationworld.com>
- Jones, L. D., & Sutherland, H. (2001). Academic redshirting a positive approach to grade

- retention. *Education* 102(2), 173-175
- Katz, L. G. (2000). Academic redshirting and young children. Champaign: IL: Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED447951)
- Laidig, P., Ph.D. (1998) School entry decisions. *Helping Children at Home and School: Handouts form You School Psychologist*
- Lincove, J. A., & Painter, G. (2006). Does the age that children start kindergarten matter? Evidence of long-term educational and social outcomes. *Educational Evaluation and Policy Analysis*, 28(2), 153-179
- Logue, M. (2007). Early Childhood Learning Standards: Tools for promoting social and academic success in kindergarten. *Children & Schools*, 29(1), 35-43
- March, C. (2005). Academic redshirting: Does withholding a child from school entrance for one year increase academic success. *Issues in Educational Research*, 15, 1-13
- Marshall, H. H. (2003). Opportunity deferred or opportunity taken? An updated look at delaying kindergarten entry. Beyond the Journal – Young Children on the Web
- Matthews, L. L., May, D. C., & Kundert, D. K. (1999). Adjustment outcomes of developmental placement: A longitudinal study. *Psychology in the Schools*, 36(6), 495-504
- McClure, R. (n.d.). Before you decide to hold your child back from starting school. Retrieved November 11, 2008, from <http://childcare.about.com>
- Miller, L. (1995). Setting entry age for kindergarten triggers debate. *Education Week*, 14(34), 1-2
- Narahara, M. (1998). Kindergarten entrance age and academic achievement
- Oshima, T. C., & Domaleski, C. S. (2006). Academic performance gap between summer-

- birthday and fall-birthday children in grades K-8. *The Journal of Educational Research*, 99(4), 212-217
- Position statement on student grade retention and social promotion (1998). *Helping Children at Home and School: Handouts from Your School psychologist*
- Rafoth, M. A., Pd.D, Buchenauer, E. L., Med, Crissman, K. K., Med, & Halko, J. L. (n.d.) School readiness-preparing children for kindergarten and beyond: Information for parents. *School and Home*
- Rathbun, A., & West, J. (2004). From kindergarten through third grade: Children's beginning school experiences (NCES 2004-007)
- Social skills: Promoting positive behavior, academic success, and school safety. Retrieved October 14, 2008, from <http://www.nasponline.org>
- Stipek, D. (2002). At what age should children enter kindergarten? A question for policy makers and parents. *Social Policy Report*, Retrieved from <http://www.srcd.org/spr.html>
- Stipek, D. J., PhD. (2003). School entry age. *Encyclopedia on Early Childhood Development*
- The elementary school performance and adjustment of children who enter kindergarten late or repeat kindergarten: Findings from national surveys (NCES 98-097)
- Warder, K. (1999). Born in december: Ready for school?
- Weil, E. (2007, June 3). When should a kid start kindergarten? *The New York Times*
- West, J., Meek, A., & Hurst, D. (2000). Children who enter kindergarten late or repeat kindergarten: Their characteristics and later school performance. *Education Statistics Quarterly*, 2(3), 21-24
- Winter, S. M. (2008). Forty years of school readiness research: What have we learned? *Childhood Education*

Zill, N., & West, J. (2000). Entering kindergarten: A portrait of American children when they begin school (NCES 2001-035)