EFFECTS OF PRESCHOOL ON CHILDREN'S ATTITUDES TOWARDS SCHOOL

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CHAPTER 1

INTRODUCTION TO THE STUDY

THE PROBLEM

Historically, before World War II many children were cared for at home by one parent, usually the mother. After the involvement of women in the workforce during World War II and as a result of the post industrial age, women have asserted more choices in their lives and many have pursued a career outside the home. This movement has resulted in many children spending their preschool years in day-care and other similar programs. Television reports in 1990 noted that many kindergarten children were experiencing burnout. The question this raises is whether or not the preschool programs experienced by many children subsequently impact negatively on their school achievement. This study was designed to examine this question. Specifically, it was designed to determine if there is a difference in the attitude toward school of kindergarten children who experienced preschool and those who did not.

Recently Governor Hunt, in his November 1992 campaign promise and his 1993 State of the State address,presented his concerns about the state of early childhood education in North Carolina. Governor Hunt has followed through with his promise that improving the North Carolina early childhood education system would be first on his agenda. Currently, the bill for

early childhood education improvement is in the legislature as well as in the budget. Early childhood education currently is a crucial element in education, society, economics and politics.

The realization of the importance of early childhood education however, began in the 1960's. Elkind (1986), a well known child advocate, discussed some factors that encouraged the emphasis on early childhood education including the 1957 launching of Sputnik I and the ideas of Jerome Bruner, J. McVicker Hunt, and Benjamin Bloom. The launching of Sputnik I spurred a movement to catch up with the Russians, for they had apparently surpassed us educationally. He suggested that Bruner's statement that "you can teach any child any subject matter at any age in an intellectually honest way" (p. 633), was misconstrued as giving the go ahead to the introduction and instruction of formal academics of young children. Ramey, Bryant and Suarez (1985) expanded on Elkind's idea of J. Mc Vicker Hunt's influence in the early childhood education movement.Hunt interpreted Piaget's theory of child development and suggested that a child's environment influenced the child's intellect more than her hereditary make-up. He believed the child's development depended on appropriate experiences at appropriate times in her development, thus implying critical points of development for intervention.

Ramey, Bryant, and Suarez (1985) also extended Elkind's notion of the influence of Bloom's 1964 research on intellect on the early childhood education movement. Bloom believed that a young child attains half of her intellectual ability by age four.

Bloom based this statement on the correlation of IQ scores at different age levels by the same subjects. As in the case of Bruner, Bloom's idea has also been misinterpreted as calling for early formal academics for young children.

Another factor that influenced the emphasis of early childhood education was the criticism of public education which heightened with the 1983 National Commission on Excellence in Education's report, A Nation At Risk. The report stressed the need for higher academic standards, greater emphasis on basics, more rigorous teaching, and longer school days and years. Early schooling was proposed as a remedy for these problems. Adler (1983) echoed these same notions for school reform and early education intervention. Alder warned, "Preschool deprivation is the cause of backwardness or failure in school...Hence at least one year or better, two or three years of preschool tutelage must be provided" (pp.37-38).

These factorsinfluenced the development ofearly childhood education programs or preschools such as Head Start, the Perry Preschool Project, BEEP, and many other programs, to be discussed at length later. Early childhood education has been theorized as a tool for social change to combat the evils of ignorance and poverty for the creation of a better future for children. Yet, with such a noble goal, preschool has its critics.

The criticism of preschool has been due to recent findings that dispute the gains and advantages of early childhood education that were claimed in the 1960's and were emphasized through the 90's. Critics such as Elkind (1986), Zigler (1987),

Shell (1989), Hirsh-Pasek, Hyson, and Rescorla (1989), and Fuerst (1992) argue that preschool negatively affects children, and the gains in intellect and academic achievement found in earlier studies have been proven to be short-lived. Overall, the critics feel preschool is intellectually, socially, and developmentally inappropriate for children.

It appears that preschool has potential effects to aid or harm children's development. The positive effects that initiated preschool as well as the negative effects of preschool claimed by critics are to be researched and presented here.

HYPOTHESES

This study was designed to investigate the following null hypotheses:

H_o: There is no statistically significant difference in scores obtained on the MYCATS (Measure of Young Children's Attitudes Toward School) for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "general feelings about school subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "perceptions of teacher subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "difficulty/enjoyment of school activities subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "perception of maternal satisfaction with school work subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

DEFINITION OF TERMS

The following terms require definition as related to this study.

MYCATS-Measure of Young Children's Attitudes Toward School was developed by Van Trieste (1989) and assesses four factors that comprise children's attitudes toward school. These factors are feelings about school, perceptions of teacher, difficulty/enjoyment of school activities and perception of mother's satisfaction with school work.

Preschool-Any formal program for students below the age of five with a set curriculum. Preschool may involve Head Start, or public preschools (funded by the state of North Carolina).

LIMITATIONS

This study possesses three limitations: size, setting, and type of study. This study involves 50 kindergarteners who attended or did not attend preschool. The small size of the sample may not yield findings that are applicable to the entire

population.

Second, the testing was conducted in "quiet" areas of the classroom or library. In the school environment, quiet areas are almost nonexistent. Quiet testing areas are essential for the experimenter and subjects. Additionally, asking questions about children's attitude toward school in a school setting presents a confounding variable wherein the setting itself may influence the children's responses.

The third limitation of this study is the type of study that this research is, descriptive. In descriptive research there is no manipulation of variables or experimentation, just evaluation and then a search for correlations within the findings.

SUBJECT SELECTION

Subjects were drawn from an elementary school in a rural area of Southeastern North Carolina. Three kindergarten classes were asked to participate in the study and 50 children were tested. Twenty-nine children attended preschool and 21 did not attend preschool.

RESEARCH DESIGN

The design is a descriptive study of kindergarten children who attended or did not attend preschool. Blind testing (i.e. the researcher did not know which students had attended preschool and which had not), was used. Children were given numbered

answer sheets with the teacher recording the number beside the child's name in her attendance book. After the testing of all the children, the teachers revealed whether or not the particular number assigned to the child, to hide his identity, attended preschool. The test administered was the MYCATS, Measure of Young Children's Attitudes Toward School.

DELIMITATIONS

An essential item to keep in mind in reviewing this study is the preschoolers involved. In the public preschools in North Carolina the only children who are admitted into the program are those who score very low on the preschool measurement, LAP-D (Learning Accomplishment Profile Development Test). Thus the public preschool is an early intervention program designed to give those children who are at a disadvantage a chance to catch up. Therefore results may not be applicable to students with other backgrounds. Because of the sample size no distinction was made in type of preschool attended.

SUMMARY

Chapter one provided an overview of this study. A statement of the problem, general background, hypotheses, definition of terms, limitations, research design, subject selection, and delimitations have been presented.

Chapter two will present a review of related literature.

Chapter three consists of the methods and procedures used in this study. The results are presented in Chapter four and Chapter five presents the conclusions and discussion of the implications.

CHAPTER 2

THE LITERATURE

EFFECTS OF PRESCHOOL

Review of the literature suggests that positive and negative effects of preschool seem to be associated with the curriculum utilized. Formal academic teacher-directed preschools, early intervention programs, and child-centered play-oriented preschools are the types of preschools the debate about the effect of preschool surround. Formal academic teacher-directed preschools are claimed to cause negative effects on preschoolers due to the academic pressures these programs put on young children, say critics such as Katz (1987), Zigler (1987), Elkind (1986), and Fuerst (1992).

Academic pressures for young children to excel and become better are part of early childhood education today as a result of the misinterpretation of Bruner's, Hunt's, and Bloom's ideas on children's flexible intellect and development. One critic, Katz (1987), warned that the academically focused preschool curriculum negatively affected children by pressuring the children to work too soon and too long at academic exercises. These early pressures can cause children to suffer from academic burnout. The academic burnout is represented in the children's unwillingness to do exercises in reading, writing and arithmetic.

The children's willingness to work in these academic areas becomes exhausted and they begin to tune out many learning tasks at school.

Bowen (1986) cited Zigler's conclusion that preschool has "no long-term effect on middle-class kids." Zigler suggested that this current "hothousing" of young children is a "yuppie" phenomenon where parents are placing their excessive goals to achieve on their children. Zigler (1987) expanded on the harmfulness of a formal academic preschool program because of its developmental inappropriateness for young children. Zigler viewed the formal academic preschool as a junior version of the graded curriculum found in elementary school and he stressed that preschoolers are not ready to handle formal academics. Zigler also warned that universal preschool education is not the panacea for education's problems of school failure, drop-outs, poor test scores, and incompetent high school graduates. He emphasized that no superficial programs can solve the problems of the poor, only deep social reforms can do this.

Tizard (1974) suggested that preschool education alone is not the solution and warns that "without continuous reinforcement in the primary school or home, preschool education has no long-term effect on later school achievement." (p. 4)

Sava (1989) agreed with Zigler that urging children toward an academically based curriculum frustrates children's learning and negatively impacts on their educational future. Sava stressed that children's play is serious learning because they are working with concrete objects that form the basis of their

learning for their style of learning needs visible, tangible, and audible experiences. Sava noted that the abstract components of the academic preschool curriculum wasted preschoolers' time. He claimed that preschoolers are not developmentally ready to process such material as numbers and printed words.

Piccigallo (1988) noted that Seigal stressed that children pushed too hard too early before they begin formal school can be turned off from the excitement of learning. Also, Seigal (1987) stated that "teaching concepts and skills at this early period is very time-consuming, even for rote learning, because learning is more difficult when understanding does not accompany the learning experience" (p.216). Seigal warned that children who are academically pressured too early are at risk for developing achievement anxiety. The children's self worth is at risk as well for they view themselves as being valued for what they produce, not for themselves.

Elkind (1986) refuted the formal academic preschool's methods and suggested that they counter the unique direct experience learning styles of children that Froebel, Montessori, and Piaget discovered in their child development research. Elkind found that the formal academic preschool detrimentally affects children's motivation, intellect, social demeanor, and causes stress in children.

Elkind (1986) warned that an early formal education harmfully affects children's motivation, for their natural self-directed interests become thwarted. The formal academic preschool pressures children to follow what adults view as an

appropriate curriculum where learning reading, writing, and arithmetic is stressed. Elkind concluded that when children become dependent on adults for direction and do not trust their own initiative it causes them to feel a sense of guilt about any self-initiated activities.

According to Elkind (1986) the formal academic preschool also intellectually impacts harmfully on children. Children are at risk because the formal academic preschool emphasizes rote learning and memorization. Elkind explained that children's learning is based on "reflective abstraction", wherein children experience something and ponder the causes and effects for themselves. Formal education counters "reflective abstraction" with its emphasis on "spewing out" memorized material.

Elkind (1986) further suggested that socially children are harmed by the formal academic preschool for they are taught negative notions of best and least. When children observe the reward of correct answers and the punishment of incorrect answers, children translate these into one child is smarter than the other. This emphasis causes children to turn away from self-directed and self-initiated sources of self-esteem to focus on others for their sense of self worth.

Elkind (1986) explained that stress is caused in the children because of the pressures formal education places on them to adapt to a type of learning counter to their learning styles. When children cannot adapt, the result is stress that causes fatigue, appetite loss and a decreased efficiency in children. Further stress can cause damaging headaches and stomach aches

that can shorten children's lives. His "Defense of Early Childhood" stressed that not only will the children suffer physically, but that the early education pressure is not worth the negative physical effects for, "the percentage of children entering kindergarten with advanced skills as a result of exposure to academic material in a day care or nursery school setting is likely to be small, and any advantage they enjoy is likely to be short-lived." (p. 9)

Elkind (1987) warned that pushing young children toward academic achievement has introduced preschoolers and kindergarteners to inappropriate teaching methods and expectations that can cause stress and possible burnout in elementary school. Additionally, with more children exposed to these inappropriate methods, Elkind stressed that "there is a real danger that larger numbers of young children will experience learning problems at an age when in the past most children were not even in school." (p.14)

Shell (1989) found that the academically focused preschool manifests what parents feel their children should be learning: the basics of reading, writing, and arithmetic. She suggested that parents seek out formal academic programs in the belief that building with blocks, playing games and working on art projects will not benefit their children as much as learning to read before entering kindergarten will.

Bowen (1986) noted Blum's warnings that academic pressuring in preschool can result in very nervous, anxious children afraid of failure and risk taking. Shell (1989) compared the teaching

of preschoolers in academically focused preschools to recognize letters and recite the alphabet, to training pigeons. Pigeons can be trained to recognize letters, but this does not mean they are prepared to read. Preschoolers likewise have more pressing developmental tasks to accomplish at this stage of their lives and can pick up reading eventually.

In Shell (1989) Bredekamp emaphasized that many teenagers today were taught to read by age five and now do not even open a book; they are burned out. She stresses that children have the rest of their lives to read The New York Times, but only a few years to be children. The ideas, philosophies and beliefs these critics hold about the negative effects of preschool are supported by Head Start studies, differential preschool studies and academic environment studies.

Featherstone (1986) noted the 1969 Westinghouse Learning Corporation study of Head Starts effects indicated that the only advantages found were that IQ test scores were boosted temporarily and these gains dissipated by the time the children reached the third grade. The study suggested that if these gains were to be extended, schools must provide enrichment for these disadvantaged kindergarteners and first graders in school.

According to Powell (1986) Huston-Stein, Friedrich-Cofer and Susman studied thirteen Head Start classrooms in 1977. They found that children in teacher-directed classrooms were less social with children, showed less imaginative play and were less aggressive than children in more open classrooms with lower amounts of adult control. Children in high-structure classes

were more attentive in circle time and were more helpful in cleaning up after free play. Yet the children did not exhibit more task independence.

Evans (1982) updated a longitudinal follow-up assessment of differential preschool experiences for low socioeconomic minority children who attended preschool during 1970-1971. Evans' sample included 44 high school students from the original sample of 92 preschoolers who attended two different preschools.

Twenty-seven of the 44 students experienced at least one year of the highly structured DISTAR (Direct Instructional Systems in Training for Arithmetic and Reading) program. The remaining seventeen attended a Head Start program one year before kindergarten. Thirty-three children with indeterminate preschool experience were included in the sample as well to focus on school achievement and attitude toward school. The control group was comprised of 20 children who did not attend preschool, yet were similar to the experimental groups in race, sex, age, grade, school, and free lunch status. Evans (1982) measured educational and school achievement effects as well as the students' attitude toward and perceptions of preschool.

Evans (1982) found that there were no general school achievement or attitude effects carried from middle school to high school. Yet, males with no preschool experience exhibited a lower achievement pattern in grades six and eight than the no preschool females or preschool males and females. Evans interpreted his data and the findings of poor performance of males in other studies to suggest the need for early intervention

programs for males.

Hirsh-Pasek, Hyson, and Rescorla (1989) studied academically focused preschools. Their sample included 120 mothers and 90 preschoolers with a follow-up sample of 56 kindergarten children. These middle to upper class children were from Pennsylvania and Delaware. Children attended eleven different preschools, with 46 of the children attending highly academic preschools and 44 attending less academically focused preschools.

Hirsh-Pasek et al. (1989) evaluated parental attitudes and behaviors, school philosophies and practices, as well as children's academic skills, cognitive ability, creativity and emotional state. Hirsh-Pasek et al. found a significant relation wherein mothers with higher academic expectations had children with better academic skills, yet this disappeared at the end of kindergarten. They did not find significant associations between test anxiety and family and preschool variables for there was little difference in academic skills, creativity, or emotions. Yet, at the end of kindergarten, test and performance anxiety was significantly associated with maternal and preschool variables. Moreover, children who attended highly academically focused preschools showed more test anxiety by the end of kindergarten as well as less positive attitudes toward school. In contrast, children who attended more developmentally appropriate preschools held more positive views toward school at the end of kindergarten. The findings from the study suggest that there are no academic advantages for children of high academic environments and there are disadvantages in emotional

well-being.

Van Trieste (1989) conducted a study of the self-perceptions of competence, academic skills and school attitude of 58 white, middle class kindergarten children from 10 different preschools. Subjects were selected based on their mothers' scores on the Educational Attitude Scale and their groups consisted of "high", "moderate" and "low" expectations. The preschools were also rated on the Classroom Practices Inventory, with five rated developmentally appropriate and the other five as highly academic.

Van Trieste (1989) found a non statistically significant trend that mothers of children with moderate expectations had the most positive attitude toward school. Moderate correlations were found between developmentally appropriate preschools and the children's attitudes toward school later in kindergarten. Yet, no statistically significant difference was found in children's academic abilities of those in developmentally appropriate preschools and those in highly academic preschools. These findings suggest that highly academic preschools have no academic advantages, yet may give children negative attitudes toward school.

J.S. Fuerst (in press) completed in 1992 his study of Head Start in Chicago under Title I. The study began in 1967. Fuerst's sample included 684 black children who started in the program at age three. Most were from single parent families and on welfare. The children were placed in six child-parent centers in classes of 20 with teaching teams and teacher aides.

A variety of learning programs were used, but the primary program was DISTAR. DISTAR is highly structured and places emphasis on repetition and positive reinforcement. Overall the curriculum was highly academic with a large focus on language development and parent involvement.

Fuerst's initial findings in 1974 showed that the children's reading and math scores were above neighboring children's scores and exceeded national norms. Later in high school their initial gains were lost and only 62 percent of the children graduated. Fuerst investigated and found that in one center the children where exposed to special instruction seven to nine years longer than the other subjects. This group's findings were that 70 percent of the boys and 85 percent of the girls graduated from high school, implying that extra help that Head Start can provide for a longer period of time is more effective than the usual one or two years.

POSITIVE FACTORS

The supporters of academically focused preschool programs such as Head Start and DISTAR have found that the academically focused preschool positively affects children. According to Brofenbrenner (1974), Soar found that disadvantaged preschool and primary aged children benefited greatly from the academically focused preschool. He concluded that the academically focused preschool provided the control, structure, focus, and convergence the children need for cognitive growth especially in skill areas.

Glazer (1988) noted that Carnine stressed the benefits of the academically focused preschool for disadvantaged low-income children because of the lack of skills and the advantages that middle class children have upon entering school. Carnine suggested that the direct instruction of academically focused preschools catches the children up and provides them with necessary academic experiences. Carnine found that children who experience direct instruction at academically focused preschools drop out of high school at a lower rate than other children who did not receive direct instruction. Additionally, Carnine found these children were placed in classes for gifted students at a rate that was the same for the whole school district.

Glazer (1988) also noted that Nielsen reported that the direct instruction of the academically focused preschool offers positive social effects for children. In Nielsen's study, the teacher was involved with the student and the program was verbal. Thus the children were provided with constant reinforcement of their self-esteem from their teacher.

Sava (1987) suggested that more parents hold the belief that the preschool can provide an environment to foster children's natural inclinations to learn with the guidance of a teacher knowledgeable of the child's developmental needs. Such programs are more important today because of the instability of the home due to divorce, single parents and teenage parents. This turmoil reduces the attention that preschoolers formerly received from their parents which formed the hidden curriculum of the home. Sava describes what the ideal preschool program should offer, "a

richer learning environment than all but the best homes and most attentive parents provide" (p.15).

Piccigallo (1988) noted that the founder of the Better Baby Institute extolled the benefits of early schooling for children, in particular for reading achievement suggesting that a child who has not learned to read early, before formal school, may be disadvantaged. Doman, the founder of the Better Baby Institute, explained that younger children, (less than one, one and two year olds) learn to read faster than older children (three, four and five year olds).

The studies that support the positive findings of academically focused preschools range from early intervention preschool programs like Head Start, DARCEE (Demonstration and Research Center for Early Education) and DISTAR to preschool programs created by the researchers. These early intervention preschool programs have yielded positive effects on children, especially minorities. Edward Zigler, was the first director of the Head Start program in the 1960's, articulated the goal of the program to provide a brief educational intervention in the early years to inoculate the children from the woes of their disadvantaged environments.

Miller and Bizzell (1983) studied the effects of four preschool programs. The four preschool programs were started in 1968 within the Head Start program in Louisville, Kentucky. The programs involved four classes of children in Traditional (child-centered), Bereiter-Engelmann and DARCEE (teacher-directed) classes and two classes in Montessori (child-centered). In all,

the sample numbered 214 and 90 percent of these children were low-socioeconomic black children. The control group consisted of 34 children who did not attend preschool, but were from the same neighborhoods as the experimental preschool children.

The children were evaluated based on measurements of academic achievement and intellect. Miller and Bizzell (1983) found that preschool children gained more in achievement during their first preschool year than the controls and at first grade were superior to the controls on reading. In second grade, the Bereiter-Engelmann, Montessori and control children were higher in reading than the traditional and DARCEE groups. In terms of IQ, the preschool children's IQ were higher than the control children at the end of preschool. The didactic Bereiter-Engelmann and DARCEE programs showed a great impact on IQ at the end of kindergarten. Yet, no other differences in IQ were found in later years among the children.

Miller and Bizzell (1983) updated their study through sixth, seventh, and eighth grades and found that IQ did not significantly vary between groups. Yet, reading and math scores varied by programs and sex. Males from the Traditional and Montessori child centered programs were superior in achievement to males from the DARCEE and the Bereiter-Engelmann teacher directed programs. The females' scores of the DARCEE and the Bereiter-Engelmann teacher directed programs were overall a little higher than the boys except for Montessori boys. The Montessori boys consistently showed superior effects in all measures.

Miller and Bizzell (1984) followed up their study through ninth and tenth grades. The children were evaluated on intelligence, achievement, cognitive reasoning, self-esteem, divergent thinking, and task persistence. They found that within the Bereiter-Engelmann and Traditional groups the males and females were similar in their scores, but in the DARCEE group females scored a significant 10.5 points higher than males. In the Montessori group, the males scored 15.9 points higher than Montessori females and overall scored higher than all of the other groups in all measurements overall. DARCEE females scored second highest of all the groups, with DARCEE males scoring lower than all groups as they did in sixth, seventh, and eighth grades. Montessori females scored lower than any other group, and control females were the highest. These findings are similar to the sixth, seventh, and eighth grade findings.

Hebbler (1985) investigated the long term effects of Head Start on children that attended Head Start in the Montgomery County Public Schools, Maryland in 1970-1971, 1974-1975, and 1978-1979. The school system was composed mostly of middle to upper class students. The Head Start students were compared to a group of students who had applied but were not admitted to the program as well as to all other students in the school system born the same year as the Head Start students. The outcome measures to evaluate the Head Start children were grade retention, placement in special education, standardized test performance, grades, course selection and attendance.

Hebbler (1985) found that students who attended Head Start

in 1970-71 did better than their comparison group who did not have Head Start. The Head Start classes of 1974-75 also showed some possibility of positive effects of Head Start as well as a significant 15 percentage point difference of students below the 40th percentile on the California Achievement Test (CAT). The 1978-79 group showed a 31 percentage point difference of students scoring above the 80th percentile on the CAT. The 1978-79 group had higher scores on the subtests of the two parts of the CAT and the total test as well as a higher mean score for all subtests of both parts of the CAT than the other groups, but this finding was not significant. Overall, the measures favored the Head Start students over the comparison group.

Hebbler (1985) mentioned that the Head Start students in the study were from low-income groups attending a school comprised mostly of middle to upper class students. She assumed that one would misinterpret the results of the Head Start children in the study and remark that Head Start was unnecessary for them. Nevertheless, their overall performance was poor compared to the students born in 1966. Twice as many of the 1970-71 students were retained, four times as many had been in special education programs during the preceding four years and five times as many scored below the 40th percentile on the eleventh grade CAT.

Hebbler concluded that Head Start has long term positive effects on the achievement of low-income children. Hebbler suggested that the differences found in the Head Start students and comparison students were due to socioeconomic differences.

Lee, Brooks-Gunn, Schnur and Liaw (1988) updated their study

of preschool effects on disadvantaged children. The sample consisted of 969 disadvantaged children attending Head Start, other preschools, or no preschool. In the sample, 78.1 percent of the children were black and 21.9 percent were white. Of the children, 414 attended Head Start, 390 attended some preschool, and 165 attended no preschool. The children were evaluated on five cognitive measures in the spring before the preschool experience and at the end of their experience. These measures focused on verbal ability, general knowledge, school-readiness skills, impulsivity, and analytic ability.

Lee et. al. (1988) found that Head Start children showed significantly larger cognitive gains on the verbal ability and impulsivity tests than those with no preschool or those enrolled in other preschool programs, with black children gaining the most. Yet, after a period of time, the Head Start children lost that initial advantage and were behind the comparison groups after a year in the program. They suggested that Head Start benefits children who are socially and cognitively disadvantaged because of low-income.

In 1990 Lee, Brooks-Gunn, Schnur, and Liaw extended their investigation of the long term effects of Head Start, some preschool, and no preschool on children. They studied 646 black children from the original sample. The groups in the sample included 333 in Head Start, 204 with no preschool and 109 in some preschool. The children were evaluated by several measures assessing cognitive verbal ability perceptual reasoning, and social competence.

Lee et. al. (1990) found that Head Start children scored significantly higher on the social competency test than those who did not attend preschool. In the perceptual reasoning test (Embedded Figures) the Head Start children continued to show enduring effects of school success as compared to children who did not attend preschool. Lee et. al. concluded that Head Start benefits disadvantaged children cognitively in gains evidenced at the end of preschool and in formal school. Their advantages are sustained compared to those without preschool. They suggested that any preschool is better than no preschool.

Stalling cited in Powell (1986) studied first and second grade Follow Through classrooms. He found higher scores in reading and mathematics among children in highly controlled classrooms that were teacher-directed and utilized positive reinforcement than in child-centered classrooms. Children in the teacher-directed environments took responsibility for their failures and attributed their successes to their teachers or some other outside force.

In flexible child-centered classrooms where children had more choices, the children scored higher on a test of nonverbal perceptual problem solving and showed a greater willingness to work independently. They were also absent less from school. These children exhibited internal locus of control by taking responsibility for their own successes and failures.

Darlington (1980) presented the results of The Consortium for Longitudinal Research's study of the long term effects of preschool on children's competence. The Consortium project began

in 1960 and involved twelve researchers who created their own preschool curriculum, implemented the experimental programs and then pooled their findings in a follow up study in 1976-77. The project consisted of 11 preschool centers in the Northeast, Southeast, and Midwest. The programs varied from informational home visits for parents, to group programs for three and four-year-olds in centers, to group programs in centers with home visits. The curriculum in the centers was based on Piaget's theory, Montessori's methods, the Bank Street model, Bereiter-Engelmann's programmed learning methods and others.

Of the original sample of children, 94 percent were black children from low socioeconomic backgrounds. In all, there were 2,700 subjects and controls. Subsets of these children were randomly assigned to preschool and control groups to focus on the effectiveness of preschool. Other programs were designed to focus on which curricula were most effective; ideal ages to enter the preschool program; and lengths of involvement in the program. In the follow-up, 1,599 of the children were found and their ages ranged from 9 to 19-years-old.

The Consortium researchers assessed intelligence test scores, school records, scores on standardized achievement tests, and interviews with parents. The researchers found that there were large gains in IQ test scores given after the preschool program. These gains dissipated however, three or four years after preschool. The researchers concluded that if one year in the preschool program offers two or three years worth of IQ gains then what would two years of preschool yield?

Results from seven researchers on their projects,indicated that children who attended preschool were more likely to meet the school's requirements, (meaning they were not retained or placed in special education classes) than the controls without preschool experience. Twenty-four percent of the preschoolers did not meet the school's requirements compared to 45 percent of the control children. In six projects it was found that preschool had an effect on placement in special education programs for 14 percent of the preschool children were placed in special education classes compared to 29 percent in the control group.

Irvine (1980), the coordinator of the New York State Prekindergarten Evaluation staff, presented the evaluation of the state funded New York State Experimental Prekindergarten Program. The project, begun in 1966, focused on the effectiveness of a comprehensive, developmental preschool for economically disadvantaged children and their families. Irvine utilized four groups in this study: the in depth preschool group involved 20 children from the original sample of those from the seven centers who were followed-up for continuity; the intense preschool group consisted of 344 preschool children from the original sample from the seven centers who were not studied in depth; the non-in depth group consisted of 807 preschool children from the other 45 centers involved in the New York Prekindergarten program that were not studied in depth; the control group involved 40 children who did not attend any preschool.

These children were given several standardized tests assessing cognitive reasoning and verbal ability. The results of

the study show that preschool children who had an intense study and continuity in the seven centers scored higher on the Cognitive Abilities and Peabody Picture Vocabulary tests than those preschool children without continuity in their program.

Carini and Updike (1989) updated the New York State Experimental Prekindergarten program. The program involved three and four-year-olds from preschool to grade three, a five year program, with a developmentally appropriate curriculum, monitoring children's health, and offering parental information and support. The program consisted of preschool programs in 52 New York school districts.

Carini and Updike (1989) cited the 1984 New York Prekindergarten Project's findings of the children in the seventh grade. Approximately 1,000 New York preschool children from the original sample from 36 of the original experimental districts were compared to 1,800 children without preschool and had the same disadvantaged economic backgrounds. The measurements consisted of two focuses. The first focus included scores on several standardized tests, health, and parent participation records. The findings showed that the preschool children performed better than those children without preschool in all program measurements. Of the preschool children, those who were economically disadvantaged showed the most positive effects compared to the other preschool children, and those children without preschool. Specifically, the preschool children showed higher scores on reading and math tests in the third and sixth grades. The preschool children had fewer absences in

kindergarten through sixth grade. The preschool children were retained less often in their grades than the no preschool comparison groups. The preschool children needed fewer special education remediation classes in reading and math compared to the children without preschool. In comparison to those children without preschool, half the number of preschool children involved in the study were in limited English proficiency programs. Another finding was that there was no statistically significant difference in enrollment in special education classes for preschool children with handicaps compared to those in the control group.

Carini and Updike (1989) noted that the second aspect of measurement in the follow-up study focused on the children. Seven children from seven centers from the original 52 centers were selected to be observed and evaluated by their teachers. Their teachers as well as other outside observers gathered information on the children including samples of drawings, paintings, stories, writings, photographs, classroom diagrams, reports from specialists and staff, parental contact records, and transcripts of interviews with children, parents and teachers. These seven children, as well as the other preschool participants, were followed up thirteen years later and interviewed. The findings showed that students have a great deal to convey about their school experience. The study concluded that for more effective feedback on children's perception of their school experience, an increased communication between the home, school, and between grade level teachers is necessary.

Schweinhart and Weikart in 1980 studied their Perry Preschool Project which began in Ypsilanti, Michigan in 1962. The study focused on the long-term effects of preschool on 123 low-income disadvantaged black children. The children at ages three and four were randomly assigned to two experimental groups: 58 children were in the preschool group and 65 were in the no preschool group. The preschool curriculum, called the High/Scope model, is a high quality open framework educational program incorporating Piaget's cognitive theory and addressing the intellectual and social development of the children. The children attended two years of preschool in 1962 and 1967 (Weikart, 1986). .

Berrueta-Clement, Schweinhart, Barnett, Epstein and Weikart (1984) followed up their study and investigated the children's competence, academic placement, employment, delinquency and crime, welfare dependency, teen pregnancy, graduation from secondary schools and enrollment in postsecondary programs. The children's progress was followed at age 19. All but two of the original sample were interviewed yielding a group of 121. They found that functional competence for the preschool groups was 61 percent compared to 38 percent for the controls. The preschool groups spent 16 percent of their years in special education programs compared to 28 percent for the controls. Fifty-nine percent of the preschool children were employed compared to 32 percent of the control group. Preschool children had a low 31 percent of delinquency compared to the high 51 percent for the controls. The number of preschool children who were welfare

dependent was 18 compared to 32 of the control children. Female children in the preschool group had 64 teen pregnancies compared to 117 in the controls. Sixty-seven percent of the preschool children graduated from high school (or its equivalent), compared to 49 percent of the control group. In terms of enrollment in post secondary or vocational school, 38 percent of the preschool children enrolled compared to 21 percent of the controls.

Berrueta-Clement, Schweinhart, Barnett, Epstein and Weikart (1984) stressed that these results consistently indicate lasting positive effects of preschool indicated by improving functional competence, academic placement, employment, delinquency and crime, welfare dependency, teen pregnancy, graduation from secondary schools and enrollment in postsecondary programs. They suggested that preschool can aid children intellectually and socially, as well as help them achieve greater success in adolescence and adulthood and is a sound socioeconomic investment.

Schweinhart, Weikart and Larner (1986) investigated the long term effects of three preschool curriculum models started in 1967. The three models utilized were: DISTAR, a direct instruction programmed-learning approach; High/Scope Cognitively Oriented program, an open-framework involving teachers and children in planning; and a child-centered nursery program as well as a control group.

All programs met Monday through Friday for two and a half hours a day. There were ninety minute home visits every two weeks. The program lasted for three years and the IQ's of the

children after the first year ranged from 60-90 and rose between 23 and 28 point, thus moving them out of the at-risk category. In the second year the IQ scores of the High/Scope and nursery children dropped nine points with the DISTAR group dropping a three points. After kindergarten, differences in IQ were not seen. In a like manner, no statistically significant difference was found in the experimental children's CAT scores.

Differences in social behavior were found in the DISTAR group. At age fifteen, the children in DISTAR group were involved in twice as many delinquent acts as the other experimental children. They also committed five times as many criminal acts of property violence and twice as many drug abuse accounts and reports of running away from home. In other social areas the DISTAR children had poorer family relations than the other groups as well as less involvement in sports and fewer job appointments. The DISTAR children also reached out the least for help with personal problems. High/Scope children showed positive effects in all areas of social behavior contrasting with the DISTAR group.

The children did not vary from each other in employment, money, self-esteem or perceived locus of control, only in social behavior. This finding led the researchers to conclude that the preschool curriculum program is an important consideration. The high quality program that involves child initiated learning such as the High Scope program did not yield the negative social effects that the "pressure-cooker" DISTAR model did.

Pierson, Walker, and Tivnan (1984) studied the effects of

the Brookline Early Education Project (BEEP). The BEEP project started in 1972 with 285 families in the Brookline, Massachusetts area. Thirty-nine percent were ethnic minority families and for 18 percent, English was not the first language in the home. The BEEP program consisted of three aspects: informing and supporting parents through resources and information; monitoring children's health and development to ensure their safe progression; and education programs for children. This project involved the children until age five and then followed the children's progress through second grade.

In kindergarten it was found the BEEP was effective for children at risk. Those without the program had difficulty with school. BEEP participants were found to have advantages over comparison children without preschool in social behavior and other kindergarten skills. In second grade, BEEP children's classroom learning behaviors measurement showed half the difficulty rate of the comparison group. This overall advantage was found regardless of background. The percentage of BEEP subjects unable to comprehend stories in a 2.2 level basal reader was 19.3 percent compared to 32.5 percent of the comparison group. The results indicate that fewer BEEP children had problems in school and thus the goal of the program was achieved.

Fry and Addington in 1984 (cited in Powell, 1986) studied preschool classrooms for two years. They found that elementary children in open classrooms had higher scores on social problem solving and self-esteem measures than children in more closed, traditional classrooms. They concluded that child-centered

environments fostered social learning as well as personal growth and that teacher-directed environments did not support social development as well as child-centered environments.

Rohter (1985) presented the results of Deutsch, Jordan and Deutsch's 1961 longitudinal study of the effects of preschool which was followed up in 1981. Deutsch, Jordan and Deutsch of the Institute for Developmental Studies of New York University School of Education conducted this study to investigate the effects of preschool on disadvantaged children. The subjects were 750 black children from Harlem who participated in the New York University's early childhood programs in New York City Public Schools from 1961-70. The children, enrolled at age four, continued receiving enrichment classes through the third grade and then were transferred to regular classes. The preschool programs involved teacher aides, compulsory breakfast programs, parental involvement, electronic teaching devices, and home reading plans.

The students, then 19 and 21, were contacted in 1981 for a follow-up study. Four hundred of the original 750 children were found and 178 were randomly chosen and interviewed. Half of the preschool group had jobs which was double the percentage of the control group with no preschool. Sixty percent of the preschool children had high school diplomas or the equivalent compared to 40 percent in the control group. Forty percent of the preschool group enrolled in post-secondary or vocational schools after high school compared to 20 percent of the controls. Deutsch, Jordan and Deutsch concluded that children's participation in this

program influenced their later successes as well as positively enhanced their self-esteem, sense of control of their lives, and an increased desire for learning. They suggested that it is possible to positively affect children's lives through early and sustained educational experiences.

Essa, Read and Haney-Clark (1988) studied the effects of parent involvement on the preschool curriculum of three classes of three and four year olds from three day care centers. The centers were comprised of mostly middle class white children with two working parents. The sample was randomly assigned to three groups: 22 in the curriculum with parental involvement, 23 in the curriculum alone, and 15 in the control. A Nutrition Knowledge Test was the evaluative measurement devised by the researchers. The test focused on a basic knowledge of the four food groups, balanced diet, health and nutrition relationship and the difference between healthy and junk foods. The children were pretested, then exposed to the curriculum, and tested again. Parents in the parent-involvement group were given information to aid their child's nutrition study while the curriculum-alone parents received no information.

Essa et. al. (1988) found that children exposed to the curriculum compared to the control children made the greatest gains. The children in the curriculum with parent-involvement made the greatest gains. They concluded that parental involvement has positive effects on the preschool curriculum.

These are powerful statements of criticism and support of preschool programs and these opposing views are part of this research to investigate the effects of preschool on children's attitudes toward school. Van Trieste (1989) cited Ball's 1971 and Harter and Pikes' 1984 findings that children's attitudes toward school and perceived self-competence were important factors for examining the effectiveness of an educational program as well as for influencing present and future school achievement.

Children's attitudes toward school involve their attitude toward their teachers and their teachers' expectations. Van Trieste (1989) cited also Brophy and Good's, Parsons, Kaczala and Meece's and Segiver's findings that teacher's expectations are related to children's academic achievement and self-perceptions of competence.

Another aspect in childrens' attitudes toward school is that which is fostered at home through their parents, in particular the mother. Parental expectations and perception of children's competence is a part of children's attitude toward school. Van Trieste (1989) mentioned the findings of Laosa, Phillips and Hess, Holloway, Price, and Dickson. These researchers found that parental expectations and perceptions of children's competence is related to children's actual and self-perceptions of competence.

Children's attitude toward school consists also of the emotions toward school itself and the academics involved. Van Trieste (1989) noted Elkind's, Sigel's and Ladd and Price's

findings that children's emotion toward school and academics could aid or harm future achievement and learning. For as Ladd and Price 1987 stated "children who like school and feel secure in this environment are more likely to profit from their educational experiences. Conversely, reactions such as anxiety, avoidance, or negative attitudes toward school...may disrupt children's future progress" (p.1169). All these aspects of children's attitude toward school will be measured in this study.

SUMMARY

Chapter two has given a review of the literature on the negative and positive effects of preschool expressed by critics and supporters as well as through studies. Literature on children's attitudes toward school has been briefly reviewed as well.

CHAPTER 3

METHODS AND PROCEDURES

The methods and procedures used in this study to investigate the effects of preschool on children's attitudes toward school are described in this chapter. This chapter also includes the methodology, instrumentation, and the statistical procedures used to analyze the data.

DESIGN OF THE STUDY

This is a descriptive study of kindergarten children who attended or did not attend preschool. Their attitudes toward school are measured by the MYCATS, Measure of Young Children's Attitudes Toward School (Van Trieste, 1989).

HYPOTHESES

This study was designed to investigate the following null hypotheses:

H_o: There is no statistically significant difference in scores obtained on the MYCATS (Measure of Young Children's Attitudes Toward School) for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "general feelings about school subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "perceptions of teacher subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "difficulty/enjoyment of school activities subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

H_o: There is no statistically significant difference in scores obtained on the "perception of maternal satisfaction with school work subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

SUBJECT SELECTION

Subjects were drawn from an elementary school in a rural area of Southeastern North Carolina. Three kindergarten classes were asked to participate in the study and 50 children were tested. Twenty-nine children attended preschool and 21 did not attend preschool.

The subjects attended the same school in a rural area of Southeastern North Carolina. The socioeconomic level of the area is low to moderate. The racial composition of the area is 46.5 percent American Indian, 30.2 percent black and 24.5 percent white. Sixty-six percent of the children in this area receive free or reduced lunches.

INSTRUMENTS

The instrument used in this study is the MYCATS, Measure of Young Children's Attitudes Toward School. The MYCATS was developed by Van Trieste (1989) as part of her master's thesis for the University of Delaware. The MYCATS was also utilized in Hirsh-Pasek, Hyson and Rescorla's study of academic environments, which was a collaborative effort between Temple University, the University of Delaware and Bryn Mawr College.

The MYCATS consists of sixteen items measuring children's attitudes toward school. The questions can be categorized into four subscales: childrens' general feelings about school, perceptions of teacher, difficulty/enjoyment of school activities, and perception of maternal satisfaction with school work. Children select from pairs of gender neutral pictures that convey situations dealing with the four subscales of childrens' attitudes toward school, the picture that is most like them.

The MYCATS involves an equal number of positive pictures and negative pictures alternating in left to right presentation in order to avoid response bias. A sample question from the MYCATS is included in Appendix A.

PROCEDURES FOR DATA COLLECTION

Initially, permission to conduct the study was granted by the Institutional Review Board of Pembroke State University. Then the principal of the school involved was contacted and he gave his permission for testing the children in three kindergarten classes. The MYCATS was administered using a blind test procedure wherein children were given numbered answer sheets for which the teacher had recorded the number beside the child's name in her attendance book. Later, after testing all the children, the teachers revealed whether or not the particular number labeling the child, attended preschool or not.

Fifty-four students were administered the MYCATS. The responses of four subjects were discarded due to their attendance in daycare rather than preschool. Therefore the study focused on 50 subjects. Twenty-nine of the children attended preschool and 21 did not attend preschool.

SCORING CRITERIA

On the MYCATS, the most negative responses receive a score of one, moderately negative a score of two, moderately positive a score of three and most positive a score of four. Subscale scores can range from four to 16 and overall scores from 16 to 64. The responses were scored by the researcher.

STATISTICAL PROCEDURES

After the responses had been scored the results were divided into groups based on preschool experience, race and sex. A One-Way Analysis of Variance (ANOVA) was utilized to evaluate the overall scores and the scores on the four subscales of the MYCATS.

SUMMARY

Chapter three provided a description of the methods and procedures used in this study. Chapter four will present the results and findings of this study. Chapter five will present the conclusions of the study and a discussion of its implications.

CHAPTER 4

RESULTS

As reported in Chapter three the data for the 50 subjects was evaluated. The hypotheses were tested using a One-Way Analysis of Variance (ANOVA). The results of the ANOVA follow:

H_o: There is no statistically significant difference in scores obtained on the MYCATS (Measure of Young Children's Attitudes Toward School) for kindergarten students with a preschool experience and those without such an experience.

Table 1: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, and Sex for the overall score on the MYCATS.

	SS	df	MS	F
Between	170.00	3	56.67	2.692
Error	968.48	46	21.05	

(F-Ratio = not significant)

H_o: There is no statistically significant difference in scores obtained on the MYCATS (Measure of Young Children's Attitudes Toward School) for kindergarten students with a preschool experience and those without such an experience.

Table 2: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, and Race for the Overall Score on the MYCATS.

	SS	df	MS	F
Between	101.00	5	20.20	0.857
Error	1037.48	44	23.58	

(F-Ratio = not significant)

No statistically significant differences were found in the total mean scores of the 50 children who were administered the MYCATS regardless of preschool experience, race or sex. Thus the null hypothesis failed to be rejected for the overall means scores on the MYCATS.

H_o: There is no statistically significant difference in scores obtained on the "general feelings about school subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Table 3: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, Race, and Sex for the Subscore "General Feelings About School" on the MYCATS.

	SS	df	MS	F
Between	39.80	9	4.42	2.159
Error	184.36	90	23.58	

(F-Ratio = .05)

H_o: There is no statistically significant difference in scores obtained on the "perceptions of teacher subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Table 4: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, Race, and Sex for the Subscore "Perceptions of Teacher" on the MYCATS.

	SS	df	MS	F
Between	3.87	9	0.43	0.196
Error	197.13	90	2.19	

(F-Ratio = not significant)

H_o: There is no statistically significant difference in scores obtained on the "difficulty/enjoyment of school activities subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Table 5: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, Race, and Sex for the Subscore "Difficulty/Enjoyment of School Activities" on the MYCATS.

	SS	df	MS	F
Between	27.52	9	3.06	0.713
Error	385.92	90	4.29	

(F-Ratio = not significant)

H_o: There is no statistically significant difference in scores obtained on the "perception of maternal satisfaction with school work subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Table 6: One-way Analysis of Variance (ANOVA) for the Variables Preschool, No Preschool, Race, and Sex for the Subscore "Perception of Maternal Satisfaction with School Work" on the MYCATS.

	SS	df	MS	F
Between	76.28	9	8.48	2.317
Error	329.28	90	3.66	

(F-Ratio = .05)

On the comparison of scores on the four subscales of the MYCATS no statistically significant differences were found on the scores of the perceptions of teacher and difficulty/ enjoyment of school activities subscales. Thus, the null hypothesis failed to be rejected in these two cases.

Although nonsignificant, a difference in means scores was found for Indian children who attended preschool's attitude toward school in terms of the difficulty and enjoyment of school activities. Indian children who attended preschool had a mean score of 14.00 compared to Indian children who did not attend preschool's mean score of 12.67 which was the lowest of all the other groups.

Statistically significant differences ($p < .05$) were found for the total scores on the general feeling about school and perceptions of maternal satisfaction with school work subscales. Thus, these two null hypotheses were rejected. Indian children who attended preschool had the highest mean score of all the other groups on the general feelings about school subscale on the MYCATS. There was also a discrepancy found in the perceptions of maternal satisfaction with school work subscale. Preschool males held a mean score of 12.75 compared to no preschool males mean score of 15.00. Another difference was found in males who attended preschool's mean scores compared to preschool females mean score of 15.31, the second highest mean score on the perceptions of maternal satisfaction with school work subscale.

SUMMARY

Chapter four presented the results of the study. Chapter five will present the conclusions of the study and a discussion of its implications.

CHAPTER 5

CONCLUSIONS, DISCUSSION, AND IMPLICATIONS

SUMMARY OF RESULTS

Fifty kindergarteners were administered the MYCATS, Measure of Young Children's Attitudes Toward School, after four months in kindergarten. Twenty-nine of the children attended preschool and 21 did not attend preschool. The overall scores on the MYCATS were evaluated as were the scores on the four subscales of the MYCATS. The hypotheses were tested using a One-Way Analysis of Variance (ANOVA) and the decisions reached as follows:

Decision	Hypothesis
Fail to Reject	H_o: There is no statistically significant difference in scores obtained on the MYCATS (Measure of Young Children's Attitudes Toward School) for kindergarten students with a preschool experience and those without such an experience.
Reject	H_o: There is no statistically significant difference in scores obtained on the "general feelings about school" subscale of the MYCATS for kindergarten students with a preschool experience and those without such an experience.
Fail to Reject	H_o: There is no statistically significant difference in scores obtained on the "perceptions of teacher subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Fail to Reject	H_o: There is no statistically significant difference in scores obtained on the "difficulty/enjoyment of school activities subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.
Reject	H_o: There is no statistically significant difference in scores obtained on the "perception of maternal satisfaction with school work subscale" of the MYCATS for kindergarten students with a preschool experience and those without such an experience.

Testing the first hypothesis, there was no statistically significant difference in an overall comparison of mean scores on the MYCATS. No statistically significant differences were found in the total mean scores of the 50 children who were administered the MYCATS regardless of preschool experience, race or sex. Thus the null hypothesis failed to be rejected for the overall means scores on the MYCATS.

The second hypothesis showed a statistically significant difference ($p < .05$) in scores from the general feelings about school MYCATS subscale. Considering students' sex, preschool experience and no preschool experience, there is a statistical difference in their scores. In particular, Indian preschool children had the highest mean score of all the other groups on the general feelings about school subscale on the MYCATS. The null hypothesis is rejected.

Testing the third hypothesis no statistically significant difference in an overall comparison of children's subscores on the MYCATS' perceptions of teacher subscales were found.

Considering students' race, sex, preschool experience and no preschool experience, there was no statistical difference in their scores on the subscale overall. Thus the null hypothesis failed to be rejected for the MYCATS subscale perceptions of teacher.

The fourth hypothesis showed no statistically significant difference in an overall comparison of children's subscores on the MYCATS difficulty/enjoyment of school activities subscale. Considering students' race, sex, preschool experience and no preschool experience, there was no statistical difference in their scores on the subscale overall. Thus the null hypothesis failed to be rejected for the MYCATS subscale difficulty/enjoyment of school activities. Although not significant, it is interesting to note that Indian children who attended preschool had the highest scores for attitude toward school in terms of the difficulty and enjoyment of school activities. Indian children who attended preschool had a mean score of 14.00 compared to Indian children who did not attend preschool's mean score of 12.67, which was the lowest of all the other groups.

The fifth hypothesis yielded a statistically significant difference ($p < .05$) in scores obtained from the perception of maternal satisfaction with school work MYCATS subscale. Considering students' sex, preschool experience and no preschool experience, there is a statistical difference in their scores. Preschool males had a mean score of 12.75 compared to no preschool males mean score of 15.00. Also a difference was found

between preschool males' mean score of 12.75 compared to preschool females' mean score of 15.31. Females had the second highest mean score on the perceptions of maternal satisfaction with school work subscale compared to White children with no preschool's mean score of 15.36.

DISCUSSION

Realizing that a small number of subjects could hardly yield results applicable to the large population, in this study it was found that among those 50 kindergarteners tested that preschool experience did not make a difference in children's overall attitude toward school. Yet, further considering the results of the two of the four subscales: general feelings about school and perception of maternal satisfaction with school work show that preschool experience did make a difference in those 50 children's attitude toward school.

Although small, the study yields significant findings for Indian children. Preschool Indian children showed more positive attitudes towards school as measured on the difficulty and enjoyment of school activities subscale and by their highest means scores on the general feelings about school subscale. Considering these findings, preschool may benefit Indian children.

There are some plausible factors for these effects. These factors could be socioeconomical or cultural. One could reason that socioeconomic factors such as jobs and leisure time could

impact on preschool Indian children's attitudes toward school. Possibly the parents held jobs where they worked second shift and such a time schedule leaves the parents little time to work with their children. Thus, the extra help the Indian children who attended preschool received, aided them in their work in kindergarten leaving them with a view that school is not difficult.

There may be possible cultural reasons for this finding. It is perceived that the Native American Indian people have closely knit family ties and the extended family is usually utilized for child care instead of outside preschool programs or daycare facilities. It could be reasoned that the absence of a preschool curriculum in the home care could account for the negative feelings toward school by those Indian children who did not attend preschool. It is possible that those who attended preschool felt better about school because they had been prepared unlike their counterparts who did not have that preparation due to their lack of preschool experience. Remember also that the public preschool in this area accepts only children who score the lowest on the LAP-D (Learning Accomplishment Profile Development test). Thus the preschool's aim in this area is to give the disadvantaged an advantage and possibly that is what the Indian children in this area who attended preschool gained.

Approximately 46 percent of the people in this area are Native American. In the schools in this area an estimated 57.6 percent of the children have been retained in grades since ninth grade (NC DPI, 1991). Also, the children in this area have a

drop out rate of 42.4 percent (NC DPI, 1991). Such negative statistics for school success in this area seems bleak for children, in particular the Indian children which comprise 46.5 percent of that population. Regardless of the possible factors, Indian children with preschool experience of the 50 kindergarteners tested show a positive attitude toward school. Van Trieste (1989) noted that as Ball, Harter and Pikes; Brophy and Good; Parsons, Kaczala and Meece; Segiver, Elkind, Sigel, and Ladd and Price found, children's attitudes toward school reveal a great deal about the effects of preschool on children.

Three differences found in the perceptions of maternal satisfaction with school work subscale require further investigation. One difference was that preschool males had lower mean score compared to no preschool males. Another difference was that in comparison to preschool males' mean score, preschool females had the second highest mean score on the perceptions of maternal satisfaction with school work subscale. A further difference found was White children with no preschool had the highest mean score of 15.36 on the perceptions of maternal satisfaction with school work subscale.

There are plausible behavioral and cultural reasons for these findings. One could reason that preschool males' negative perception of maternal satisfaction with school work is due to behavior. It is possible that the aggressive and active behavior often ascribed for males did not allow for adjustment to the quiet and passiveness of school which some have labeled "a feminine environment". This lack of adjustment could be

communicated by the male children's behavior such as talking, handwriting, neatness of work and language proficiency. Females often times are less active, not as aggressive as boys, and possess better language proficiency as researched. The teachers could convey displeasure to the parents, in particular the mother and thus it is plausible that preschool males would perceive negative satisfaction with their school work from their mothers. Also, considering the females' behavior difference of quietness, less aggressiveness, and language proficiency, they could fit better into the school environment. The teachers' satisfaction with the females could also be conveyed to the females' mothers. Thus females would perceive their mothers' satisfaction with their school work.

Another behavioral factor to consider is communication with parents, especially the mother. Females seem to be more verbal than males and it seems possible that through their communicative nature the females would perceive their mother's satisfaction with their school work. Unlike males who seem to be more active and less inclined to exchange ideas about school work.

Culture is a final factor to consider for these findings. White children who did not attend preschool had the highest mean score for maternal satisfaction with school work out of all others. Black children without preschool held a mean score of 14.75 and Indian children without preschool had a mean score of 14.17. White children that did not attend preschool perceived their mothers to be more satisfied with their school work than all the other children. There is a perceived expectation in the

White culture for the parents to involve themselves in their children's learning. Possibly the White children's mothers involved themselves more in their children's learning by teaching their children at home instead of using outside sources as preschool or daycare. One could further reason that these mothers could have volunteered in the schools, helped with homework, attended school functions, open houses, and parent-teacher conferences more than the Black or Indian mothers. The White children could have perceived their mother's satisfaction with their school work through their mothers' involvement in their learning. This perception of their mother's satisfaction in school tells us a great deal about the effects of preschool as Van Trieste (1989) noted that Laosa, Phillips, Hess, Holloway, Price, and Dickson found.

IMPLICATIONS

This study has shown that children's attitudes overall which consists of the factors of general feelings about school, perceptions of teacher, difficulty/enjoyment of school activities, and perception of maternal satisfaction with school work are not affected by preschool experience, sex or race. Yet, the individual factors of general feelings about school and perception of maternal satisfaction with school do seem to be affected by preschool experience, sex or race. This is evident in the findings for Indian children with preschool's positive attitude toward school, preschool males negative perception of

their mothers' satisfaction with their school work and preschool females' and White no preschool children's positive perceptions of their mothers' satisfaction with their school work.

These findings indicate an area for further research into the effects of preschool on children's attitude toward school especially for Indian children and preschool males. Research over a longer period of time to investigate long terms effects of preschool on children's attitudes toward school would be ideal. Also follow up of the children with focus on school achievement, drop out rate, high school graduation rate, employment, and engagement in post secondary education would yield a wealth of information on the effects of preschool on children's attitude toward school in general.

RECOMMENDATIONS

It is important to keep in mind the limitations of this study when interpreting the results. Perhaps the children's current teachers are so wonderful that regardless of preschool experience, sex or race there is no difference in these 50 childrens' attitudes toward school positively or negatively. Again considering the small group of 50, a larger sample would possibly yield different results. Additional research to replicate this study or to address questions raised by this study would provide early childhood educators with valuable information.

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APPENDIX A

APPENDIX A

MYCATS SAMPLE

This girl/boy likes to do things that her/his class does at school.

Do you:

lly like things your s does at school? OR like things your class does at school pretty much

4 ③

This girl/boy doesn't like to do things that her/his class does at school.

Do you:

sort of not like things your class does at school? OR Really not like things your class does at school

② 1