

THE EFFECT OF A JUNIOR KINDERGARTEN PROGRAM
ON READING COMPREHENSION

THESIS

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ABSTRACT

This study examined whether there was a statistically significant difference between the reading comprehension of students taught in a junior kindergarten and the reading comprehension of students placed directly into kindergarten at the end of three years of instruction and at the end of first grade.

The researcher compiled a list of students who attended the junior kindergarten program. Another group of students who attended regular kindergarten was randomly selected. The Comprehensive Test of Basic Skills (CTBS) reading comprehension scores were compared between transition students and their counterparts in age who were placed into regular kindergarten programs. CTBS reading comprehension scores were also compared between transition students in the same grade at the end of first grade.

The findings indicated no difference between reading comprehension scores at the end of three years of instruction. A significant difference was found in reading comprehension at the end of first grade. However, it was the students who did not attend junior kindergarten who performed better.

Table of Contents

Chapter 1

Statement of the Problem

Purpose.....	1
Need for the Study.....	1
Questions.....	4
Limitations of the Study.....	5

Chapter 2

Review of the Literature

Readiness Testing.....	7
Transitional Programs.....	14

Chapter 3

Design of the Study

Purpose.....	21
Null Hypotheses.....	21
Methodology.....	22

Instruments.....	23
Procedure.....	23
Analysis.....	24

Chapter 4

Analysis of Data

Table 1.....	26
Table 2.....	27

Chapter 5

Conclusions and Implications

Purpose.....	29
Conclusions.....	29
Implications for the Schools.....	31
Implications for further Research.....	32

References.....	34
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Chapter I

Statement of the Problem

Purpose

The purpose of this study was to determine if there is a significant difference between reading comprehension scores of students taught in a junior kindergarten (transition class) versus students placed directly into a kindergarten class as they progress into the primary grades.

Need for the Study

Whether a child is ready to enter kindergarten or not is an issue every school and parent faces. Parents, teachers, and administrators all want children to be successful when

attending school. Brewer (1990) states that no one feels good about retaining a child - parents, teachers, and children all feel like failures.

Many programs have been instituted to help prevent failure and promote success for children labeled "at-risk". Head Start, pre-school, junior kindergarten, pre-first, extended first are all aimed at trying to help at-risk learners while they are still young. Transitional programs which allow a child to experience three years of school prior to second grade, instead of the traditional two years, have been developed to prevent failure during later school years. With more and more curriculum demands on high school teachers, junior high teachers, intermediate, and even primary teachers, some of the curriculum is being pushed down to lower grades

as expectations rise. Uphoff (1990) states that these transition grades would not be necessary if curriculum were appropriate.

Kindergarten screening is an attempt to determine a child's readiness for kindergarten. Decisions are made based upon these tests which affect the child's placement into a program. Those deemed "not ready" are, in some cases, placed into an extra year program or held at home for another year. In some cases these children are put into a traditional kindergarten program with their peers. Meisels (1987) states that a number of widely used tests assess children's mastery of a specific set of skills. To assume that such tests give a clear picture of a child's future performance is highly questionable.

As the nation becomes more and more preoccupied with excellence, accountability, and competitiveness, parents are

looking for ways to give their children an academic edge.

School systems also are looking for ways to meet the growing demands of a population of learners labeled "at-risk".

Transition classrooms are springing up across the country in an attempt to respond to this demand.

Questions

1. Is there a statistically significant difference between the reading comprehension of students taught in a junior kindergarten, and the reading comprehension of students placed directly into kindergarten after each group has completed three years of instruction?
2. Is there a statistically significant difference between the reading comprehension of students taught in a junior

kindergarten, and the the reading comprehension of students placed directly into kindergarten at the end of first grade?

Limitations of Study

This study is limited to reading achievement that is measured by standardized testing only. This does not take into account a student's classroom achievement which may differ greatly from standardized scores for various reasons. It also does not consider possible limitations of the CTBS itself.

Students enrolled in the Gifted and Talented program were included; however, those who have special placement because of learning disabilities or are considered second language, were not included.

Chapter II

Review of the Literature

The kindergarten program has changed its focus over the years. Hill (1987) states, "Kindergarten was originally a year of relatively informal education designed to form a bridge from home to more formal schooling in the elementary grades" (p.12). Charlesworth (1989) adds, "Through the 70's kindergarten retained its focus on developing school readiness through socialization experiences and learning through play. During the 80's there has been a trend toward identifying high-risk children who may not be ready for kindergarten" (p.10). Smith (1987) states, "Rather than serving as a readiness function in the sense of socializing children for future schooling, kindergarten has become an experience for which children need to be ready when they arrive" (p.129).

Readiness Testing

Kindergarten teachers and principals are increasingly looking at entrance into kindergarten as an ideal time for assessment of abilities, particularly in regard to identifying those children with special or exceptional needs (Wendt, 1978). In fact, federal and state legislators are beginning to mandate screening of children for retardation, learning disabilities, emotional disturbance, or other disabilities as early as three years of age. These same legislators advance the argument that the earlier the screening and subsequent intervention, the greater the likelihood of success. Pre-kindergarten screening practices throughout the nation, however, tend to be quite diverse with varying degrees of effectiveness.

Many instruments have been developed to test a child's readiness for kindergarten. However, Meisels (1987) points to a need for caution in using tests to determine placement because test results are unreliable measures of young children's potential for school success or failure. Steinberg (1990) says, "According to the National Association for the Education of Young Children (NAEYC), readiness tests are as likely to result in misplacement as in correct placement. The error rate of tests commonly in use ranges from 33 to 50 percent" (p.7). Steinberg does not find this surprising given how inexperienced young children are at taking tests, and how quickly they develop and change.

A study by May and Welch (1984) suggests that transitional placement on the basis of the Gesell readiness test is not predictive of later academic performance. Meisels (1989) found the test's principal fault lies in the

discrepancies between its stated purposes and the empirical evidence available to support those statements. Its developers claim that it can identify children who are at high risk for school failure and that it can be used to determine when children should begin school, which children should be promoted, and which should be retained in grade. Unfortunately, Meisels (1989) found no data to support these assertions.

Most readiness tests are criterion-referenced, where a particular score indicates a specific level of concurrent performance mastery. The basic purpose of criterion-referenced tests is to measure current achievement, not to predict future performance. Therefore, the use of criterion-referenced tests for purposes of classification, retention, and promotion is unjustified (Meisels, 1989).

The Brigance K and 1 Screen is a criterion-referenced readiness test designed to provide a general picture of a young child's language development, motor ability, number skills, body awareness, and auditory and visual discrimination. Despite its purpose, the Brigance is being used nationally to rank and group children who are high, average or lower than their local reference group in order to contribute to readiness decisions, to make placement decisions and for referral for special services. Boehm (1985) states, "To fulfill these purposes, a test must be norm-referenced and valid. However, no reliability, validity, or standardization data are available for the Brigance" (p. 32).

Gordon (1988) studied 109 children, administering 20 subtests of the readiness section of Brigance's Inventory of Basic Skills in kindergarten, followed by the reading and mathematics sections of the Stanford Achievement Test in

second grade. A combination of 10 readiness subtests predicted both success and failure with the same degree of accuracy as that obtained using the entire battery. One view about the value of these tests is that they can be used for the purpose of determining school readiness. Gordon (1988) warns that, "Neither the whole battery nor the 10 subtests determined areas of second grade weakness accurately enough to make practical the use of the test for this purpose" (p. 239). His view is that the subtests can be used effectively to set kindergarten educational objectives, but not in determining who is ready or not ready for kindergarten.

In the state of Georgia the Quality Basic Education (QBE) Act was passed in 1986. This requires all children seeking to enter first and fourth grades to pass an academic readiness test. The test selected is the California Achievement Test (CAT), level 10 (CTB/McGraw-Hill 1988). However, in the

"Georgia edition" of the CAT, only 64 of the 146 items are administered. The results are used to render decisions about student classification, retention, and promotion. Meisels (1989) states, "There is no evidence to support the validation of the modified test; nor is there predictive validity data available for this test" (p. 19).

In a study by Rubin, Barlow, Dorle, and Rosen (1978) 732 subjects were given the Metropolitan Readiness Test (MRT) at age 5 the summer prior to kindergarten, and at age 6, prior to entering first grade. The word meaning, spelling, and arithmetic computation sections of the Stanford Achievement Test (SAT) were individually administered during the summer of the calendar year in which subjects reached their ninth birthday.

Scores on the pre-first grade MRT were more accurate predictors, particularly of low performance, on all three

subtests of the SAT than were the scores of the pre-kindergarten MRT. Findings of this study indicate that correlations in the .50's, .60's, and even as high as .70's, between scores on predictor and outcome variables do not justify the assumption of consistency of performance over time for low scoring children. Rubin found that far greater reliance can be placed on use of high preschool readiness scores as predictors of essentially normal or better academic performance than low scores as predictors of low academic performance. Seventy percent to 91% of those who scored low on the preschool readiness test were found to rank in the achieving groups on the SAT at age 9.

Horn and Packard (1985) conducted a meta-analysis on 58 studies that reported correlations between measures administered in kindergarten or first grade and reading achievement later in elementary school. They found the best

single predictors of reading achievement during elementary school years were attention-distractibility and internalizing behavior, such as anxiety disorders, personality problems, and depression.

Transitional Programs

Transitional programs have been developed and designed to provide another year of school for children who are not predicted to do well. This is in contrast with social promotion which is premised on the belief that children should move through the school with their age mates and friends (Brewer, 1990). Much controversy surrounds the implementation of transitional programs. According to Brewer (1990), transitional programs are illegal in California. In Nebraska, the State Board of Education strongly suggests that

all five-year-olds be enrolled in kindergarten and that no child be held back for developmental reasons. In other states, schools are celebrating the success of children who have attended transitional programs. Shepard and Smith (1988) concluded that the detriment of being youngest in a grade is slight and disappears by third grade if instruction is individualized.

In a study by Klueberg and Gershman (1978) immature preschool children were placed into three groups: a waiting at home group, a kindergarten readiness program, and a regular kindergarten program. Follow up data suggested little or no advantage to waiting, and the authors questioned the idea that readiness can be expressed as a unitary concept. They state that unfortunately, testing for school readiness rarely appears to be related to effective programming for the non-ready child.

In Entwisle's (1987) study of 825 Baltimore City first graders the socialization hypothesis that a longer placement in kindergarten will help a child that is socially immature to behave in a more socially mature way was not supported. It was found that the amount of kindergarten does not affect children's expectations for their own performance, children's marks in conduct, children's personal maturity level as estimated by their teachers or their peer popularity. Therefore, Entwisle concluded that the effects of more kindergarten are not attributable to socializing children for first grade.

Gredler(1978) stated that children who are placed in readiness or transition classes are assumed to be beneficiaries of more appropriate programming than would be possible in regular classrooms. However, the research on grade retention, transition classes, and even the relative

achievements of younger versus older children in the same classrooms does not support the assumption. Rather, extra year programs often translate into retention programs that provide little more than an additional year of schooling, with possible negative consequences.

Wendt(1978) states that parental reactions to both labeling and readiness tend to be negative. Taking a test to "get their child into school" or being told, "Your child is not ready for our program," or even "Your child is a slow learner", can produce hostile reactions. He feels that testing for "readiness is probably one of the most questionable practices in all preschool assessment programs and especially as a negative public relations device for the schools" (p.58).

Shepard and Smith (1988) concluded that transition classes are not necessary if instruction is developmentally appropriate. In the half-dozen comparative studies reviewed

by Gredler(1984), the at-risk but promoted children were no different at the end of first grade from the children who participated in the extra year program. In only one study was the transition class group superior to the regular first-grade group on first-grade reading performance. However, their comparative advantage had disappeared by third grade.

Meisels (1989) reports of a study by the Michigan Department of Education in which 161 extra-year early childhood programs in a single state reported an annual cost of more than \$3.4 million. He estimates that nationally, the cost of implementing extra year programs is probably in the hundreds of millions of dollars. He feels these funds should be used for more worthwhile ends. Wendt (1978) points out that, "Assessment in programs should be relative to beginning points rather than any set of normative considerations" (p. 58).

Bredekamp (1990) states that the institution of transition classes is often the quick fix to the school structure that takes the place of the fundamental, philosophical change that is really needed to improve schools. Shepard (1989) found that controlled studies do not support the benefits claimed for extra-year programs and that negative side effects occur just as they do for retention in later grades. After reviewing 16 controlled studies on the effects of extra-year programs, Shepard's predominant finding was one of no difference academically.

According to Bredekamp (1990),

The need for transition classes is symptomatic of the larger problem of inappropriate curriculum in primary grades. If sufficient numbers of children are not ready for the regular classroom so that a whole class is needed to accommodate them, then the regular classroom is by definition developmentally inappropriate.

Not only are transition grades potentially harmful for children, but they also do not facilitate school

improvement. In fact, they may actually be used to impede change.

Advocates of transition classes emphasize that the practice helps children before they fail; however, this argument ignores the fact that identification as "unready" is itself a negative experience for children.

The transition class should be used as a model for change if it is developmentally more appropriate. Advocates for and against must work together to ensure that all children have access to developmentally appropriate school experiences (p. 20).

Wendt (1978) feels that "readiness," which is a common concept for testing, raises the issue of the basic role of school. He asks, "Is the role of the schools to determine who is ready for their program, or to take the child at his/her present level and educate him/her accordingly?" (p.58).

Chapter III

Design of the Study

Purpose

The purpose of this study was to determine if there is a difference between reading comprehension of students taught in a junior kindergarten (transition class) versus students placed directly into kindergarten.

Null Hypotheses

- 1) There will be no statistically significant difference in mean reading performance at the completion of three years of schooling, between a random sample of 31 first graders that attended a junior kindergarten program and a random sample of 32 first graders placed directly into kindergarten.

- 2) There will be no statistically significant difference in mean reading performance at the completion of first grade between a random sample of

31 first graders that attended a junior kindergarten program and a random sample of 32 first graders placed directly into kindergarten.

Methodology

Subjects

The subjects (n= 63) for this study were first and second grade students from a rural school district in upstate New York. Some of the students (n= 31) attended a junior kindergarten transitional program, while others (n= 32) were placed into a regular kindergarten program after a kindergarten screening process administered in May preceding the child's first year of school. The students in the regular kindergarten control groups were randomly selected. The control group consisted of students that were chronologically the same age as the experimental group attending junior kindergarten. The only difference between the two groups was that, based on the kindergarten screening, students were labeled ready or not ready for kindergarten. Those labeled not ready were placed into the junior kindergarten program with parental approval.

Instruments

The Comprehensive Test of Basic Skills (CTBS) reading comprehension scores were used as a measure to determine reading comprehension at the end of first and second grades.

Procedure

The researcher compiled a list of students presently in the second and third grades who attended the junior kindergarten program. Another group of students, presently in the third and fourth grades, was randomly selected and their names compiled into a list to be used as a control group. CTBS reading comprehension scores were compared between transition students and their counterparts in age who were placed into regular kindergarten programs. CTBS reading comprehension scores were also compared between transition students and students in the same grade at the end of first grade.

Analysis

The statistical analysis used t tests for the significance of the difference between the means of two independent groups. The confidence level for testing the statistical significance was set at the 95 percent level. If the null hypothesis is not accepted, it indicates that the difference between the two group means is large enough to warrant the assertion that 95 times out of 100 this difference would not occur by chance.

If the difference between means is statistically significant, the question remains as to whether or not the difference is educationally important. In order to get some indication about the importance of the difference, all the reading comprehension scores from both groups were combined. The extent of the variation in those scores could be explained simply by knowing which treatment the subjects received. This is called the treatment effect.

The procedure used is a correlational technique where each group was coded zero or one on the treatment variable. The resulting statistic is called the Point Biserial Coefficient of Correlation (r_{pb}). When this value is squared, it became the Point Biserial Coefficient of Determination (r_{pb}^2) which implies the explanatory power of the treatment effect. A commonly accepted minimal level of explanatory power is 15 percent ($r_{pb}^2 = 0.15$). This means that out of all the variables that could be operating to influence the reading scores for the subjects, the treatment received by itself is explaining 15 percent of the variation in reading scores.

Chapter IV

Analysis of Data

There were two major hypotheses analyzed in this study. The first hypothesis examines the junior kindergarten group and the kindergarten group at the end of three years of instruction. The second hypothesis examines both groups at the end of their first grade year of schooling. Table 1 shows the analysis of data for Hypothesis #1. Table 2 shows the analysis of data for Hypothesis #2.

Table 1

t-Test Results for Null Hypothesis #1

	Junior Kindergarten	Kindergarten
Size	31	32
Mean	2.33	2.38
Standard Deviation	1.56	1.50
Median	2.1	2.1
<u>t</u> value	-0.14	

t (61) = 2.03, $p < .05$

Since the t required for 61 degrees of freedom at the 95% confidence level is ± 2.03 , and since the t obtained is -0.14 , the null hypothesis is retained. There is no statistically significant difference between the posttest means of the junior kindergarten approach and the direct placement into kindergarten.

Table 2

t-Test Results for Null Hypothesis #2

	Junior Kindergarten	Kindergarten
Size	31	32
Mean	2.33	4.22
Standard Deviation	1.56	2.20
Mode	2.1	3.6
t value		-4.02

$t(61) = 2.03, p < .05$

Since the t required for 61 degrees of freedom at the 95% confidence level is ± 2.03 , and since the t obtained is -4.02 , the null hypothesis is

rejected. There is a statistically significant and important difference between the two groups. However, the difference is in favor of the group that did not attend the junior kindergarten program.

Chapter V

Conclusions and Implications

Purpose

This study examined the effect that placement into a junior kindergarten program had on reading comprehension as compared to students placed directly into kindergarten.

Conclusions

In reviewing the results of this study it was apparent that the regular kindergarten children performed better on the CTBS reading comprehension test than the junior kindergarten group at the end of first grade, even though they had fewer years of schooling. As a result of this, administrative personnel might question the continued implementation of the junior kindergarten program.

The program's purpose and selection process should be reexamined. Perhaps the deficiencies of students selected for junior kindergarten were influential enough to keep them from achieving at a comparable level to the regular kindergarten despite an extra year of schooling. Another

point to be considered is the junior kindergarten transition program was developed to prevent failure during later school years. Saying a child is "not ready" for kindergarten implies a failure. The children may believe they have failed.

Perhaps the junior kindergarten curriculum needs to be reexamined; what is being taught might not be what the students need. Along these lines, if the kindergarten program would accept students at their current developmental level, and begin to work with them from this point, there would be no need for a junior kindergarten program.

Children might be better placed into kindergarten since both groups were comparable in reading comprehension after finishing three years of instruction. It did not seem to matter whether those three years consisted of JK-K-1 or K-1-2. The junior kindergarten children are being held back one year, but are in the same place academically as their age mates who are one school year ahead.

Implications for the Schools

As a result of this study, administrators might reexamine the existence of junior kindergarten and other transition programs. As Bredekamp (1990) states, "The need for transition classes is symptomatic of the larger problem of inappropriate curriculum in primary grades. If sufficient numbers of children are not ready for the regular classroom so that a whole class is needed to accommodate them, then the regular classroom is by definition developmentally inappropriate" (p.20).

This study shows that children attending a regular kindergarten class did better than those attending a transition junior kindergarten class at the end of first grade. Shepard's (1989) findings were similar in that they did not support the benefits claimed for extra-year programs.

School personnel should examine their selection process for the junior kindergarten program. Standardized readiness tests are not a reliable predictor of future performance of a child (Meisels, 1987, 1989; May & Welch, 1984). Children are being held back a year and costing school districts thousands of dollars because of the view of some that they are "not ready" for kindergarten.

This study showed that junior kindergarten and regular kindergarten children performed equally well at the end of three years of instruction, despite which class they began in. Both groups showed they were able to progress equally given the same amount of years of instruction. Gredler (1984) found that the at-risk but promoted children were no different at the end of first grade from the children who participated in the extra year program. Perhaps the junior kindergarten children should be placed directly into kindergarten.

Implications for Further Research

This study was a beginning in the examination of the effects of a junior kindergarten program, and is only a small facet of the total picture. Many ideas for further research have been brought to mind in light of what has been learned. Researchers might want to study the relationship of socio-economic status of the students chosen for the program with that of students not chosen. The number of boys and girls placed into the program and their progress would be another area interesting to study. The social adjustment of junior kindergarten students throughout their school years is also an important area that should be examined.

A most important study would examine how students recommended for the junior kindergarten program, but refused it, perform throughout their school years. Alternatives to a junior kindergarten program could be looked at and results compared. Perhaps a pre-school/readiness program that does not hold children a year behind in school would have better overall results. Another alternative would be a non-graded primary school. A longitudinal study following the progress of the junior kindergarten students through grade 12 would help to determine any lasting effects of the program.

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