ABSTRACT

The scores on the Iowa Tests of Basic Skills taken by 179 Black and Hispanic students who voluntarily transferred from predominantly minority schools to desegregated schools were examined. They reveal that a desegregated education obtained through voluntary transfer has no significant effect on the reading and mathematics achievement levels of minority elementary school students. Although the voluntary transfer students scored higher than their home school counterparts, their scores were lower than those of students in the receiving schools. Another factor still to be examined is whether voluntary transfer programs are guilty of skimming or of retarding the progress of students. A brief list of references is included. (BJV)
Voluntary Transfer and Student Achievement: Does It Help or Hurt?

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The purpose of this paper is to determine the effect of voluntary transfer from a predominantly minority school to a desegregated school on the reading and mathematics achievement levels of minority elementary school students. This paper compares the Iowa Tests of Basic Skills (ITBS) scores of students in the same grade at both the Home and Receiving schools.

The schools included in this study are located in primarily white residential neighborhoods and accept minority students through voluntary transfer guidelines outlined in the Chicago Student Desegregation Plan. The Plan stipulates that desegregated schools recruit students from predominantly minority neighborhood schools to achieve a racial composition of from 40 to 70 percent minority.

Voluntary transfer programs have been criticized both by Receiving and Home schools for seemingly paradoxical reasons. On the one hand, some critics say that voluntary transfer programs "skim" high achieving students from predominantly minority schools. On the other hand, teachers in Receiving schools claim that the voluntary transfer students are below the achievement levels of their Receiving school counterparts. Unfortunately, researchers have not reached consensus regarding the effect of voluntary transfer on academic achievement.

Although this paper focuses on the somewhat narrow issue of voluntary transfer, it is important to note that the larger issue of whether minority students perform better in desegregated environments, of which this is a part, is not new. From Brown vs the Board of Education in the mid 50s, to the controversial issue of forced busing in the 60s and 70s, to the
emphasis on magnet schools in the 80's, the issue has been, and continues to be, the effect of a desegregated learning environment on the academic achievement of minority children.

Frelich (1979), in a study of the effects of changes in school environments on economically disadvantaged students, found that:

1. increases in classroom mean achievement levels have a positive impact on black students' achievement levels and have a positive impact on black students' academic growth patterns;

2. students from predominantly black sending classrooms benefit academically from moves into majority white classrooms; and

3. relatively high achieving students experience greater achievement gains in their receiving schools than in their sending schools, whereas low achievers tend to show academic losses in their receiving schools.

In a review of an NIE study in which seven scholars investigated the effect of desegregation on black student achievement, Ascik (1984) concluded:

Desegregation has small positive effects on black student achievement in reading and no effects on black achievement in mathematics. (p.19)

However, a group of educators at Vanderbilt University disagreed with Ascik's conclusion and reported that public school desegregation improved the work of minority students while white student performance was unaffected (American Teacher, 1981). Meyer (1964), in an early examination of the effects of desegregation on student achievement, reached the same conclusion as the Vanderbilt group.

In a study that looked not only at the effect of desegregated education but also at when this experience begins, Crain et. al., (1982) have suggested that the effectiveness of desegregation may be strongly
influenced by when students begin to attend these schools. They conclude that:

Nearly every study of black students who began desegregation in kindergarten or first grade showed achievement test scores going up, but studies of black students who did not begin desegregation until late elementary or junior high school often found no increase in achievement and sometimes found losses. (p.20)

Schweitzer (1985), in a study of the academic achievement of students in a newly desegregated school district, found that during the first three years students made no significant gains in reading and mathematics. However, while it is important to note that generally there is improvement in minority student achievement in desegregated school environments, other researchers caution that there may be other factors which accompany desegregation that may have a greater impact on minority achievement.

Felice and Richardson (1980) argued that providing black students with a desegregated learning environment was not enough to produce increases in student achievement, but that a high-quality educational program was needed. Crain and Mahard (1978) analyzed the relationship between desegregation and achievement and reported that desegregation tends to have a positive effect on black achievement. However, they cautioned that the achievement gains may be related more to what goes on in the classroom than desegregation itself. They contended that:

Desegregation sometimes results in better curricula or facilities; it often results in blacks having better trained or more cognitively skilled teachers; it is frequently accompanied by a major effort to upgrade the quality of education; and it almost always results in socioeconomic desegregation. When desegregation is accompanied by all of these factors, it should not be surprising that there are immediate achievement gains half to two-thirds of the time. (p.39)
In a major review of the effects of desegregation on black students, Bradley and Bradley (1977) noted the importance of student background on the success of desegregation.

The caveats of some researchers notwithstanding, there seems to be general agreement with the conclusion reached by Meyer (1983). In an analysis of numerous studies that looked at the effects of desegregation on black student achievement he concluded that:

The preceding analyses of analyses agree, with qualifications, that desegregation has a positive effect on black achievement. (p. 153)

The picture presented by this analysis of previous research suggests that when and if desegregation improves achievement of minority students the reasons are often complex and conflicting. Researchers attribute these changes to various factors such as socioeconomic variables, when students are first exposed to the desegregated environment, student achievement prior to transfer and what happens to these students once they "get off the bus."

METHODOLOGY

School and Student Selection

This study is focused on achievement test scores of black and Hispanic students who attended desegregated elementary schools between Fall 1982 and Spring 1986. These students, referred to here as Voluntary Transfer students, chose to attend desegregated schools rather than their predominantly minority neighborhood or Home school. The desegregated Receiving Schools are between 30 and 65 percent white and 35 and 70 percent minority and have mixed racial compositions because of the voluntary transfer of minority students. Most of the white students who attend
desegregated schools live in the neighborhood attendance area and most of the minority students do not.

The sample in this study contains twelve desegregated elementary (K-8) schools. In order to be included, a school needed to have black or Hispanic students who had attended continuously for four school years (1982-83 to 1985-86) and who had complete test scores from the citywide testing program in Spring 1983 and Spring 1986. The twelve are not a random sample from a population of approximately 70 desegregated elementary schools, but were chosen in the belief that they would provide adequate numbers of students with complete records for the time period being studied.

Two separate cohorts of students constitute the sample in this study. Cohort 1 contains 95 students (83 black and 12 Hispanic) who were third graders in school year 1982-83 and sixth graders in 1985-86 (and had test data as indicated above). Cohort 2 contains 84 students (66 black and 18 Hispanic) who were second graders in 1982-83 and fifth graders in 1985-86. Researchers utilized the school system's Comprehensive Student Information System to identify potential members of the sample and retained only those students who had the requisite test score data.

The Test Scores

The researchers collected Iowa Tests of Basic Skills (ITBS) Form 7 reading comprehension and mathematics total scores in grade equivalent units (GEs) for the spring testings in 1983 and 1986 for the students in this study. Test scores were obtained from student cumulative records in the schools and from centralized computer data bases.

The data analysis in this study involved comparing the test scores of voluntary transfer students to the median scores in the desegregated schools.
that they attended (Receiving schools) and to the attendance area school in their neighborhood (Home schools) that they would have attended. Median test scores for these schools were obtained from Chicago Public Schools documents. The Comprehensive Student Information System identified the Home schools of the voluntary transfer students.

Follow-up study

A second, confirmatory or follow-up study collected and analyzed longitudinal test scores for three subsamples of students who were third graders in 1982-83 and sixth graders in 1985-86. The first subsample contains 61 black students from Cohort 1 who attended five of the desegregated Receiving schools. The second subsample contains 41 white students from the five desegregated Receiving schools who live within their school's attendance area and attended the school for the same period of time as the voluntary transfer students. The third subsample contains 61 black students from six Home schools that were among the attendance area schools of the voluntary transfer students. Three of these six school were the Home schools of 14 of the voluntary transfer students in this second study. These three Home schools had the highest concentration of voluntary transfer students who lived in their attendance areas. The other three schools were selected at random from a population of seven Home schools that had two voluntary transfer students in their attendance areas. The students in the second and third subsamples were selected at random.

RESULTS

The analysis of test scores of the Voluntary Transfer students computed median scores for 1983 and 1986 for Cohorts 1 and 2 in reading.
comprehension and math total. These medians are compared to the median scores in the Receiving schools and in the Home schools in Table 1. As shown, the 95 Cohort 1 students had a median reading comprehension score of

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| Median Differences between: |       |       |       |       |       |       |
| Voluntary Transfers and Receiving School Medians | -0.1  | -0.4  | -0.2  | -0.2  | -0.1  | -0.4  | 0.0  | -0.3  |
| Voluntary Transfers and Home School Medians    | 0.3   | 0.3   | 0.2   | 0.2   | 0.3   | 0.0   | 0.1  | 0.0   |

| Percent Voluntary Transfers with GE scores: |       |       |       |       |       |       |
| >= to Receiving Median                      | 46.3  | 40.0  | 44.2  | 43.2  | 45.2  | 34.5  | 51.2 | 35.7  |
| >= to Home Median                           | 63.2  | 54.7  | 63.2  | 57.9  | 66.7  | 53.6  | 60.7 | 54.8  |

Table 1
Median ITBS Grade Equivalent Scores in 1983 and 1986 for Two Cohorts of Voluntary Transfer Students, their Receiving Schools, and their Home Schools; Median Differences Between Scores; and the Percent of Students with Scores Greater than or Equal to their Receiving and Home Schools.
3.9 (GEs) in 1983 and a median score of 6.4 in 1986. These students attended Receiving schools where the median scores were 4.1 and 6.7 in 1983 and 1986, respectively; and they resided in the attendance area of Home schools where the median reading scores were 3.5 in 1983 and 6.1 in 1986. The Voluntary Transfer students scored somewhat higher than the medians in their Home schools in 1983 and somewhat lower than the medians in their Receiving schools. In 1986, these students also scored lower than their Receiving school median and higher than their Home school medians.

Table 1 also presents the median difference between individual student scores and their Receiving and Home school medians. The median difference between Cohort 1 students and their Receiving school median in reading in 1983 was -0.1 GE (one month lower) and -0.4 GE (four months lower) in 1986, indicating that students scored somewhat further below the Receiving school medians in 1986 than in 1983. These Cohort 1 students scored 0.3 GEs above their Home school medians in 1983 and also in 1986, indicating that their achievement levels relative to their Home schools did not change.

The final information contained in Table 1 is the percent of Voluntary Transfer students who scored at or above their Receiving and Home school medians. In reading, 46.3% of the Cohort 1 students in 1983 had scores equal to or greater than their Receiving school medians; in 1986 40.0% achieved scores equal to or greater than their Receiving school median. In 1983, 63.2% of the voluntary transfer students scored as well or better than their Home school medians and in 1986, 54.7% of these students reached or exceeded the Home school median.

A similar pattern is evident in the test scores in math for Cohort 1 and for math and reading for Cohort 2. In 1983, Voluntary Transfer students
had scores somewhat behind their Receiving school medians and somewhat ahead of their Home school median scores. In 1986, the voluntary transfer students scored somewhat further below the Receiving school medians, and they declined somewhat in relation to the Home schools as well (although the median difference did not change in Cohort 1).

Because this analysis compares individual student longitudinal scores to school medians at two different points in time, it does not consider the effect of changes in the student body between 1983 and 1986. In order to overcome this deficit, we conducted a small scale pilot follow-up study that identified two comparison groups of students, white students in the Receiving schools who lived in the attendance areas, and black students who resided in the attendance areas and attended the Home schools.

Table 2 shows the mean reading scores for these three groups of students and indicates that the Voluntary Transfer students have a lower rate of gain than either the Receiving or Home school students, as implied in the median comparisons in Table 1. Earlier research of ours (Easton &
Bennett, 1987) provided comparable test score averages for black Voluntary Transfer students (mean ITBS reading scores of 3.66 in 1983 and 6.22 in 1986) and white Receiving school students (4.03 and 7.04) in desegregated schools. The results from this follow-up study confirm the findings reported here that the Voluntary Transfer students appear to have lower scores than Receiving school students and that their scores remain lower over a period of time.

SUMMARY AND CONCLUSION

The results of this study indicate that a desegregated education obtained through voluntary transfer has no significant positive effect on minority student reading and mathematics achievement. Although the voluntary transfer students scored higher than their Home school counterparts, their scores were lower than those students in the Receiving schools.

The results presented above notwithstanding, the paradoxical issue presented earlier (i.e., whether voluntary transfer programs are guilty of skimming or of retarding the progress of other students) has yet to be addressed. In part, the answer to this question depends on how both "skimming" and "retarding progress" are defined. In both cohort groups, almost two out of three of the voluntary transfer students had GE scores greater than the median of the Home school, while less than half had median scores equal to or greater than the Receiving school median.

A somewhat disturbing result occurs in both groups after spending three years in the Receiving schools. In both cohort groups, the GE scores of
voluntary transfer students declined in relation to Receiving and Home school medians from 1983 to 1986.

This study, like other studies that have looked at the effect of a desegregated learning environment on minority student achievement, has raised more questions than it has been able to answer.

First, there is the research that links achievement with involvement at kindergarten or first grade. The students in this study entered their desegregated school settings in the second or the third grade. It is beyond the scope of this study to determine whether there is a clearly defined point that determines the chances for success based on when students become involved in a desegregated environment. Indeed, what this argues for is an additional study that looks at those students whose initial involvement in desegregated schools falls into at least three categories: 1. involvement at the kindergarten and first grade level; 2. involvement at the second, third and fourth grade levels; and 3. involvement at the fifth, sixth, and seventh grade levels. In this way we will be able to test whether early involvement is a critical factor in student success.

Second, much of the research on the effects of desegregation point out the importance of what happens to the students once they arrive in the desegregated environment. Is there a difference in the curriculum and/or quality of teachers? Are teachers and administrators prepared to deal with this new student population? Are students who might have been the better academically able students in their Home schools, prepared to deal with students who are equally or better prepared than they are? If they are not, does this effect their self-esteem and have a resultant negative impact on achievement? Again, the study presented here is somewhat limited
in that it only compares ITBS scores in reading and mathematics. The next step in this study will be to spend time in the schools conducting ethnographic research to determine what happens once the students "get off the bus."

Finally, there is a decline in test scores that affects students in all three categories of schools. In all three categories of schools, the 1983 reading median scores are closer to the national norm than the 1986 median scores. In a recent article, Chall and Snow (1988) found similar results when examining reading development of low-income children. They concluded that:

Our findings suggest that the seeds of poor academic achievement in high school may be sown as early as fourth or fifth grade, when children first start to slip below expected achievement in vocabulary and reading -- or even earlier if primary reading preparation is inadequate. (p.4)
REFERENCES


