ABSTRACT
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Tennessee high school who were promoted without mastery in the middle school.
Their academic achievement in the high school math class was recorded. The
relationship between social promotion and mathematical academic achievement
was analyzed using Pearson product moment correlation. Similarly, the
relationship between math academic achievement and overall high school
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correlation. The difference in male and female mathematical academic
achievement was analyzed using an independent t-test. Also, the difference
between the number of times a student was promoted in the middle school and
mathematical achievement was analyzed using t-test for paired sample means.
The results indicated a significant negative correlation between social
promotion and high school math academic achievement. A strong correlation
existed between math academic achievement and overall academic achievement at
the high school level. There was no significant difference between the
mathematical academic achievement of males and females. Also, no significant
difference was found between the number of times a student was promoted in
middle school to high school math achievement. The study suggests that
students who are socially promoted in middle school perform poorly in high
school math classes. (Contains 16 references.) (Author/MM)

Running head: SOCIAL PROMOTION IN THE MIDDLE SCHOOL

The Relationship Between Social Promotion in the Middle School and Academic
Achievement in a High School Math Class

Patrick Kariuki

And

Lana Page

Milligan College

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Abstract

The purpose of this study was to determine the relationship between social promotion in

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Review of the Literature

Social promotion and retention have been the center of conflict among educators when trying to identify causes of poor academic achievement in students. One group of educators, social promotion opponents, believe that retaining students who did not master requirements at a specific grade level allowed them extended time to become proficient in the area (or areas) of weakness. Extended time allowed the student to move to the next grade level with confidence and stronger skills in the area of weakness, therefore, resulting in decreased drop out rates. These educators believe that allowing the student to move to the next grade level without mastery would place the student at a disadvantage academically. There are also those who do not believe that retention is beneficial. As a matter of fact, they believe it is harmful to the student's long-term academic progress and view of education (Kaczala, 1991; Karweit, 1991; Shepard & Smith, 1990).

These educators, social promotion advocates, believe that retention severely damages the confidence of the student sets the student up for future academic failure (Kaczala, 1991; Karweit, 1991; Shepard & Smith, 1990). They believe that students, regardless of academic achievement, should be allowed to move from one grade level to the next with peers of the same age. They argued that non-promoted students lacked confidence and were too mature for their younger peers. Some educators suggest that promoted students academically outperform their retained students. In addition to increased academic achievement, Owings and Magliaro (1998) suggested that retention produced negative attitudes toward school and negative effects on long-term student achievement due to damaged self-esteem and maturity levels.

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Research has been conducted for many years to study social promotion and its relationship to academic achievement. The United States Department of Education (1999) described social promotion as "pervasive." The study indicated that students were being promoted in all areas of curriculum and at all grade levels. There are school systems within the United States that are initiating programs to end social promotion. In 1996, the Chicago Public Schools launched an initiative to end social promotion and raise academic achievement by invoking required summer school programs for students not receiving passing scores on standardized reading and math tests (Roderick, 1999).

As technology continues to advance, national math scores continue to be well below international averages (National Center for Education Statistics [NCES], 1996). Research has attempted to identify factors that have contributed to poor mathematical achievement despite the advancements in technology. Factors such as teacher training, curriculum, student learning styles, instructional strategy, and math anxiety have been identified to play an important role in mathematical achievement. What factor, if any, did social promotion have on mathematical academic achievement? Because basic mathematical skills are needed in order to perform more complex computations, it seemed logical that proficiency in middle school math foundations would be essential to succeed in high school math. The question arose, "Could there be any relationship between a student's academic achievement in high school math to promotion without mastery in middle school?" "Does an early mathematical background that is weak make it difficult for students to learn concepts that are needed each year to be successful in proceeding classes?" These questions form the basis for this study.

Historical Perspectives

The history of social promotion and retention found its roots in the beginning of graded schools in the 1840s (Rose, Medway, Cantrell, & Marus, 1983). Until this time, students were grouped heterogeneously and moved from one mastery level to the next at their own rate of accomplishment. After the introduction of graded schools, students were promoted to the next grade level if grade level standards were met. If the standards were not met, the student was retained and repeated the material the next school year. In the late 1800s, it was estimated that as many as 70% of students were retained in any one year (Karweit, 1991). This number was astoundingly high. For every four students, almost three were retained. As education continued in the United States, approximately 20% of students in public schools were retained each year in the early 1900s. Rates of retention varied throughout the United States. In 1929 in Massachusetts, 7.5% of students were retained per year, but in Tennessee, some 75.8% were retained each year (Karweit, 1991).

As practices of retention continued, educators during the 1930s began to feel that retaining students was harmful to their self-esteem and social development. Social promotion was created. Under the policy of social promotion, students were promoted to the next grade level regardless of their mastery of current grade level standards. Failing students were promoted to the next grade and provided with remedial help (Rose et al., 1983). Retention rates showed a marked decline throughout the United States for the next 30 years, but as a result of social promotion drop out rates increased. This increase could be due in part to students' inability to perform academically at the next grade level (Karweit, 1991).

The practice of social promotion continued for the next several years, up until the late 1950s. It was at this point that standardized test scores began to decline (Rose et al., 1983). Many educators held the practice of social promotion responsible for this decline. They felt that loosened academic standards and promotion policy had attributed to poor academic achievement among American students. With the Soviet's launch of Sputnik I in 1957 and President Kennedy's goal to land a man on the moon and return him safely to earth by the end of the decade, politicians began to pressure educators to tighten academic achievement standards (Trowbridge & Bybee, 1996). This led to the most extensive reform in curriculum and education in American history. During the past 40 years stricter promotion policies and academic standards were implemented in school systems across the United States in an attempt to improve standardized test scores and academic achievement. Social promotion advocates have not gone quietly. They have provided research evidence as to why they feel retention is both an ineffective and harmful practice.

Proponents of Social Promotion

Much research has been done during the past century to describe the negative effects of retention on academic achievement, self-esteem, social development, and drop out rates. McCollum, Cortez, Maroney, Oanh, and Montes (1999) found that of the 66 studies done from 1990 to 1997, 65 of the studies found retention to be ineffective and harmful. In their study of grade retention, the results suggested that nationally 50% of retained students perform no better and 25% perform worse the second year through the same material. This finding was consistent with a study by Shepard and Smith (1990),

who found that retained students actually perform more poorly than if they had been promoted to the next grade level.

Proponents of social promotion believe that retention was ineffective because after only a few years of positive effects, which they believe were few and only in a few cases, disappeared (Holmes, 1989). This lead to the thinking among proponents of social promotion that if the retained students were no better off than those who were promoted, why retain them? Retained students were not better off academically and yet a year behind in school. In a meta-analysis by Holmes (1989) of 63 studies on the effects of retention, only 9 studies were found to show positive outcomes. This led many to believe that retention produces an overall negative effect on students. The effectiveness of retention has not been found for either academic achievement or attendance (Jackson, 1975; Kaczala, 1991; Lenarduzzi & McLaughlin, 1992; Owings & Magliaro, 1998). An actual negative correlation between retention and academic achievement and attendance was noted (Kaczala, 1991). Shepard and Smith (1990) reported that a retained student was five times more likely to drop out of high school than those not retained. When students were retained more than once, the rate increased to 100%. Studies of the ineffectiveness of retention are not new to the educational arena.

Bocks (1977) reported on several studies on the effects of retention. He indicated that retention did not ensure mastery of material being repeated. Several studies were done in the following years to refute the practice of retention in an attempt to increase student academic achievement. Kaczala (1991) found that low retention rates, or in effect high promotion rates, correlated with increased scores in reading in primary grades. Social promotion advocates believe that retention was a harmful practice that in no way

benefits students' long-term academic achievement. They have many studies to back up their beliefs and have no intention of backing down on the issue of the ineffectiveness of retention.

Opponents of Social Promotion

Although several studies suggested that retention is ineffective, harmful, and did not ensure improved academic achievement, it is still a widely accepted and used practice by principals, teachers, and parents across the nation. Teachers testified to instances in which retention made all the difference in a student's academic achievement. Retention can lead to a more positive self-image, leadership, and a stronger foundation of basic skills (Tomchin & Impara, 1992). Being retained a year may help students who are immature for their age to develop both emotionally and physically. Studies have compared the academic achievement of students who had been retained to their matched counterparts who were promoted to the next grade (Lenarduzzi & McLaughlin, 1992; Karweit, 1991). Were retained students expected to be at the same level as those who were promoted? Did some students need more time than others to learn the same material? In these cases, retention could be beneficial (Karweit, 1991). Retention also showed to be beneficial with students who were white and lived in suburban and middle class school districts (Holmes, 1989).

Karweit (1991) cited a 1982 doctoral dissertation by Oldham that compared the academic achievement of 11th graders who had been retained in primary with a control group that had been promoted. The two groups were matched on IQ, gender, and entry age. Achievement in mathematics and reading were looked at in 3rd, 6th and 10th grades.

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He found that the retained students scored significantly higher in mathematics and higher in reading, though the scores were not significantly higher. Retention is not always the best solution to be offered when students are performing below academic standards. There is no conclusive evidence available to offer proof that either social promotion or retention is more beneficial than the other. Whether students are retained or socially promoted, their academic achievement still often remains below achievement standards (Karweit, 1991).

Summary of Relevant Findings

Since the beginning of graded school there has been the question of how to deal with students who did not achieve grade level requirements. The answer to this question was retention up until the 1930s, when educators began to feel that retention was harmful and ineffective. From the 1930s to the 1960s, social promotion was the accepted way to deal with students who did not meet academic standards. With the decline of national standardized test scores and the demand for stricter standards and increased academic performance, retention once again became the accepted practice. The nation demanded that students be held accountable for the stricter standards implemented by school systems through standardized national testing. There was also need for national concern in mathematical achievement. The nation's ranking in mathematics was among the lowest internationally, which demands that achievement in math be greatly improved to keep the United States among the center of the leading industrial nations.

Studies suggested that neither retention nor social promotion provides failing students with the support they need to achieve success in school. Several alternatives to

retention and social promotion were suggested, among which was individualized instruction, personalized student progress plans, summer school, peer tutoring, and computer assisted instruction.

Methodology and Procedures

The population for this study consisted of one high school in Northeast Tennessee. The school system was located in a city with a large industrial base and a population of 53,000. The high school has an enrollment of 2400 students in grades 8-12, with 394 students in the senior class. In 1991, the high school was recognized by the U.S. Department of Education as a National School of Excellence. The high school (grades 9-12) followed a block schedule, completing four classes in the fall followed by four additional classes in the spring. The eighth grade was organized in yearlong middle school teams. The population of the high school consists of 50% male students, 50% female, 86% Caucasion, 11% African American, 1% Asian, 1% Hispanic, and less than 1% Indian. The number of students receiving free or reduced lunch is 24%.

The sample for this study was comprised of students from the senior class of 394 students at the high school. A student was included in this sample if he or she had been in the school system for the grades 6-8, promoted to the next grade level at least once without receiving a grade of "C" or better in math in grades 6-8, and had taken Algebra I.

The data were collected from each student in the senior class that had been promoted without mastery in math in grades 6-8. Data collected included student identity, age, gender, race, number of times promoted without mastery in grades 6-8,

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grade(s) promoted without mastery in math, and 9 or 18 week letter grades in math from grades 6-12.

Procedures

Before data collection began, a formal letter requesting permission to access student permanent records was written to the principal of the high school participating in the study. After permission was granted, the sample was selected from the population of all seniors in the high school. The sample consisted of any senior who had been in the school system throughout grades 6-8, had been promoted at least once in grades 6-8 without mastery (a grade of "C" or better), and had taken Algebra I. After selection of the sample, the data were collected by manual review of permanent records of each senior using an instrument designed based upon relevant research questions and hypotheses. After the data were collected, the grade point average, GPA, for mathematics was calculated for each student based upon the letter grades from 18-week periods of all math classes taken in grades 9-12. A 4.0 ranking scale was used. The Pearson product moment correlation, r, was used to determine if there was any significant relationship between social promotion and academic achievement. After the significance of the relationship was determined, the results were interpreted and the null hypotheses were either rejected or retained. Recommendations and implications were made for future study.

Results

Four research questions were used to guide the analysis of the data. Each research question was followed by a research hypothesis.

Research Questions

1. Is there a relationship between social promotion in the middle school and academic achievement in the high school math class?

2. Is there a relationship between a student's high school math grade point average and their overall high school grade point average?

3. Is there a difference between the academic achievement of socially promoted males and females in a high school math class?

4. Is there a difference in the high school math grade point average and the number of times a student is promoted without mastery in middle school?

Research questions 1 and 2 were analyzed using Pearson product moment correlation. Research questions 3 and 4 were analyzed using independent and paired samples t-tests respectively. The results for research question 1 indicated a significant negative relationship between social promotion and mathematics achievement ($r = -.44$, $p < .05$). Similarly, a significant relationship was realized between students high school math GPA and their overall GPA ($r = .87$, $p < .05$).

The results for question 3 indicated no significant difference between academic achievement in math for socially promoted males and females ($t = .12$, df 28, $p > .05$). Also, research question 4 indicated no significant difference between the number of times a student was promoted without mastery in middle school and their math achievement in high school ($t = .11$, df 29, $p > .05$).

Discussion

In regard to Research Question 1, Is there a relationship between social promotion and academic achievement in a high school math class, the Pearson Product moment coefficient correlation was conducted. Results indicated a significant negative relationship ($r = -.44$, $p < .05$). The null hypothesis was rejected. The findings of this research suggest that promoting students to the next grade level without mastering the material with a grade of "C" or better is not an effective practice. The negative correlation suggests that promotion without mastery yields a negative effect on a student's high school mathematical achievement. It is the view of the researcher that in order for students to achieve mathematical standards and master (receive a "C" or better) mathematical objectives, they must receive a solid foundation of basic math skills in elementary and middle school. Neither social promotion nor retention as a solitary means of remediation will be effective in helping low achieving students improve mathematical ability. Based upon TIMMS (NCES, 1996) findings, the United States is below international averages in math at the eighth and twelfth grade levels. Alternatives to social promotion must be developed and implemented into our educational programs to ensure that the United States remains competitive internationally. This finding is consistent with the review of literature. Jackson (1975) and Natale (1991) state that students who do not meet grade level requirements and are either promoted or retained remain low achievers and perform poorly academically in following years.

In regard to Research Question 2, Is there a relationship between a student's mathematical academic achievement and their overall academic achievement in high

school, the Pearson Product moment coefficient correlation was conducted. Results indicated a significant relationship ($r = .87$, $p < .05$). The null hypothesis was rejected. These findings suggest that the students in the study who were promoted without mastery in math in middle school not only performed poorly during high school in math, but also in other subjects based upon overall grade point average. These findings are consistent with past research in that students who did not meet grade level requirements and were either socially promoted or retained remained low achievers at the next grade level (Jackson, 1975; Natale, 1991).

In regard to Research Question 3, Is there a difference between high school mathematical academic achievement in males and females, independent samples t-test was conducted. Results indicated that there was no significant difference ($t = -.12$, $p > .05$). The null hypothesis was retained. This leads the researcher to conclude that gender is not a significant factor in predicting mathematical achievement among students who were promoted without mastery.

In regard to Research Question 4, Is there a difference between the number of times a student was promoted without mastery in middle school and their high school mathematical academic achievement, the paired samples t-test was conducted. Results indicated that there was no significant difference ($t = .11$, $p > .05$). The null hypothesis was retained. This leads the researcher to conclude that the number of times a student is promoted without mastery in middle school does not significantly influence the mathematical achievement of the student in high school. Students who were promoted without mastery only once in middle school performed no better in high school math than students who were promoted without mastery two or three times in middle school.

Conclusion

The hypothesis that there was a relationship between social promotion in the middle school and academic achievement in the high school math class was supported by the research findings. Similarly, the hypothesis that there was a relationship between a student's high school mathematical GPA and their overall high school GPA was supported by the research findings. The hypothesis that there was a difference between the high school mathematical achievement of males and females was not supported by the research findings. Similarly, the hypothesis that there was a difference between the number of times a student was promoted without mastery in the middle school and their high school mathematical academic achievement was not supported by the research findings.

References

Bocks, W.M. (1977). Nonpromotion: A year to grow? Educational Leadership, 34, 379-383.

Holmes, C.T. (1989). Grade level retention effects: A meta-analysis of research studies. In L.A. Shepard & M.L. Smith (Eds). Flunking grades- Research and policies on retention (pp. 16-33). New York: The Falmer Press.

Jackson, G.B. (1975). The research evidence on the effect of grade retention. Review of Educational Research, 45, 613635.

Kaczala, C. (1991). Grade retention: A longitudinal study of school correlates of rates of retention. Cleveland, OH: Cleveland Public Schools, Department of Research and Analysis. (ERIC Document Reproduction Service No. ED 337 532)

Karweit, N.L. (1991). Repeating a grade: Time to grow or denial of opportunity. Report No. 16. Baltimore, MD: Center for Research on Effective Schooling for Disadvantaged Students. (ERIC Document Reproduction Service No. ED 336 493)

Lenarduzzi, G. & McLaughlin, T.F. (1992). The longitudinal effects of retention in junior high school on academic achievement and attendance. Education, 113 (1). 112-114.

McCollum, P., Cortez, A., Maroney, O.H., & Montes, F. (1999). Failing our children: Finding alternatives to in grade retention, a brief policy. San Antonio, TX: Intercultural Development Research Association. (ERIC Document Reproduction Service No. ED 434 962)

Natale, J.A. (1991). Promotion or retention? Ideas are changing again. Executive Editor, 13 (1), 15-18.

National Center for Education Statistics. (1996). Pursuing Excellence. (DHHS Publication No. NCES 97-198) by Lois McPeak. Washington, DC: U.S. Government Printing Office.

Owings, W.A. & Magliaro, S. (1998). Grade retention: A history of failure. Educational Leadership, 56, 86-88.

Roderick, M., Bryk, A., Jacob, B., Easton, J., Allensworth, E. (1999). Ending social promotion: Results from the first two years. Charting reform in Chicago series 1. Chicago, IL: (ERIC Document Reproduction Service No. ED 439 214)

Rose, J.S., Medway, F.J., Cantrell, V.L., & Marus, S.H. (1983). A fresh look at the retention-promotion controversy. Journal of School Psychology, 21, 201-211.

Shepard, L.A., & Smith, M.C. (1990). Synthesis research on grade retention. Educational Leadership, 47 (8), 84-88.

Tomchin, E.M. & Impara, J.C. (1992). Unraveling teachers' beliefs about grade retention. American Educational Research Journal, 29 (1), 199-223.

Trowbridge, L.W., & Bybee, R.W. (1996). Historical perspectives on science education. In B.J. Potthoff (Ed.), Teaching secondary school science: Strategies for developing scientific literacy 6th ed. (pp. 42-55). Englewood Cliffs, NJ: Merrill.

U.S. Department of Educaiton. (1999). The president's educational plan. National standards of academic excellence. Congressional Digest, 76 (11), 265.

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