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## On the Failure of Failure: Examining the Association Between Early Grade Retention and Education and Employment Outcomes During Late Adolescence

**Shane R. Jimerson**

*University of California*

Past research examining the efficacy of early grade retention has presented mixed results, including numerous deleterious outcomes, especially during adolescence. The results of this 21-year, prospective, longitudinal study—which includes retained students, low-achieving but promoted students, and a control group—provide evidence that retained students have a greater probability of poorer educational and employment outcomes during late adolescence. Specifically, retained students had lower levels of academic adjustment at the end of 11th grade, were more likely to drop out of high school by age 19, were less likely to receive a diploma by age 20, were less likely to be enrolled in a postsecondary education program, received lower education/employment status ratings, were paid less per hour, and received poorer employment competence ratings at age 20 in comparison to a group of low-achieving students. Furthermore, the low-achieving but promoted group was comparable to the control group in all employment outcomes at age 20. Given the importance of a quality education and socioemotional adjustment for subsequent development, the effects of early grade retention may be further understood by considering a transactional model of development. © 1999 Society for the Study of School Psychology. Published by Elsevier Science Ltd

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“To retain or not to retain?” That is the question that has been vexing educators and researchers for more than 30 years. Political groups, professional associations, researchers, school personnel, parents, and assorted publications have presented varied positions regarding whether early grade retention is an appropriate educational intervention strategy. Amid a decade of research failing to document the benefits of retaining students emerged a book entitled *On the success of failure: A reassessment of the effects of retention in the primary grades* (Alexander, Entwisle, & Dauber, 1994). Alexander and colleagues interpreted the findings from their study as support for the use of early grade retention while critiquing past research suggesting

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Address correspondence and reprint requests to Shane R. Jimerson, University of California, Graduate School of Education, Santa Barbara, CA 93106-9490. Phone: (805) 893-3366; fax: (805) 893-7264; E-mail: Jimerson@education.ucsb.edu

negative outcomes associated with retention. In the recent State of the Union Address (1999), President Clinton called for an end to social promotion;<sup>1</sup> for some, this calls for a return to the practice of holding students back. In contrast, the National Association of School Psychologists (NASP) recently passed a *Position statement: Student grade retention and social promotion* (1998), which states, "Through many years of research, the practice of retaining children in grade has shown to be ineffective in meeting the needs of children who are academically delayed" (p. 1). The purpose of this paper is to provide further information regarding the association of early grade retention and outcomes during late adolescence, utilizing data from a 21-year, prospective, longitudinal study.

The percentage of retained students has risen steadily during the past 25 years (U.S. Department of Commerce, Bureau of the Census, 1966, 1990). Shepard and Smith (1990) estimate an annual retention rate of 5–7%; thus, more than 2.4 million students in the United States are retained each year. Moreover, grade retention is not an inexpensive intervention, resulting in additional educational expenses exceeding \$14 billion a year (Dawson, 1998). Thus, it is critical that we continue to study the outcomes of these children in an effort to better understand the efficacy of early grade retention.

Questions and concerns regarding the quality of many past studies have been repeatedly presented in several reviews (Holmes, 1989; Jackson, 1975; Niklason, 1984, 1987; Rose, Medway, Cantrell, & Marus, 1983) and again in recent publications (Alexander et al., 1994; Jimerson, Carlson, Rotert, Ege-land, & Sroufe, 1997). Methodological concerns include: comparing pre- and posttest scores of retained students rather than a comparison group; characteristics of comparison groups are rarely delineated; data collected 30–40 years ago may be outdated; most studies do not consider socioemotional outcomes; and most studies are unable to examine the long-term outcomes associated with grade retention. This prospective, longitudinal study avoids these methodological concerns. This paper extends a previous report with this sample that explored the characteristics of children retained in early elementary school and the effects of retention on achievement and adjustment throughout the elementary years and at age 16 (Jimerson et al., 1997).

Although a comprehensive review of past research regarding grade retention is beyond the scope of this paper, it is important to briefly explore some essential questions:

1. What characteristics are associated with being retained?
2. Is grade retention associated with improved achievement?
3. Is grade retention associated with improved socioemotional health?
4. Is grade retention associated with dropping out?

<sup>1</sup>Social promotion refers to the practice of promoting students with their same-age peers regardless of achievement.

Following a brief discussion of each of these questions, a conceptual model providing a developmental framework is offered to facilitate interpretation of the results from studies examining outcomes associated with early grade retention.

### **What Characteristics Are Associated With Being Retained?**

Research has identified several familial and demographic characteristics associated with an increased likelihood of being retained. Higher retention rates have been shown among ethnic minorities, especially among Black and Hispanic students (Abidin, Golladay, & Howerton, 1971; Alexander et al., 1994; Cassavantes, 1974; Niklason, 1984; Reinherz & Griffin, 1970; Zill, Loomis, & West, 1997). Another important feature is gender, with males more likely to be retained than females (Abidin et al., 1971; Alexander et al., 1994; Dobbs & Neville, 1967; Jimerson et al., 1997; Zill et al., 1997). Studies examining the chronological age of children report mixed results (Sandoval, 1984; Shepard & Smith, 1987), with some reporting younger children are more likely to be retained because of “immaturity,” whereas others find no significant age differences. Children from disadvantaged families or low socioeconomic status (SES) and with less education or less parental involvement also appear more likely to be retained (Abidin et al., 1971; Alexander et al., 1994; Byrnes & Yamamoto, 1985; Jimerson et al., 1997).

Several individual characteristics also have been identified. The evidence regarding the role of intelligence in achievement of children is mixed, with many researchers reporting no significant differences between retained children and low-functioning but promoted peers (Aibersold, 1971; Caplan, 1973; Jimerson et al., 1997; Niklason, 1984; Sandoval, 1984; Trotter, 1982); others report developmental delays and learning disabilities as features increasing the likelihood of retention (Zill et al., 1997). Students who display more maladaptive behaviors and are less confident, self-assured, engaging, socially competent, and popular with peers are also more likely to be retained (Cairns & Cairns, 1994; Lambert, Bower, & Hartsough, 1979; Jimerson et al., 1997; Sandoval, 1984). The above characteristics reflect a broad range of possible academic challenges for children, and retention is often implemented as an academic intervention to remediate poor achievement and/or socioemotional difficulties.

### **Is Grade Retention Associated With Improved Achievement?**

The results of many past studies examining the association between grade retention and achievement outcomes, including meta-analyses, suggest mixed effects for retained students (Holmes, 1989; Holmes & Matthews, 1984; Jackson, 1975; Karweit, 1992; Niklason, 1984, 1987; Shepard, 1989;

Shepard & Smith, 1989, 1990; Smith & Shepard, 1987). In a meta-analysis of 63 controlled studies, Holmes (1989) reported that 54 studies showed negative achievement effects when retained children went on to the next grade. Of 9 studies that reported positive, short-term achievement effects, the benefits were shown to diminish over time and disappear in later grades (Holmes, 1989). Since Holmes' review, research has yielded mixed results regarding the achievement outcomes associated with grade retention (Alexander et al., 1994; Armistead et al., 1992; Dennebaum, & Kuhlberg, 1994; Jimerson et al., 1997; Johnson, Merrell, & Stover, 1990; Mantzicopoulos & Morrison, 1992; Meisels & Liaw, 1993; Nason, 1991; Pianta, Tietbohl, & Bennett, 1997; Pierson & Connell, 1992; Reynolds, 1992; Reynolds & Bezruczko, 1993; Zill et al., 1997). Again, achievement gains appear in the years immediately following the retention, but these gains were not shown to be maintained. Regarding achievement during adolescence, studies do not demonstrate significant differences in achievement scores between retained students and matched comparison peers during middle school and high school.

### **Is Grade Retention Associated With Improved Socioemotional Health?**

Fewer studies have addressed the social and psychological adjustment outcomes of retained students. Overall, the results of studies that have examined socioemotional adjustment have yielded mixed results for retained students (Bocks, 1977; Finlayson, 1977; Holmes, 1989; Holmes & Matthews, 1984; Jackson, 1975; Kellam, Branch, Agrawal, & Ensminger, 1975; Shepard, 1989; Shepard & Smith, 1986). Considering more than 40 studies including socioemotional outcomes, Holmes (1989) concluded that, on average, the retained students display poorer attendance, social adjustment, and attitudes toward school and more problem behaviors in comparison to matched controls. Studies focusing on older children suggest poorer adjustment for retained students (Bachman, Green, & Wirtanen, 1971; Finlayson, 1977; Godfrey, 1972; Hubbell, 1981; Plummer & Graziano, 1987; Safer, 1986; White & Howard, 1973). Related research indicates that many retained students have difficulties with their peers (Byrnes, 1989; Shepard & Smith, 1990). Research since Holmes' review also indicates mixed findings regarding poorer socioemotional adjustment of retained students (Alexander et al., 1994; Armistead et al., 1992; Jimerson et al., 1997; Nason, 1991; Pianta et al., 1997; Pierson & Connell, 1992; Reynolds, 1992; Zill et al., 1997). Whereas some of these studies suggest the short-term socioemotional adjustment of retained children may be compromised, others report improved adjustment and a reduction in behavioral problems. No evidence of beneficial effects of grade retention on social and personal adjustment in high school has been shown.

## Is Grade Retention Associated With Dropping Out?

Studies examining the association between grade retention and dropping out of high school consistently have demonstrated that students who are retained are more likely to drop out of school prior to graduation than students who are not retained (Bachman et al., 1971; Cairns, Cairns, & Neckerman, 1989; Ensminger & Slusarick, 1992; Fine, 1989, 1991; Grissom & Shepard, 1989; Lloyd, 1978; Nason, 1991; Pallas, 1986; Roderick, 1994, 1995; Rumberger, 1987, 1995; Shepard & Smith, 1989, 1990; Stroup & Robins, 1972; Tuck, 1989). Shepard and Smith (1990) reported that “Dropouts are five times more likely to have repeated a grade than are high school graduates” (p. 86). Moreover, dropping out is associated with numerous deleterious outcomes, including fewer employment opportunities, substance abuse, and arrests (Cairns & Cairns, 1994; Catterall, 1987; Center for the Study of Social Policy, 1994; McDill, Natriello, & Pallas, 1986; Steinberg, Blinde & Chan, 1984).

Many previous studies identify dropouts and look backward to examine whether or not these dropouts had been retained, as opposed to a prospective study following the students forward. This is an important methodological consideration, as the results may be interpreted differently. Studies that begin by identifying dropouts and then examine earlier grade retention demonstrate that many students who drop out were retained. However, this is different from following a group of retained students and a control group of low-achieving but promoted students forward to examine the ratio of students in each group who drop out, as is done in this study.

Many children who are retained in elementary school join a cohort of younger children the following year and are considered to be “over-age for grade” the remainder of their education. Past research also suggests that there is an effect of being over-age for grade that influences students to drop out during adolescence (Roderick, 1995). Research also suggests that students who are over-age for grade exhibit more behavioral problems, report higher levels of emotional distress and more substance abuse, and engage in more reckless behaviors (e.g., sexual intercourse, riding in a car with an intoxicated driver) (Byrd, Weitzman, & Auinger, 1997; Byrd, Weitzman, & Doniger, 1996; Resnick et al., 1997). In sum, past research provides evidence that repeating a grade provides few remedial benefits and may, in the long run, place students at a higher risk of dropping out of school (Roderick, 1995).

## An Organizing Framework

The accumulated evidence regarding outcomes associated with grade retention may be further illuminated by considering a transactional model of

development. Sameroff and Chandler (1975) proposed that we must consider the interplay between individuals and their environments. The overarching premise of the transactional model is that the contact between the individual and the environment is a transaction in which each alters the other and that this transaction impacts subsequent interactions in an ongoing fashion. Thus, behavior is always a product of current circumstances and one's developmental history (Sameroff, 1992; Sroufe, Egeland, & Carlson, 1999). As discussed above, there are multiple characteristics of a child's developmental history that increase the likelihood that he or she will be retained in elementary school. To understand the effects of education on children, we must acknowledge the transactional nature of the student's developmental history, his or her experiences at school, as well as other contemporaneous experiences (see Bachman et al., 1971; Cairns & Cairns, 1994; Dryfoos, 1990; Evans & DiBenedetto, 1990; Fine, 1989; Kirsch, Jungeblut, Jenkins, & Kolstad, 1993; Kronick & Hargis, 1990; Sroufe et al., 1999; Toles, Schultz, & Rice, 1986; Wehlage & Rutter, 1986; Wehlage, Smith & Lipman, 1992; and Weis, Farrar, & Petrie, 1989 for further discussion).

There is a homeorhetic tendency in development (Sameroff & Fiese, 1989), such that once a pathway is enjoined, numerous factors conspire toward its continuation (Sroufe, 1997). Considering the importance of a quality education and socioemotional adjustment for both employment and one's psychological well-being, the reported outcomes during late adolescence associated with grade retention may indeed be a result of the confluence of factors throughout one's developmental trajectory, probabalistically manifested toward deleterious outcomes. Rather than suggesting that grade retention inevitably leads to highly associated outcomes in a direct and causal manner, the transactional perspective reminds us to consider the complex interplay of individual and experiential influences across time. Thus, the transactional model of development provides an organizing framework to facilitate the interpretation of outcomes associated with early grade retention. Additional research is necessary to understand the influences of early grade retention on subsequent developmental trajectories.

### **Where Do We Go From Here?**

Whereas many studies have explored the short-term adjustment and achievement of retained students, fewer studies have provided long-term follow-up outcomes comparing low-achieving but promoted students with retained students. The inclusion of this comparison group is necessary to address the overall success or failure of early grade retention. In particular, a prospective, longitudinal study utilizing a well-matched control group is

essential to explore the association of elementary grade retention with education and employment outcomes for these students and their low-achieving but promoted peers. The specific questions addressed with the data from this 21-year, longitudinal study include the following:

1. What is the association between grade retention and academic adjustment in high school?

High school achievement, behavioral problems, and attendance in 11th grade will be included to perform contrasts among retained students, low-achieving but promoted students, and regularly promoted students.

2. What is the association between grade retention and dropping out of high school?

The high school status at age 19 of the retained group will be compared to a matched group of low-achieving, promoted students and regularly promoted students.

3. What is the association between grade retention and obtaining a certificate of high school completion?

Contrasts will be performed among the retained group, a matched group of low-achieving but promoted peers, and regularly promoted peers, regarding receiving a diploma or general education equivalency certificate by age 20.

4. What is the association between grade retention and postsecondary education?

Enrollment in college and technical programs by age 20 is included to perform contrasts among the retained group, a matched group of low-achieving but promoted students, and regularly promoted students.

5. What is the association between grade retention and employment outcomes in late adolescence?

Employment hourly pay, education/employment status, and employment competence are each included as employment outcomes at age 20. The retained group will be compared to a matched group of low-achieving, promoted students and regularly promoted students.

## METHODS

### Participants

The participants in this study were selected from 190 children participating in the Minnesota Mother-Child Interaction Project. This is a 21-year, prospective, longitudinal study of children at risk for maladaptive outcomes.

Families were originally selected by enrolling primiparous women receiving prenatal care through public assistance at the Maternal and Infant Care Clinic of the Minneapolis Health Department. The mothers ranged in age from 12–37 years ( $M = 20.52$ ;  $SD = 3.65$ ) at the time of the baby's birth. Sixty percent of the mothers were single, and 86% of the pregnancies were unplanned. The education of the mothers ranged from junior high to post-college level, and 40% had graduated from high school by the time their infants were born. Eighty percent of the mothers were White, 14% were Black, and the remaining 6% were Native American or Hispanic. Approximately 15% of the children were of mixed racial background.

### **Retained Group**

The retained group consisted of the children in the sample who were retained once in either kindergarten (9) or first (9), second (7), or third grade (4). Three other children were omitted from the group because they were retained more than once or were identified as having mental or physical sensory disabilities. Thus, the analyses included 29 students in the retained group.

### **Low-Achieving, Promoted Group**

Participants were selected for the comparison group of low-achieving, promoted students on the basis of low academic achievement in order to identify a group of children functioning similarly to retained children in terms of academic achievement. The low-achieving, promoted group was first constructed by identifying all subjects whose standard scores (grade normed) on the Peabody Individual Achievement Test (PIAT) fell within the bottom quartile of the sample in first, second, or third grade. Students who met this criterion at more than one grade level were randomly assigned as eligible for the comparison group for only one grade level. Retained students were excluded, as were other students diagnosed as developmentally delayed or identified as having mental, physical, or sensory disabilities. Fifteen of 19 students eligible for the comparison group were randomly selected for the kindergarten group. Teacher ratings of achievement and differences in total Achenbach Child Behavior Checklist—Teacher Form (CBC—T) scores were used to select the eligible kindergarten students. Of the 26 students selected as eligible based on the above methods, 17 were randomly selected for the first-grade group and 11 of 14 were randomly selected for the second-grade group; the third-grade group included all 7 eligible students. A total of 50 students were selected for the low-achieving, promoted group. Thus, the number of subjects assigned to a group at each grade level was approximately 1.5 times the size of the retained group for the given grade levels. There were no achievement or

“ability” differences between the comparison group of students and the retained students (Jimerson et al., 1997).

### **Control Group**

The control group consisted of randomly selected students who were not already included in the retention or low-achieving, promoted groups. Thus, the control group exhibited higher academic achievement by definition, as its members had not appeared on the low-achieving lists at any grade level. Students eligible for the control group were randomly assigned to one grade level only, in order to develop a control group for every grade level. Twenty-five students were assigned to each control group for grades kindergarten through third, yielding a total of 100 students in the control group. Although it may be expected that the control group will always outperform the retained students, this group provides further insights regarding the relative outcomes of the retained students and low-achieving but promoted students through contrasts with the comparison group.

The retained group had significantly more males than the low-achieving but promoted group (74% and 56%, respectively). The percentages of minority students in the retained, comparison, and control groups were 35%, 31%, and 16%, respectively. Participants attended more than 120 different schools from 1982 to 1986, the period during which students were retained in grades kindergarten through third.

## **MEASURES AND PROCEDURES**

### **Child and Family Characteristics**

During the early childhood and early elementary years, the assessments included teacher interviews, child interviews and testing, and mother interviews and testing. If a child had been retained at any time in grades kindergarten through third, an interview was conducted during the year prior to retention and again during the retained year. From each of these assessments, the following measures and variables were included in this study to describe child and family characteristics for each group of students.

**Teacher interview measures.** Project staff members conducted interviews with the child’s primary teacher. Interviews were scheduled during the spring quarter of the school year when the subjects were in kindergarten and first, second, and third grade. One component of this assessment consisted of a structured teacher interview. The following information provided by the child’s teacher was used in this study.

**Attendance:** Reports of both the number of days absent and the total number of days in the school year were collected for each student. The percentage of days absent was used in this study.

Child Behavior Checklist—Teacher Form (CBC—T): This measure, designed to assess children's problem behaviors, is a 113-item checklist completed by the child's classroom teacher (Achenbach & Edelbrock, 1980; Edelbrock & Achenbach, 1985). The total score was used as an estimate of the student's problem behaviors in this study.

Emotional health/self-esteem and peer acceptance/popularity rank order measures: These rank order measures employ the teacher nomination procedure and were developed by staff from the Minnesota Mother-Child Interaction Project. The emotional health/self-esteem measure addresses characteristics of the emotionally healthy child, such as the ability to be confident, curious, self-assured, and engaging. The teacher was provided with a short description of these characteristics and asked to rank order the children in his/her classroom, with the child most closely resembling the description to be ranked at the top. For the peer acceptance/popularity measure, the teacher reads a description of a socially competent and popular child and repeats the rank order procedure, using the same method employed for the first scale. The child's scores on these measures consist of a ratio of the child's rank divided by the number of students in the class. Because only a single teacher did these ratings, reliability figures are not available. However, in a separate study, multiple counselors independently performed these rankings following four weeks of summer day-camp and reported interrater reliability ranging from .64 to .81 on both emotional health/self-esteem and peer acceptance/popularity (Elicker, Englund, & Sroufe, 1992). The teacher rankings themselves show significant stability from year to year, significant correlations with behavioral problems, and significant correlation with observed peer competence (Hiester, Carlson, & Sroufe, 1993).

**Child assessments.** Staff conducted the child assessments used in this study during the summers following kindergarten and first, second, and third grade.

Peabody Individual Achievement Test: (PIAT). The PIAT (Dunn & Marwardt, 1970) was administered as part of the assessments conducted following kindergarten and first, second, and third grade. The PIAT provides an assessment of achievement in five areas: mathematics, reading recognition, reading comprehension, spelling, and general information. Standard scores were computed and included age percentiles and grade percentiles. The PIAT scores presented reflect grade standard; age standard scores would be biased against the retained group because its members are in a grade one year behind their age level.

Wechsler Preschool and Primary Scales of Intelligence (WPPSI): Four subtests of the WPPSI (Wechsler, 1967) (Vocabulary, Comprehension, Animal House, and Block Design) were administered to all subjects during the

assessment conducted at 64 months of age, and scaled scores were obtained and prorated to provide an abbreviated estimate of intellectual functioning.

Wechsler Intelligence Scale for Children—Revised (WISC—R): Three subtests from the WISC—R (Wechsler, 1974) (Block Design, Vocabulary, and Similarities) were administered to children as part of the third-grade assessment, and the subtests yielded a derived IQ score.

**Mother/home assessments.** Information collected from the mother before the birth of the child, soon after the birth, at 30 and 48 months, and at first grade was used in this study. The information relevant to the current study included questions concerning SES, age of the mother at the child's birth, level of education, and assessment of intelligence. During the home interview, an assessment of the home environment was also completed.

Wechsler Adult Intelligence Scale (WAIS): As part of the assessment conducted when the children were approximately 48 months of age, mothers were administered three subtests of the WAIS (Wechsler, 1958) (Comprehension, Vocabulary, and Block Design). Scaled scores for each subtest were computed and added to yield a sum of scaled scores.

Home environment: As part of the assessment battery at 30 months, trained observers completed the Home Observation for Measurement of the Environment (HOME) inventory (Bradley & Caldwell, 1979). HOME is a semistructured interview and observation instrument designed to measure the quality of the child's home environment. This version consists of 48 items that are scored on nine different subscales: Organization of Stable Environment, Development Stimulation, Quality of Language Environment, Responsiveness and Avoidance of Restriction, Fostering Maturity and Independence, Emotional Climate, Breadth of Experience, Aspects of Physical Environment, and Play Materials. A total score from these subscales was used in the analyses. Bradley and Caldwell (1984) provide further information regarding the technical adequacy of the HOME inventory.

Socioeconomic status (SES): An overall household index of SES was calculated as the mean of *Z* scores from at least two of three sources. These sources included the household score from the revised Duncan Socioeconomic Index (SEI) (Duncan, 1961; Stevens & Featherman, 1981) and the mother's level of education. SES indices based on *Z*-score means were transformed into *t* scores to produce positively scaled distributions for these variables.

### Late Adolescent Outcomes

During late adolescence, information regarding education and employment was obtained at 11th grade and 19 and 20 years of age. High school counselors, in addition to the participants in the study, provided the information. Recognizing high school adjustment, postsecondary education,

and employment as salient developmental tasks of late adolescence (Santröck, 1997), this study included each of these to examine the outcomes of children retained in early elementary school. The following describes each of the specific outcome measures and variables used in this study.<sup>2</sup>

**Academic adjustment:** High school achievement (i.e., grade point average and the ratio of number of credits obtained to the number of years in high school), behavioral problems at school (number and intensity), and attendance (based on the ratio of the number of days attended to the number of days in the school year) from the student's school record, which school counselors provided at the end of 11th grade, were combined and used as an academic adjustment composite outcome variable. Z-score transformations were performed, the three components were combined, and the average was used as the academic adjustment variable.

**High school status:** The students were classified in terms of their high school graduation status at age 19. The classification was determined by reviewing forms that high school counselors and teachers completed, annual interviews with the students, and phone calls to verify academic enrollment at age 19. In this study, students who were not enrolled in any form of educational program, making progress toward a high school diploma, or enrolled in an alternative program to pursue a General Educational Development (GED) certificate were classified as "dropouts" from the traditional educational setting. Students who were currently enrolled, in full-time attendance, and making progress toward a high school diploma within a traditional setting or had graduated were classified as "traditional students." In the entire sample, 58% of the participants were classified as traditional students at age 19.

**Certificate of high school completion:** Individual reports of completion of a high school diploma or GED were included in a series of questions asked of each participant at age 19 and again at 20. In addition, school records were reviewed independently and discrepancies were resolved by contacting the educational program. In the general sample, 68% had received a diploma and 13% had completed a GED program by age 20.

**Postsecondary enrollment:** Individual reports of enrollment in postsecondary educational programs (e.g., college, technical training programs) were gathered at ages 19 and 20. This was a dichotomous variable, with each participant receiving a score of 1, indicating enrollment in a postsecondary education program, or 0, indicating no such enrollment. Postsecondary programs included technical training programs, as well as college enrollment.

<sup>2</sup>As reported in prior analyses (Jimerson et al., 1997), during the school-age years, assessments were completed when the children were in kindergarten and first, second, third, and sixth grade and age 16. Review Jimerson and colleagues (1997) for a complete discussion of the results of outcomes through age 16.

**Education/employment status:** The education/employment status scale was developed as a measure of an individual's balance of education and employment at age 20 on a 5-point scale. A score of 5 was given when one of three conditions was met: (a) full-time college/technical school, (b) part-time college/technical school and part-time employment, or (c) full-time employment. Full-time employment was defined as working either one job or multiple, concurrent jobs for 35 or more hours per week. Full-time status in credit hours was requisite for full-time education status. Full-time status was denoted when 75% of the past year constituted a dominant, enduring pattern. A score of 3 (the middle of the scale) was given when one of three conditions was met: (a) part-time college/technical school, (b) part-time employment, or (c) a combination of part-time employment and full-time employment, with neither constituting a dominant pattern during the year. Part-time status was defined as 15–35 hours per week of employment or education. Finally, at the low end of the scale, a score of 1 was given when no work or school experience was reported for the past year. Scores of 3 and 4 were defined and fell between the scale points described above. Blind raters completed the scales for high school status and employment/education status. Different raters completed the latter nearly a year after the former.

**Employment hourly pay:** The employment hourly pay was determined by using the hourly pay rate reported during the 20-year interview. If the participant had multiple employment experiences during the past year, the hourly pay rate for each position was combined, then the average was used. For those receiving gratuity dollars in addition to an hourly pay rate, the amount of average daily gratuity dollars was divided by the number of hours worked, then this average gratuity rate was combined with the hourly pay rate to be used as the individual's employment hourly pay.

**Employment competence:** The employment competence variable at age 20 is a 5-point rating scale that incorporates employment stability (number of jobs in the past year), employment commitment (duration of jobs in the past year), and employment quality (rating of the type of jobs in the past year) (Duncan, 1961; Stevens & Cho, 1985; Stevens & Featherman, 1981) and also considers the employment status as described above, taking into account that full-time students may be unable to work. A score of 5 was given when an individual had excelled in all dimensions, shown a strong commitment with relatively good employment stability (though a full-time student can also achieve this rating), and achieved a high education/employment status rating, as well as when the kinds of job experiences had been of relatively high quality. A score of 3 was given if a clear deficiency was noted in one of the areas described above while a clear competency was displayed in the other areas. Alternatively, moderate deficiencies may be evident within two areas. Individuals receiving a score of 1 had clear weaknesses manifested across all of the areas. In general, they show little commitment to finding a job and spend little time employed. These individuals

may not be working or may have scattered jobs of short duration without pursuing concurrent higher education (not to be confused with those seeking higher education who work part time). Again, scores of 3 and 4 were defined and fell between the scale points described above.

## RESULTS

First, analyses describing the characteristics of the groups will be reviewed. Next, results of this study are presented in two sections: (a) educational outcomes and (b) employment outcomes, including the combination education/employment status variable. To explore the questions specified above, one-way analyses of variance (ANOVAs) and chi-square analyses were utilized. The means, standard deviations, percentages, contrasts, *F*-ratio values, chi-square values, and significance levels are included in the tables.

### Characteristics of the Groups

Significant differences in characteristics were found between the retained and normal control group in all variables that testify to the meaningfulness of the measures. More interesting, however, were results of analyses that examined the characteristics of retained children in comparison to similarly low-achieving but promoted peers.

**Child characteristics.** A one-way ANOVA was utilized to examine group differences in child characteristics, and a priori orthogonal contrasts were conducted between groups. The retained and low-achieving, promoted groups did not differ in terms of achievement, as measured by age-normed standard scores for all academic subtests and the total score on the PIAT, and the groups displayed similar intellectual functioning, as assessed by the WPPSI and WISC—R. Although analyses produced significant differences between the retained and control groups, a priori contrasts between the retained and low-achieving, promoted groups were not significant, suggesting success in the attempt to construct an academically comparable group of promoted peers.

However, in contrast to the low-achieving, promoted group, retained students displayed more problem behaviors in the classroom, as measured by the CBC (total score) ( $p < .05$ ), and were also ranked lower in terms of emotional health ( $p < .05$ ) and peer acceptance/popularity ( $p < .01$ ). Additionally, the retained students missed a significantly greater percentage of school days ( $p < .05$ ). These results are displayed in Table 1.

**Family demographic characteristics.** Comparisons of the age of the mother at birth, maternal education at birth, SES at birth, home environment at 30 months, and maternal education at first grade yielded no significant differences between the retained and low-achieving but promoted

**Table 1**  
**Child Characteristics [*M* (*SD*)]**

Variable	Group 1 Retained	Group 2 Comparison	Group 3 Control	<i>F</i>	Contrasts
WPPSI sum of four scaled scores	38.11 (8.39)	39.48 (7.21)	47.38 (6.72)	27.76**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3*
WISC—R deviation IQ	94.82 (15.09)	98.69 (10.38)	112.09 (11.16)	28.05**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
PIAT total	90.47 (9.46)	89.35 (3.42)	107.21 (7.19)	99.31**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
PIAT math	95.05 (10.72)	91.85 (7.21)	107.51 (10.54)	34.38**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
PIAT reading recognition	89.16 (9.06)	91.92 (7.17)	108.36 (9.18)	65.10**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
PIAT reading comprehension	91.05 (9.77)	91.59 (6.06)	108.31 (9.53)	56.35**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
PIAT spelling	89.79 (8.85)	90.38 (7.57)	104.88 (7.77)	52.50**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3**
Percent absent	11.32 (11.52)	6.55 (5.04)	5.13 (3.54)	9.95**	1 vs. 2** 1 vs. 3** 2 vs. 3 <i>ns</i>
Emotional health ranking	20.54 (23.56)	32.37 (24.41)	57.22 (26.42)	29.30**	1 vs. 2* 1 vs. 3** 2 vs. 3*
Peer acceptance ranking	22.54 (22.06)	38.12 (26.13)	59.41 (26.42)	20.86**	1 vs. 2** 1 vs. 3** 2 vs. 3*
Child Behavior Checklist	51.58 (28.59)	38.43 (30.54)	21.99 (24.98)	14.84**	1 vs. 2* 1 vs. 3* 2 vs. 3*

*Note.* All PIAT scores represent grade standard scores; \*  $p < .05$ , \*\*  $p < .01$ ; WPPSI = Wechsler Preschool and Primary Scales of Intelligence, WISC—R = Wechsler Intelligence Scale for Children—Revised, PIAT = Peabody Individual Achievement Test,  $F$  =  $F$  ratio.

groups. However, contrasts indicated that mothers of the retained children displayed lower levels of cognitive functioning on the WAIS than mothers of the low-achieving, promoted group ( $p < .05$ ). Also, the SES of the retained students was significantly lower in first grade ( $p < .05$ ). These results are displayed in Table 2.

### Educational Outcomes

The analyses in this section provide information regarding the following questions:

**Table 2**  
**Family Demographic Characteristics [M (SD)]**

Variable	Group 1 Retained	Group 2 Comparison	Group 3 Control	<i>F</i>	Contrasts
Age of mother at birth	19.52 (3.14)	19.68 (2.71)	22.21 (4.13)	5.13**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3 <i>ns</i>
Maternal education at birth	10.94 (1.34)	11.62 (1.71)	12.64 (2.28)	4.89**	1 vs. 2 <i>ns</i> 1 vs. 3*** 2 vs. 3***
Socioeconomic status at birth	45.75 (6.27)	49.62 (10.38)	52.15 (10.20)	5.35**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3 <i>ns</i>
Maternal IQ at 48 months	26.40 (8.19)	30.02 (6.23)	32.44 (7.03)	8.53***	1 vs. 2* 1 vs. 3*** 2 vs. 3*
Home environment at 30 months	29.03 (6.87)	29.77 (7.31)	34.41 (6.40)	11.92**	1 vs. 2 <i>ns</i> 1 vs. 3* 2 vs. 3**
Maternal education at grade 1	11.18 (2.77)	12.04 (1.56)	12.59 (1.86)	5.77**	1 vs. 2 <i>ns</i> 1 vs. 3** 2 vs. 3 <i>ns</i>
Socioeconomic status at grade 1	44.99 (8.46)	49.28 (8.96)	52.33 (10.63)	6.45**	1 vs. 2* 1 vs. 3*** 2 vs. 3 <i>ns</i>

*F* = *F* ratio; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

1. What is the association between grade retention and academic adjustment in high school?
2. What is the association between grade retention and dropping out of high school at age 19?
3. What is the association between grade retention and obtaining a certificate of high school completion by age 20?
4. What is the association between grade retention and postsecondary education?

The results regarding educational outcomes are illustrated in Table 3.

One-way ANOVAs with a priori orthogonal contrasts were calculated on levels of high school adjustment in 11th grade. In regards to the first question, it appears that the retained group of children displayed significantly lower academic adjustment than both the low-achieving but promoted group ( $p < .01$ ) and the control group ( $p < .001$ ). However, no significant difference was found between the low-achieving but promoted group and the control group.

In regards to the second question, the chi-square analyses of the ratio of dropouts in each group suggest a significantly higher percentage in the retained group relative to both the comparison group ( $p < .05$ ) and the control group ( $p < .001$ ). These results indicate that a greater percentage of

**Table 3**  
**Educational Outcomes: 11th Grade, Age 19, and Age 20 [M(SD)] or [%(n of n)]**

Variable	Group 1 Retained	Group 2 Comparison	Group 3 Control	Contrasts	F or $\chi^2$ Value	Significance
Academic adjustment 11th grade	-0.50 (0.89)	0.02 (0.88)	0.23 (0.95)	1 vs. 2 1 vs. 3	6.59 13.95	** ***
Dropped out of h.s. age 19	69% (20 of 29)	46% (23 of 49)	29% (30 of 98)	2 vs. 3 1 vs. 2 1 vs. 3	1.66 3.57 13.79	<i>ns</i> * ***
Certificate of h.s. completion age 20	42% (11 of 26)	72% (33 of 46)	88% (84 of 95)	2 vs. 3 1 vs. 2 1 vs. 3	3.77 5.44 23.66	* ** ***
Postsecondary enrollment age 20	23% (6 of 26)	41% (19 of 46)	56% (53 of 95)	2 vs. 3 1 vs. 2 1 vs. 3	5.83 2.43 8.74	** <i>ns</i> **
				2 vs. 3	2.60	<i>ns</i>

F = F ratio,  $\chi^2$  = chi-square; h.s. = high school; \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

the retained students dropped out of high school, in contrast to the low-achieving but promoted students (69% and 46%, respectively). The comparison group also yielded a significantly higher dropout ratio than the control group ( $p < .05$ ).

Additional chi-square analyses of the ratio of students in each group receiving a certificate of high school completion at age 20 provided information regarding the third question. The retained group displayed a significantly lower percentage than both the comparison ( $p < .01$ ) and control groups ( $p < .001$ ). As such, by age 20, a lower percentage of the retained students had received a certificate of high school completion than their low-achieving but promoted peers (44% and 72%, respectively). The comparison group also yielded a significantly lower percentage than the control group ( $p < .01$ ).

In regards to the fourth question, the results of the final chi-square analyses revealed that the retained group displayed a lower percentage of students enrolled in an educational program beyond high school than the control group ( $p < .001$ ). Although the comparison group did not differ significantly from the retained group, it was comparable to the control group. Examining the percentages clearly indicates that the retained students were least likely to be enrolled in postsecondary education, whereas the percentages for the low-achieving but promoted group and the control group were both higher (23%, 41%, and 56%, respectively).

Collectively, these results demonstrate that the retained group of students displayed lower academic adjustment in 11th grade, a greater percentage dropped out of high school by age 19, and a lower percentage had received a certificate of high school completion at age 20, in contrast to the group of low-achieving but promoted students. Furthermore, whereas the percentage of low-achieving but promoted students enrolled in a postsecondary program was comparable to that of the control group, the percentage of retained students was significantly lower. Thus, on all of the educational outcomes in high school and beyond examined in this study, as a group, the retained students appear to be worse off than the low-achieving but promoted students.

### **Employment Outcomes**

The results in this section provide information regarding the following question: What is the association among grade retention and employment status, hourly wages earned, and employment competence in late adolescence? Each of these areas is addressed in the following ANOVA analyses. The results regarding employment outcomes are displayed in Table 4.

Results of the first ANOVA illustrate that the retained group of students displayed lower education/employment status than either the comparison group ( $p < .05$ ) or the control group ( $p < .001$ ). Essentially, this reflects

Table 4  
Employment Outcomes: Age 20 [*M(SD)*]

Variable	Group 1 Retained <i>n</i> = 26	Group 2 Comparison <i>n</i> = 46	Group 3 Control <i>n</i> = 95	Contrasts	<i>F</i>	Significance
Education/employment status age 20	2.31 (1.40)	3.05 (1.38)	3.30 (1.10)	1 vs. 2 1 vs. 3 2 vs. 3	4.62 14.31 1.32	* *** <i>ns</i>
Employment hourly pay age 20	6.59 (4.05)	8.42 (3.45)	8.57 (4.40)	1 vs. 2 1 vs. 3 2 vs. 3	4.09 4.23 0.04	* * <i>ns</i>
Employment competence age 20	2.28 (0.83)	2.68 (0.74)	2.80 (0.58)	1 vs. 2 1 vs. 3 2 vs. 3	4.39 13.04 1.03	* *** <i>ns</i>

*F* = *F* ratio; \* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001.

the fact that retained students were less likely to be engaged in either full-time employment, full-time education, or a balance of part-time employment and education. Moreover, the low-achieving but promoted students' education/employment status was comparable to that of the control group. The second ANOVA provides results illustrating that the group of retained students makes significantly less per hour than both the comparison group ( $p < .05$ ) and the control group ( $p < .05$ ). In addition, the hourly wages for the low-achieving but promoted group and the control group were comparable (\$8.42 and \$8.57, respectively). The final ANOVA indicates that the group of retained students' work competence was rated lower than that of both the comparison group ( $p < .05$ ) and the control group ( $p < .001$ ). Again, the low-achieving but promoted group and the control group did not differ significantly.

The results regarding the employment outcomes at age 20 suggest that the retained students are less likely to be attending school, working full time, or balancing part-time employment and education; make less per hour on average; and display lower employment competence (considering the stability, quality, commitment, and status of employment) relative to both the group of low-achieving but promoted students and the control group. Moreover, the group of low-achieving but promoted students appears to be comparable to the control group in all areas of employment outcomes. As the retained students face developmental tasks beyond high school (e.g., postsecondary education and employment), they appear to be less successful than students with comparable low achievement who were promoted in early elementary school.

## DISCUSSION

Based on data through the eighth grade, Alexander and colleagues (1994) state: "We find that while not a cure all, retention appears to be a reasonably effective practice" (p. ix). In contrast, the results presented in this study are less optimistic about the use of early grade retention as an early academic intervention. These findings, which are more comprehensive than past studies, suggest that there is a greater probability of students who were retained dropping out of high school by age 19, in contrast to the comparison group of low-achieving but promoted students used in this study. As identified by Dawson (1998), "Even if we accept Alexander et al.'s analysis of the data and their conclusion that retention, for children retained after grade one, halts a precipitous decline and results in better progress than before, if those same students ultimately drop out of school before graduation, then it could be said that 'we've won the battle but lost the war'" (p. 21). Considering the importance of early educational experiences on subsequent achievement trajectories, the transactional model of

development (Sameroff, 1992) provides a valuable perspective for evaluating the efficacy of early grade retention.

### **Grade Retention and Later Outcomes**

In addition to demonstrating that the retained students were more likely to drop out prior to high school graduation, this study also finds that the group of retained students had lower levels of academic adjustment at the end of 11th grade, were less likely to receive a diploma or GED at age 20, received lower education/employment status ratings, were paid less per hour, and received lower employment competence ratings at age 20, in comparison to a group of low-achieving but promoted peers identified in elementary school. These results are consistent with reported adult outcomes of retained students, including more substance abuse, more deviant behaviors, and more likelihood of living on public assistance or in prison than adults who did not repeat a grade (Royce, Darlington, & Murray, 1983).

Again, considering a transactional model of development, the importance of grade retention as an early experience influencing subsequent development warrants our attention. The results demonstrating an association between grade retention and outcomes during late adolescence are not to be interpreted as direct, causal, and ineluctable pathways. Instead, these results reflect statistically significant, probabilistic outcomes. Additional research would be necessary to understand the interplay of grade retention, in addition to multiple factors and developmental processes influencing individuals toward these outcomes across time.

A limitation of this study, as with most studies of early grade retention, is that the comparison group was matched in many achievement and cognitive ability variables, yet the groups differed in socioemotional variables. Early socioemotional adjustment has been implicated in poor achievement trajectories and later behavioral and emotional disturbances (Pianta & Walsh, 1996; Teo, Carlson, & Sroufe, 1996). Thus, further investigation is necessary to disentangle the relative effects of early grade retention and the influence of socioemotional adjustment on long-term outcomes, such as those reported in this study. Future studies designed to examine the outcomes of early grade retention may employ random assignment. That is, begin with a group of children that schools have identified for retention and then randomly assign children to be promoted and others to be retained. Without this methodology, outcomes associated with early grade retention could be due to differences between groups or unidentified factors influencing both retention and subsequent outcomes in late adolescence.

An additional direction for further research is to document the specific criteria that schools consider when contemplating whether or not to retain

a child. Currently, most states, districts, and schools have no formal standards or policies regarding retention to use in the decision-making process. Delineating criteria, measures, and standards will provide a basis for further exploration to identify which students display long-term benefits from early retention.

### **Research Regarding Social Promotion**

The best evidence regarding the effects of social promotion is those studies that employ matched samples when examining the effects of retention (Dawson, 1998). For instance, well-designed studies have found no differences in adjustment between repeaters and potential repeaters (Shepard & Smith, 1986). Furthermore, prior reports from this sample, using a well-matched comparison group and controlling for previous adjustment and achievement levels, yielded no significant differences in adjustment or achievement at sixth grade or age 16 between the retained students and those who may be considered socially promoted<sup>1</sup> (Jimerson et al., 1997). For many, it is disconcerting that we invest billions of dollars each year and a year of millions of children's lives to implement retention practices yielding outcomes comparable to low-achieving but promoted students. Given the results of the current study, grade retention may be considered a harmful intervention strategy, considering the contrasts illustrating that the group of low-achieving but promoted students displays significantly better educational and employment outcomes than the retained students.

The results of this study illustrate that the group of low-achieving but promoted students displayed higher academic adjustment in 11th grade, were less likely to drop out, were more likely to receive a diploma or GED, were rated higher on the education/employment status, earned higher hourly wages, and received higher ratings of employment competence than the group of retained students. Furthermore, the group of low-achieving but promoted students did not differ from the control group of students in academic adjustment, postsecondary enrollment, or any of the employment outcomes examined in this study. These results illustrate that the group of low-achieving students who were promoted displayed significantly better educational and employment outcomes, in contrast to the group of retained students.

As declared by the NASP (1998), "The recent movement to mandate academic 'standards' and ensure accountability has rekindled public debate on the use of retention as a means to remedy academic deficits" (p. 1). One result of this movement has been a call for an end to social promotion. Rather than taking an "either/or" or "all-or-nothing" approach regarding

<sup>1</sup>Social promotion refers to the practice of promoting students with their same-age peers regardless of achievement.

retention and social promotion, educators are encouraged to seek alternative intervention strategies that will enhance educational outcomes. It is possible to promote a child and provide effective, research-based interventions addressing the student's academic and socioemotional needs.

### **The Influence of Research on Retention Policies**

Nearly 30 years ago in the *Journal of School Psychology*, elementary school retention was deemed "An unjustifiable, discriminatory, and noxious policy" (Abidin et al., 1971, p. 410). The findings from this 21-year, prospective, longitudinal study provide converging evidence supporting the position that "Those who continue to retain pupils at grade level do so despite cumulative research evidence showing that the potential for negative effects consistently outweighs positive outcomes" (Holmes & Matthews, 1984, p. 232). As Shepard and Smith (1986) concluded more than a decade ago, "In controlled studies of the effect of nonpromotion on both achievement and personal adjustment, children who repeat a grade are consistently worse off than comparable children who are promoted with their age-mates" (p. 130). Although past studies apparently demonstrate the ineffectiveness of retention, this strategy demonstrates incredible resilience, as evidenced by the fact that the question whether or not to retain a student persists even now as we near the year 2000.

Considering the costs of early retention, it would be logical to require research demonstrating the effectiveness of retention as an intervention facilitating subsequent academic success. Rather, it appears that retention exists, yet no long-term outcomes from methodologically sound studies have been presented to support retention as an intervention. In fact, converging evidence from past research is consistent with the results of this study. It seems that the cumulative evidence emerging during the past 30 years would discourage the use of grade retention among education professionals. Instead, it appears that the percentage of retained students continues to increase (Roderick, 1995).

Despite the abundance of researchers discouraging the use of retention, the favorable attitudes of many teachers, administrators, and parents toward retention (Byrnes, 1989) may be partially understood by examining the source of their information. Most educators consider how the children in their schools do the following year and possibly the year after, but do not examine the outcomes of retained children through high school. Moreover, as Shepard and Smith (1990) aptly explain, "Without controlled comparisons, retention looks as if it works, especially if you believe it does" (p. 85). If retained students display improvement the year following retention, this provides further single-subject, anecdotal evidence supporting the educator's decision to retain, especially in the absence of comparisons with a matched group of students.

As pressures continue in the United States to establish high educational standards and accountability, educators may believe they are justified in flunking the lowest-achieving students, as they have not met the requirements to continue with their peers. School psychologists may take a leadership role in disseminating research on the efficacy of early grade retention. Recognized in most schools as intervention experts, often participating in decisions regarding retention, and likely trained to examine and interpret research, many school psychologists are in a unique position to redirect the current trend toward increased retention rates.

### **Recommendations for Reform**

Noting that neither repeating a grade nor merely moving on to the next grade provides the necessary scaffolding to improve academic and social skills of students at risk of academic failure, the NASP (1998) provides several recommendations as alternatives to retention and social promotion. Although the NASP encourages education professionals to consider a wide array of well-researched, effective, and responsible strategies, it specifically recommends: (a) actively encouraging parents' involvement; (b) adopting age-appropriate and culturally sensitive instructional strategies; (c) establishing multi-age groupings in classrooms, with teachers trained to work with mixed-age and -ability populations; (d) providing effective early reading programs; (e) implementing effective school-based mental health programs; (f) identifying specific learning or behavioral problems, designing interventions to address those problems, and evaluating the efficacy of those interventions; (g) providing appropriate special-education services; (h) implementing tutoring programs; and (i) establishing full-service schools to provide a community-based vehicle to meet the needs of at-risk students (p. 3–4). In addition to these recommendations, others have consistently offered multiple alternatives to retention that should also be considered (Peterson, 1989; Shepard & Smith, 1987, 1990). School psychologists may provide leadership in helping their school districts to implement effective alternatives to grade retention and social promotion.

### **In Sum**

The results of this study provide additional evidence illustrating poorer educational and employment outcomes through age 20 for retained students, relative to a group of low-achieving but promoted peers. Researchers, policy makers, administrators, education professionals, and school psychologists must be informed about research regarding early grade retention. Further evaluation of alternatives to early grade retention—including early

reading programs, tutoring programs, parent involvement programs, summer school programs, and other remediation strategies to facilitate the educational success of children at risk of academic failure—are encouraged. Granted, retention may benefit some children, but until future research identifies these children and specifies the positive, long-term effects of this remediation strategy, alternative intervention strategies are recommended. In regards to the conundrum presented at the outset, the cumulative results of research to date appear to suggest “not to retain.”

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