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The Effects of Grade-Level Retention in the Early Grades

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The Effects of Grade-Level Retention in the Early Grades

by

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The Effects of Grade-Level Retention in the Early Grades

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Policies are increasing the pressure for students to gain grade-level mastery. For example, federal legislation mandates that all children are able to read by third grade. This increased demand on teachers and schools has led to more students being retained, especially in the early grades. Researchers have studied the effectiveness of retention, in the early elementary grades, in order to establish the immediate and later effects on academics, behavior development, and special education participation. Through an extensive search and analysis it was determined that retention has a largely negligible impact on student performance and has been unsuccessful in closing the achievement gap. Implications, limitations, and future research are discussed.

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Introduction

“Grade retention is the practice of nonpromotion to the next grade level” (Jimerson, Carlson, Rotert, Egeland, & Sroufe, 1997, p. 3). Grade retention most often occurs as a consequence of academic failure (Pagani, Tremblay, Vitaro, Boulerice, & McDuff, 2001), with students not exhibiting the academic competencies expected for a specific grade level (Gleason, Kwok, & Hughes, 2007). It has also been used as a means to increase student’s maturity to an acceptable point, support peer relationships (Gleason et al., 2007), and as an alternative to special education (Moser, West, & Hughes, 2012). Grade retention has a profound and lasting impact on students’ academic and social-emotional growth (Dong, 2010).

The issue of grade retention has been magnified by federal legislation such as the No Child Left Behind Act (NCLB, 2001) which requires assessment to be aligned with state standards and be used to measure achievement of all students at each grade level (Hughes, Chen, Thoemmes, & Kwok, 2010). Policies like NCLB (2001) require schools focus on student performance in order to make sure that students acquire the necessary skills for learning in the early elementary grades (Hong & Yu, 2007). For example, NCLB (2001) requires every student to demonstrate the ability to read by the end of third grade. Schools are held accountable for each student’s mastery of grade level skills (Dong, 2010), and teachers are mandated to prescribe curriculum to enable each student to reach the requisite mastery level (Beebe-Frankenberger, Bocian, MacMillan, & Gresham, 2004). Such requirements have sparked an increase in the rate of retention in

schools (Hughes et al., 2010) as students who do not meet the mastery level may be retained.

Retention has been thought of as an intervention for students to gain extra exposure to curriculum and have an extra year to gain essential academic skills (Beebe-Frankenberger et al., 2004). Proponents of retention suggest that given an extra year in an early grade level, students will be more likely to reach a developmental stage equivalent to that of their peers, particularly for the grade in which they were retained (Hong & Yu, 2007). Opponents of retention believe that once promoted, students will overcome barriers that have limited their learning or they will receive necessary services through special education with diagnoses of disability (Moser et al., 2012).

Rationale

Many scholars in education, psychology, and sociology have debated the successfulness of retention in the early elementary grades (Dong, 2010). In all, teachers appear to believe retention has no lasting long-term effects on students when retained between kindergarten and third grade (Pagani et al., 2001). When the decision to retain is made, teachers are typically the primary contributors of relevant data and information to make that decision. However, it remains unknown as to whether the practice of grade retention is a benefit for students' long-term success or whether retention is a practice that results in detrimental effects particularly as students age.

Purpose and Research Question

The purpose of this synthesis is to analyze the research from 1992 to 2012 in terms of the effects of grade retention on student performance. One primary research

question guided this study. The research question is as follows: what is the effect of grade retention in early elementary years on academic achievement, behavioral development, and/or services received during students' K-12 schooling?

Method

Search Procedures

A comprehensive search of the literature pertaining to this topic was conducted in order to identify articles for this review. The search included an electronic search, an ancestral search, and a handsearch. The electronic search included a search of Google Scholar and electronic databases including Academic Search Complete, Science Direct, J-Stor, and SAGA. Key words for the search included a combination of: retention, elementary school, retain, academics and retention, retention and behavior, retention and behavior implications, and special education and retention. The reference lists from articles identified through the electronic search was used to then complete an ancestral handsearch. The ancestral handsearch did not result in any additional articles. Finally, a handsearch was completed for the journals that appeared to commonly publish articles about this topic. Journals that were handsearched included Journal of Educational Psychology and Educational Evaluation and Policy Analysis.

Inclusion Criteria

Inclusion criteria were applied to ensure that each article fit the study. These inclusion criteria are as follows:

1. Published in a peer-reviewed journal as a measure of quality.
2. Published in English for researcher understanding.
3. Published between 1992 and 2012. Studies from 1900 through 1989 indicated mixed results and led way to new studies beginning in 1992.
4. Participants retained in kindergarten through second grade.

5. Contained data on academics, behavior, or special education services during K-12 schooling.

Articles that met the inclusion criteria were then coded in order to answer the research question for this review.

Coding Procedures

Coding of each article included recording of: authors and year, research design, data collection, participants, independent variable, dependent variable, research question, and study results. See tables 1 and 2 for a summary of these components.

Research design. The research design used in each article was coded during the coding stage. Research designs were noted to be quantitative, qualitative, and mixed methods.

Data collection. Instrumental and non-instrumental assessments were used to obtain data. The studies used such measurements as direct assessments, interviews, questionnaires, evaluations, and achievement tests. Participants, parents, teachers, and school personnel were all included in the gathering of student data.

Participant characteristics. The study participants' characteristics were described based on the information included in each article. Characteristics that were coded for included: number of students promoted versus number retained, quantity of boys and girls, mean scores academically and achievement outcomes, behavioral patterns, and disability criteria.

Independent variable. Retention was regarded as the independent variable. Information about when the students were retained was collected from each study.

Retained students' performances were compared to promoted students, at-risk students, and special education students.

Dependent variable. The dependent variables are what researchers are testing for, the data they are collecting, or the results expected. The variables for which these studies were testing include academic achievement, social-behavioral competence, and Individualized Education Program (IEP) presence. Results were based on retained students compared to peers on both short-term and long-term outcomes on these specific variables.

Study results. Results included the findings from each article based on dependent variables. Outcomes measured illustrated the effects of retention on academic performance, social-behavioral performance, peer acceptance, gender differences in terms of achievement and behavioral indices, special educational status, and similarities between retained students and students in special education.

Data Analysis

The research question addressed here concerned the effects of retention on student factors such as achievement and behavioral performance. The findings of each study were analyzed to determine how these student factors were affected by retention. The following sections describe how retention affects these student factors for each study. Effect sizes are presented between the retained and promoted groups for each study. Effect sizes were calculated using the formula for Hedge's g . Hedge's g was calculated by subtracting the mean posttest score of the control group minus the mean pretest score of the control group divided by the standard deviation of the control group on pretest

from difference between the mean posttest score of the treatment group minus the mean pretest score of the treatment group divided by the standard deviation of the control group on pretest. Effect sizes were interpreted using the criteria as follows: .80 or greater are large effects, .50 through .79 are moderate, and .20 through .49 are a modest effect (Cohen, 1988).

Results

Eleven studies were included in this review. See Table 1, which indicates the articles that met the inclusion criteria for this review. Each study met criteria for inclusion. All included studies provided various data on a variety of outcomes to facilitate better understanding of the implications of retention in early elementary school.

Study Features

Research design. All eleven studies were mixed method and used longitudinal research designs (Beebe-Frankenberger et al., 2004; Dong, 2006; Gleason et al., 2007; Hong & Yu, 2007; Hughes et al., 2010; Jimerson et al., 1997; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992; Moser et al., 2012; Pagani et al., 2001; Silverstein, Guppy, Young, & Augustyn, 2009). Studies followed students retained from the repeated year to either one year post-retention, to five years post-retention, through middle school and even through age sixteen. Attrition occurred in each study leading to missing, or less participant data at the end of the study. When attrition occurred, data from participants was dropped from the study, as the researchers were only able to use completed data sets.

Data collection. Within each longitudinal study, a variety of interviews and indirect sources were used to gain information from and about participants. Three articles used interviews, one study involved participant interviews (Mantzicopoulos, 1997), another study included interviews of student participants, their parents, and teachers (Jimerson et al., 1997), and a final study included interviews of parents, teachers, and school administrators (Dong, 2010). Three other studies collected data from school records (Beebe-Frankenberger et al., 2004), teachers' and parents' assessments of

students (Pagani et al., 2001), and teachers, parents, and student reports (Moser et al., 2012). One article used observations of participants to gain data (Hong & Yu, 2007). All studies collected parent consent before participants were able to take part in the study. Table 1 contains a summary of these data sources.

Instruments. Most studies used a variety of assessment instruments to collect data on participant performance. Four studies used a version of Woodcock-Johnson III (WJIII) to determine scores on the Broad Reading and Broad Math clusters (Beebe-Frankenberger et al., 2004; Gleason et al., 2007; Hughes et al., 2010; Moser et al., 2012). Of those four studies, two also used the Bateria Woodcock Munoz (Gleason et al., 2007; Moser et al., 2012) and one used Bateria-R (Hughes et al., 2010), which are Spanish versions of the WJIII and its predecessors. Jimerson et al. (1997) used the Woodcock-Johnson Achievement Test-Revised to gain reading and math information. Two studies also assessed intelligence by using various versions of the Wechsler Scales of Intelligence for Children (WISC; Beebe-Frankenberger et al., 2004; Jimerson et al., 1997). The Wechsler Preschool and Primary Scales of Intelligence and the Wechsler Adult Intelligence Scale were also used by Jimerson et al. (1997). The SEARCH screening instrument was also used for two studies (Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992), which was an individualized assessment of basic skills needed for early reading. Jimerson et al. (1997) also used the Peabody Individual Achievement Test. Three studies used a type of checklist or inventory list to gain information from or about participants' behavior (Jimerson et al., 1997; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992). Student performance questionnaires, surveys,

behavioral rankings, and rating scales were also used as measures in several cases (Beebe-Frankenberger et al., 2004; Jimerson et al., 1997; Pagani et al., 2001). Hughes et al. (2010) also used scores from participants' Texas Assessment of Knowledge and Skills assessment. Table 2 contains a summary of the instruments used for each study. Two studies used an associated instrument; the Itemized Response Theory is a method of determining a student's cognitive growth over time (Dong, 2010; Hong & Yu, 2007).

Participants. Participants from all studies yielded a total of 21,733 students. Of the total participant pool, 1,936 participants were retained and 19,797 were promoted. Promoted students were chosen based on random selection of qualified participants or matched comparison between retained and promoted. Out of the students promoted, 130 were specifically specified as low achieving, 73 were specified as on grade level or high achieving (Beebe-Frankenberger et al., 2004; Jimerson et al., 1997), and achievement level was not specifically indicated for 19,594 participants. In total 1,109 were male, and 793 were female (Beebe-Frankenberger et al., 2004; Hughes et al., 2010; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992; Moser et al., 2012; Pagani et al., 2001; Silverstein et al., 2009), and 19,831 were not differentiated by gender.

Of those students retained, 830 were in kindergarten (Dong, 2010; Hong & Yu, 2007; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992), 878 were in first grade (Gleason et al., 2007; Hughes et al., 2010; Moser et al., 2012), and 64 were in second grade (Beebe-Frankenberger et al., 2004). The remaining students were indicated as 390 retained in kindergarten or first (Pagani et al., 2001; Silverstein et al., 2009) and 25 retained in kindergarten through second grade (Jimerson et al., 1997). Retained students

had similar identifying qualities. Five articles indicated students achieved lower than average in academic areas: such as math and reading (Dong, 2010; Gleason et al., 2007; Hughes et al., 2010; Moser et al., 2012; Silverstein et al., 2009). Three of those stated specifically that students scored below mean on a district-administered assessment (Gleason et al., 2007; Hughes et al., 2010; Moser et al., 2012). Retained students from three articles had no mental, physical, or sensory disabilities (Beebe-Frankenberger et al., 2004; Jimerson et al., 1997; Pagani et al., 2001). Only three articles indicated whether an IEP was present or not for students retained. Silverstein et al. (2009) had 40 students with an IEP and 260 without, Dong (2010) had 12% with an IEP and 88% without, and Hughes et al. (2010) stated all 165 retained students did not have an IEP. Four articles stated students who were retained had behavioral difficulties: 17% overactive (Dong, 2010), students were one standard deviation above the mean on the disruptive component (Pagani et al., 2001), students at risk for problems in social-emotional development (Jimerson et al., 1997), and students chosen from a behavioral sub-sample and above 75th percentile on the attention problem scale (Mantzicopoulos, 1997). Three articles specifically stated students had not been previously retained (Jimerson et al., 1997; Hughes et al., 2010; Moser et al., 2012), though all articles implied it. See Table 1 for a complete summary.

Pagani et al. (2001) conducted their study at a French-speaking school. Three articles indicate their participants were both English and Spanish speakers (Beebe-Frankenberger et al., 2004; Hughes et al., 2010; Moser et al., 2012). The other seven articles did not state students' language.

Participant race was classified in the majority of studies with 30% white students, 2% black students, 3% Hispanic students, <1% Asian/Pacific Islander, and 14% other. Hong & Yu (2007) and Pagani et al. (2001) did not indicate participant's ethnicity, which accounted for 50% of participants.

Based on the data indicating SES status, the majority of participants, 43%, fell in the low-income class, 9% were middle-low group, 13% middle class, and 9% high-income class (Beebe-Frankenberger et al., 2004; Dong, 2010; Gleason et al., 2007; Hong & Yu, 2007; Hughes et al., 2010; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992; Moser et al., 2012; Pagani et al., 2001; Silverstein et al., 2009). Jimerson et al. (1997) did not provide any information on SES status.

Seven articles gave percentages of participants' parents' education showing that a greater amount, 34%, possessed a high school degree or less education compared to 21% with at least a high school diploma. Pagani et al. (2001) only mentioned that parents were less educated and Beebe-Frankenberger et al. (2004), Mantzicopoulos (1997), Mantzicopoulos & Morrison (1992), and Moser et al. (2012) made no mention of parental education.

Studies took place in several geographical locations in the United States (n= 9), as well as in Canada (n = 2). Three studies were based in California (Beebe-Frankenberger et al., 2004; Dong, 2010; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992), two in Texas (Gleason et al., 2007; Hughes et al., 2010), one in Massachusetts (Silverstein et al., 2009), one in Minnesota (Jimerson et al., 1997), one in the southeastern States (Moser

et al., 2012), and two in Canada (Hong & Yu, 2007; Pagani et al., 2001). See Table 3 for a complete list.

Dependent variables. Each study contained a variety of outcome variables. The majority of articles used academic performance as their dependent variable. The researchers for four studies looked at the impact on academics immediately following the retained year (Beebe-Frankenberger et al., 2004; Gleason et al., 2007; Mantzicopoulos, 1997; Mantzicopoulos & Morrison, 1992). Another four studies included following the academic effect through later elementary years (Dong, 2010; Hong & Yu, 2007; Moser et al., 2012; Pagani et al., 2001). In one study the researchers collected data on academics at sixth grade and at age sixteen (Jimerson et al., 1997). In one study, the researchers specifically focused on passage of the third grade Texas state accountability test, TAKS, for reading and math (Hughes et al., 2010). Four articles included an examination of behavioral effects due to retention as dependent variable. One followed behavior effects through later elementary (Pagani et al., 2001). Gleason et al. (2007) and also had an outcome measure for peer acceptance. One study focused on the presence or absence of an IEP after retention through fifth grade as a dependent variable (Silverstein et al., 2009). Hong & Yu (2007) also looked at cognitive growth as a variable. Refer to Table 1 for a complete list.

Findings of Various Studies

The studies in this pool of articles largely asked many of the same questions; however, some variation existed in the outcomes that were studied. For example, some researchers examined the degree to which retained students differ on measures of

academic and social behavior compared to their peers. Studies also examined the effects on later academic and behavioral performance, peer acceptance, special education status, and long-term effects. See table 2 for a breakdown of results.

Retention and academic performance. In a study of kindergarteners who were retained, Dong (2010) used various assessment and interview methods and found retention had an immediate positive effect on academic achievement (an increase in test scores of 14.5% in reading and 13.9% in math). On first grade reading Dong (2010) reported an effect size of .552 and on first grade math .547. However, the gains diminished by third grade with reported effect sizes of .176 in reading and .464 in math (by third grade, only an increase in test scores of 2.8% in reading and 8.5% in math). Gleason et al. (2007) also examined the effect of retention on academic performance. The researchers examined outcomes in reading and math. An effect size of -1.59 for retention was found for reading. For math, the effect size was calculated as -0.136.

Hong and Yu (2007) were interested in whether students who were retained made up for lost time after retention. The researchers observed groups of kindergarten-retained and kindergarten-promoted students over a period of six years, between kindergarten and fifth grade. By the end of the first year after retention, Hong and Yu (2007) found retained students generally performed lower than promoted peers in math and reading which produced an achievement gap between these two groups. For retained students an effect size of .062 was found for reading and -.045 for math, during retained students' first grade year. Hong and Yu (2007) also found the gap persisted over the course of the next several years. By the end of fifth grade, the achievement gap between retained and

promoted students reduced by 50% for math and reading but retained students still did not meet performance of promoted peers.

Two NCLB provisions require that students are able to pass the state accountability tests and that they are proficient readers by third grade. Hughes et al. (2010) were interested in whether first grade retention was associated with passing the third grade state achievement test; in Texas in 2010, that test was the TAKS. The researchers compared scores of retained students to those of students in the promoted group. They also gave questionnaires and held interviews, as well as administered achievement, cognitive ability, and motivation assessments. If a student was bilingual, they also gave a test of English and Spanish proficiency. Results indicated being retained in first grade was marginally significantly (1.8% more likely) related to passing the third grade TAKS in reading. Thus, the percent of students who passed the third grade TAKS was higher for retained students than their promoted peers (65% versus 55%). Likewise for math, the percent of students who passed the third grade TAKS was higher for retained students than their promoted peers (63% versus 53%). The effect size calculation however revealed a negligible difference between retained students and their promoted peers. Based on students' scores on first grade measures, these effect sizes were found to be .06 and .08 for reading and math, respectively.

In their study of retained students compared to promoted students, Jimerson et al. (1997) found initial differences between retained and promoted students in the first year after retention or promotion, with effect sizes of .324 for reading and .475 for math. By

sixth grade there were no significant achievement differences between retained and promoted students. They also found the same findings at age sixteen.

Mantzicopoulos (1997) compared the performances of kindergarten retained and promoted students during first and second grade. Using a repeated measures analysis, Mantzicopoulos (1997) found the retained group appeared to have an advantage over the promoted group. In math, the retained students performed above the national average in first and second grades, whereas promoted students' scores remained below the national average. Both groups' scores were slightly above the national average for reading. An effect size of .794 was found for math for retained compared to promoted students during their second grade year. Data to determine effect size for reading was unavailable. Based on these assessments, Mantzicopoulos (1997) concluded there is an advantage for math when retaining students in kindergarten.

Mantzicopoulos and Morrison (1992) studied the academic achievement of retained and promoted students two to three years after retention. By the second and third year of schooling, retained students' achievement was similar to the performance of their peers, which indicated a shrinking in achievement gap between same-grade peers. On second grade measures, performance between retained and promoted students had an effect size of .19 for reading and -.031 for math.

Moser et al. (2012) examined the trajectory of retained students' immediate and future academic achievement. They collected data, records, and reports, as well as measures of standardized achievement during the retained year as well as during the fifth grade. Initially, an advantage appeared evident for retained students compared to

promoted students. However, these higher scores dissipated over time and by fifth grade, retained students' had lower scores for math and reading compared to their same-grade promoted peers. In fact, by fifth grade performance between retained and promoted students evidenced an effect size of .062 for reading and .094 for math.

Social-behavioral performance. Jimerson et al. (1997) compared retained students to promoted low-achieving students and a control group of high-achieving students. Through assessments and interviews, they found the short-term and long-term social effects of retention. They followed students from the retained year to sixth grade and up to sixteen years old. They compared pre- and post-test scores of retained students. Results indicated retained students and promoted students were essentially comparable in terms of social and personal adjustments as well as behavior the year following retention; there were no significant differences between groups on these variables. The effect of retention yielded an effect size of .110 for behavior. Retained students did evidence high rates of absenteeism compared to promoted students. The promoted students exhibited better emotional health in the classroom than the retained group.

Using a repeated measures analysis, Mantzicopoulos (1997) analyzed behavioral differences at first and second grades between students retained in kindergarten and those promoted in kindergarten. Findings suggested there was no significant difference for behavior between the two groups (effect size of -.048).

Mantzicopoulos and Morrison (1992) studied the behavioral performance of retained and promoted students two to three years after retention. Data collected through behavioral checklists suggested teachers rated retained students as having significantly

more immature behavior and attention difficulties than promoted same-age peers. An effect size of .045 was calculated for behavior for retained compared to promoted peers.

Peer acceptance. Gleason et al. (2007) examined the effect of retention on peer acceptance and academic performance one year after retention. Using pre- and post-questionnaires, the researchers concluded students retained in first grade improved more on measures of peer acceptance, compared to students who were promoted to second grade and not retained. The performance between these groups on measures of peer acceptance yielded an effect size of .16.

Gender differences on achievement and behavioral indices. Pagani et al. (2001) sought to determine the impact of retention on academic performance and behavioral development in general and by gender. Compared to promoted students, the performance on academic measures for boys who were retained evidenced an effect size of .125 whereas the results for girls indicate an effect size of .414. These researchers also found a sustained impact on anxiety and inattentiveness for retained students versus promoted. The behavioral performance measures evidenced effect sizes of .331 and .346 for retained boys and girls, respectively, compared to promoted students. Retained males were more disruptive and less inclined towards good academic performance compared to their same-grade promoted peers. Early grade retention was also clearly associated with school dropout for males (68%). When female students were retained, it appeared retention negatively affected their academic performance through late elementary school. The impact on long-term consequences remained strong. Female students also appeared

to demonstrate short-term negative behavioral effects and post-retention feelings of frustration, humiliation, shame, failure, and confusion.

Special education status. Silverstein et al. (2009) followed students retained in kindergarten and first grade until they reached the fifth grade. Over the courses of the students' elementary school years, Silverstein et al. (2009) looked for the presence or absence of an IEP through fifth grade. Results indicated students sustained academic difficulties when retained in kindergarten or first grade and tended to demonstrate lower academic performance in math and reading through fifth grade. Even though students struggled they were not referred for special education testing. Leaving between 65% and 75% of retained students who never received an IEP.

Similarities: retained and students in special education. Beebe-Frankenberger et al. (2004) studied four participant groups: retained, students in special education, students at-risk, and promoted students. Their findings suggested retained students and students served in special education programs had several similarities. These similarities indicated these participant groups scored lower than the promoted group on measures of reading ability, intelligence quotient (IQ), and overall academic competence. Comparison of the retained students academic competence scores to the promoted students academic competence scores yielded an effect size of .725.

Discussion

Grade retention has been a practice used for many years; yet, significant debate still exists about its utility. This review identified eleven studies that assessed the impact of grade retention in the early school years. The longitudinal studies included in this review highlight the long-term impact of grade retention as researchers have investigated the practice with respect to academic performance, maturity, peer relationships and behavior, and as an alternative to special education.

Policies increasing the pressure on schools and teachers to make sure all students have mastery of grade level skills, based on standardized state assessments, have led the way for the rise of retention. Despite finding that a mere repeat in academic curriculum does not positively affect student achievement, studies like Hong and Yu (2007) found the achievement gap seemingly shrank at first but that the effect diminished over time. This might mean retained students improved by the end of fifth grade or by the end of fifth grade promoted students were no longer doing as well. Debates about retention as an intervention still remain in schools today.

Achievement. Overall, none of the studies found conclusive evidence that early grade retention has a positive effect; instead, findings from this review suggest an overall negligible effect of retention on student academic performance and behavioral development. Though some studies found immediate student success during the retained year, that success trended downward and by later elementary school students assessment scores remained below peers. These findings mean retention of students with an achievement gap in early elementary did not, over time, assist students in reaching the

same level of academic achievement as the their peers. Also, the findings signify retention did not give students the added experience necessary for mastery of skills.

It is evident that the overall effect size, for reading and math, indicates that retention does not lead to any significant advantage. Effect size for articles that reported them or that contained data, which allowed calculation, yielded largely inconsequential gains. Additionally, in several cases retention was found to be a precursor to excessive absenteeism, school drop out, and antisocial behavior, lowered self-esteem, and a lack of school enthusiasm.

Academic measures. Overall, on academic outcome measures researchers (Dong, 2010; Jimerson et al., 1997; Moser et al., 2012) found initial gains favoring retention during the first year after retention, but in all three cases findings suggested that those differences did not sustain—that is, retained and promoted students tended to perform similarly in later years. Several studies (Hong & Yu, 2007; Hughes et al., 2010; Mantzicopoulos & Morrison, 1992) also identified negligible differences between retained and promoted students. Only one study (Pagani et al., 2001) identified negligible academic differences for males but modest academic benefits of retention for females. On all social behavioral indices, retention was found to have negligible (Jimerson et al., 1997; Mantzicopoulos, 1997, & Mantzicopoulos & Morrison, 1992) or negative effects (Gleason et al., 2007). Only one study (Mantzicopoulos, 1997) suggested a positive effect of retention on academics. While researchers have not come to a unified conclusion with respect to retention, it appears to be becoming clear that retention does not have the

anticipated or intended effect on student achievement—that is, we do not see students who are retained surpassing their promoted peers.

Limitations

A couple of limitations must be considered with regard to this review. First, a relatively small number of studies met the inclusion criteria and only published studies were included. A variety of unpublished dissertations and other manuscripts may describe studies with different overall findings with regard to retention. Generalizability is also limited due to the wide variation in participant characteristics reported across the individual studies included in this review. This review also only includes studies conducted in the past 20 years (1992-2012); yet retention has been a long used practice. Perhaps, the failure to find positive effects of retention is an artifact of educational climate and instructional practices that have existed over the past 20 years rather than pertaining to retention itself as a practice.

Future Research

For over three decades, researchers have been trying to assess retention as an alternative to student grade promotion. “Collective findings suggest that non-promotion should be seriously questioned as a punitive, remedial, or developmental intervention” (Jimerson et al., 1997, p. 4) Researchers argue that better research design studies are needed because studies thus far have been limited and flawed (Hughes et al., 2010).

Evidence from retention research continues to show the “potential for negative effect consistently outweighs positive outcomes” (Jimerson et al., 1997, p. 4).

Researchers can conclude retention is an avoidable practice and thus seek alternative

ways to ensure student success, such as the use of intense interventions during the grade-year for which the student is at-risk for academic failure. Research should provide evidence that support practices that close the academic gap without creating detrimental long-lasting effects on students.

On the other hand, based on the idea that retention has the potential to be beneficial, future research should focus on ways to improve retention practices. Retention should not be used as a solitary way to close the academic gap in students' learning. Researchers should look into ways retention along side other interventions can create an impact on student success.

Implications

The field of education has long been searching for the best ways to ensure every student gains mastery of grade level skills before promotion to the next grade level. Many students who struggle in one grade will continue to struggle in consecutive grade levels (Gleason et al., 2007); yet as this review suggests retention might not be the answer. Therefore, actions must be taken to prevent academic failure. Serious consideration must be taken before altering a student's education track, such as retention versus promotion. Retention has been used to re-expose students to the same academic skills which they had not previously mastered. Although retention should be a last resort and is not in itself beneficial, schools might do well to look at retention as a paired practice with other intervention procedures, however, this is a future research area that will require further exploration. For students for whom academic problems arise, rather than retention other options might be more promising such as tiered support through positive behavioral

interventions and supports and/or response to intervention. If these added supports fail to yield the desired results this may be the time to for practitioners to consider support with an Individualized Educational Plan (IEP) and special education services (Silverstein et al. 2009).

Appendix

Table 1

Study Features

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
Beebe- Frankenberger, M., Bocian, K. M., MacMillan, D. L., & Gresham, F. M. (2004)	Longitudinal study: IQ and achievement tests of participants, teacher data collection, school records	*64 students retained in second grade (48m, 16f) *41 promoted to third but considered at- risk (38m, 13f) *46 promoted to third but receiving special education (33m, 13f)	*Retained students *At-risk for retention *Special Education students	*Academic competence *Social behavior competence *Academic and IQ levels (retained year)

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
		*73 promoted students (27m, 46f)		
		>No Spanish speaking only students		
		>No students that have moderate to severe mental, physical, or sensory disability		
Dong, Y. (2010)	Longitudinal Study: direct assessment of participants and	*281 retained Kindergartners *8391 promoted to first grade	*Students retained in kindergarten	*Children's true academic performance (reading and

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	interviews with parents, teachers, and school administrators.	>lower than average math and reading scores >tend to communicate less well > 17% overactive > 28% disabled > 12% IEP		math) in first, third, and fifth
Gleason, K. A., Kwok, O., & Hughes, J. N. (2007)	Longitudinal study: teacher questionnaires, peer sociometric evaluation, staff	*350 students retained in first grade >scored below	*Retained students	*Peer acceptance *Academic performance

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	individual administered test of reading and math achievement (re- administered after 1 year)	the median scores on a state- approved district administered measure of literacy		(1 year)
Hong, G. & Yu, B. (2007)	Longitudinal study: observations from kindergarten through fifth grade	*471 first time retained kindergartners *10,255 promoted students to first grade	*Retained students *Promoted students	*Impact of grade retention on children's reading and math learning *Impact of grade level retention on children's cognitive growth

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
				(retained year, first grade, fifth grade)
Hughes, J. N., Chen, Q., Thoemmes, F., & Kwok, O. (2010)	Longitudinal study: propensity matching (67 variables used); teachers and parents completed questionnaires	*165 retained in first grade *604 promoted to second grade (408m, 361f) >scored below individual administration of participants measuring achievement, cognitive ability effortful control,	*Retained students *Promoted students	*Passing the third grade state accountability test, TAKS, for reading and math

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	and motivation	or Spanish		
	Participant interviews with regards to their perceived competence and attitude towards school	>not receiving special education (no IEP) >not previously been retained		
	if participant was bilingual then administered a test of English and Spanish proficiency			
Jimerson, S., Carlson, E., Rotert, M.,	Longitudinal study: assessments and	*25 student retained kindergarten-	*Retained students	*Short term effects of grade retention

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
Egeland, B., & Sroufe, L. A. (1997)	interviews of participants, teacher and mother interviews, compared pre- post test scores of retained students (rather than contrasting to comparison group)	second *Promoted group: 43 students, low- achieving academically *Control group: 25 students, higher-achieving academically >Students were at risk for problems in social emotional development	*Promoted students *Control group	academically and socially *long-term effects of grade retention academically and socially (year following retention, sixth grade, age 16)

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
		>Were not retained more than once		
		>Not identified as having mental, physical, or sensory disability		
Mantzicopoulos, P. Y. (1997)	Longitudinal study: Teacher behavioral rating, achievement assessments comparison: sex, age, at-risk status, attention	*25 retained students in kindergarten (19m, 6f) *15 promoted students to first grade (9m, 6f) >chosen from a	*Retained students *Promoted students	Group differences... (1st and 2nd grade) *Academic effects *Behavioral effects

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	problems, conduct problems, anxiety withdrawals, motor excess, psychotic behavior, and reading and math achievement	behavioral sub- sample >above 75th percentile on the attention problem scale		
Mantzicopoulos, P., & Morrison, D. (1992)	Longitudinal study: achievement test administered, same-age, same- grade comparisons, teacher rating of behavior, parent	*53 students retained in kindergarten *53 promoted to first grade (each group 38m, 15f)	*Retained students *Promoted students	*Same-age comparisons of academic achievement *Same-grade comparisons of academic achievement

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	questionnaire			*Behavioral outcomes (retained year and year following)
Moser, S. E., West, S. G., & Hughes, J. N. (2012)	Longitudinal study: data collected from school records, teacher, parent, student reports; standardized measures of achievement	*112 retained students in first grade and 251 promoted (196m, 167f) >Not receiving special education services other than speech and language	*Retained students	*Immediate effects on academics (retained year) *Future achievement of academics (5th grade)

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
		>not previously retained		
		>Scored below median on a state-approved measure of literacy		
		>Speak English or Spanish		
Pagani, L., Tremblay, R. E., Vitaro, F., Boulerice, B., & McDuff, P. (2001)	Longitudinal Study: assessments of participants and data collection from teachers and parents.	*Retained in kindergarten or first grade (55m, 35f) >French- speaking public elementary	*Student retention	*Impact of retention on academic performance *Impact of retention on behavioral development

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
		school >Rated one standard deviation above the mean on the disruptive component		(late elementary)
Silverstein, M., Guppy, N., Young, R., & Augustyn, M. (2009)	Longitudinal study: estimate the proportion of children who receive an IEP plan following	*300 students retained in kindergarten or first grade (200m, 100f)	*Children retained in kindergarten or first grade	*Presence or absence of an IEP (through fifth grade)

Author (year)	Research Design	*Participants >Retained Characteristics	Independent Variable	Dependent Variable
	retention	>Retained for academic reasons (low- achieving) >40 students had an IEP when retained		

Table 2

Study Findings

Author (year)	Instruments	Results	Research Questions
Beebe-Frankenberger, M., Bocian, K. M., MacMillan, D. L., & Gresham, F. M. (2004)	Wechsler Scales of Intelligence Woodcock-Johnson III The Social Skills Rating System-Teacher The Critical Events Index The Swanson Nolan, and Pelham Survey-Teacher Version	*Students retained or receiving special education services scored lower when compared to promoted peers on reading skills, IQ, and overall academic competence. *Students retained and those in special education had similar IQ scores. *All four groups were achieving at the level commensurate to their measured ability	Do retained students differ on academic and social-behavior factors from peers who are in special education, placed at-risk for retention, or promoted to the next grade?

Author (year)	Instruments	Results	Research Questions
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level.

*READING:

Retained students and special education student both scored consistently lower than promoted group (more than a standard deviation below).

*At-risk students were only marginally lower than normal promoted students (within standard deviation).

*At-risk were within 6 score points of normally promoted

Author (year)	Instruments	Results	Research Questions
		students on IQ.	
		*BEHAVIOR:	
		Retained, special education and at-risk students had similar scores for inattentiveness. All higher than promoted group.	
		*Overall... special education had the highest scores for social-behavioral competence, with retained and at-risk students closely behind. Promoted students scores were	

Author (year)	Instruments	Results	Research Questions
Dong, Y. (2010)	Itemized Response Theory	<p>significantly lower. (lower the score the more competence)</p> <p>*Retention showed positive effects on academics through third grade but diminished by later school years.</p> <p>*Only math (not reading) however showed significant test scores for retained students up till third.</p> <p>>Holding a low achieving kindergartener back may give lagging children a chance to</p>	<p>What are the effects of kindergarten retention on the retained children's later academic performance?</p> <p>Does a retained student actually do better than they would have done, had they been socially promoted?</p>

Author (year)	Instruments	Results	Research Questions
		<p>make-up but not catch-up. >Retaining may provide a boost academically for retained year but over time the effect wears off.</p>	
<p>Gleason, K. A., Kwok, O., & Hughes, J. N. (2007)</p>	<p>Woodcock-Johnson III Broad Reading and Broad Math Scales Batería Woodcock Munoz (Spanish)</p>	<p>*Students retained in first grade improved more in peer acceptance, amongst same grade peers, following repeated year than did students promoted to second. *Retained students compared to promoted</p>	<p>What are the 1-year effects of retention in first grade on peer acceptance? Does grade retention positively affect children's teacher/peer rated, academic competencies, and</p>

Author (year)	Instruments	Results	Research Questions
		<p>did not differ on any peer-rating scale (liking, social preference, academic competence)</p> <p>*Teachers reported retained students as less engaged and reported promoted students as more engaged.</p> <p>*Academically retained students did better on same grade standard scores but worse than promoted students on same-age standard scores.</p>	<p>sociometric measures of peer acceptance?</p>

Author (year)	Instruments	Results	Research Questions
Hong, G. & Yu, B. (2007)	Itemized Response Theory	<p>*Kindergarten</p> <p>Retention: By the end of the treatment year, students retained generally performed lower than promoted peers in math and reading. Increasing achievement gap.</p> <p>*By the end 5th grade students retained reduced the achievement gap by 50% for math and reading but did not meet performance of promoted peers.</p> <p>*First Grade</p> <p>Retention:</p> <p>Achievement gaps</p>	<p>Will kindergarten retainees recover their lost ground and excel in the long run?</p> <p>What are the effects of first grade retention?</p>

Author (year)	Instruments	Results	Research Questions
		<p>increase after year 1 for math and reading. Those gaps maintained throughout elementary years. >Trajectory shows a decrease in the increase in closing the achievement gap. Students retained never meet performance level of promoted peers.</p>	
Hughes, J. N.,	Woodcock-Johnson III	*READING: Being	What are the
Chen, Q.,	Test of Achievement	retained in first was	associations
Thoemmes, F., &	Broad Reading and	marginally significant	between repeating
Kwok, O. (2010)	Broad Writing scales of the	related to passing TAKS grade 3.	first grade and passing the third

Author (year)	Instruments	Results	Research Questions
	Batería-R (Spanish)		grade TAKS
	Texas Assessment of Knowledge and Skills SAS PROC MI	*The percent of passing third grade TAKS was higher for retained students than their promoted peers. *MATH: The percent of passing third grade TAKS was higher for retained students than their promoted peers. *Retention increases probability of passing third grade TAKS.	Reading and Math test for students attending school in Texas?
Jimerson, S., Carlson, E., Rotert, M.,	Child Behavior Checklist-Teacher Form	*Higher absenteeism rate of retained students.	What are the characteristics of retained children:

Author (year)	Instruments	Results	Research Questions
Egeland, B., & Sroufe, L. A. (1997)	Emotional health/self-esteem and peer acceptance/popularity rank order measure Peabody Individual Achievement Test Wechsler Preschool and Primary Scales of Intelligence Wechsler Intelligence Scale for Children-Revised Woodcock-Johnson Achievement Test-Revised Life Events Inventory Wechsler Adult Intelligence Scale	*Retained students and promoted students were essentially comparable in terms of social and personal adjustments and behavior the year following retention. *No significant difference between retained students and promoted students on grade standard scores. *LONG-TERM (sixth grade): revealed no significant	how do they compare to regularly promoted children, and how do they contrast to a group of comparably low-achieving, promoted peers? What are the short-term and long-term effects of retention on achievement? What are the effects on social and personal adjustment?

Author (year)	Instruments	Results	Research Questions
Mantzicopoulos,	SEARCH screening	<p>achievement</p> <p>difference between retained and promoted students.</p> <p>*The promoted students exhibited better emotional health in the classroom than the retained group.</p> <p>*AGE 16: No significant difference on reading or math between retained students and promoted ones.</p>	Does early retention

Author (year)	Instruments	Results	Research Questions
P. Y. (1997)	instrument Revised Behavior Problem Checklist	Comparison) *After repeated measure retain group had a suggested advantage over promoted group. *MATH: Retained students performed above national mean on successive grade levels (first and second). whereas promoted students' scores remained below national mean. *READING: Both groups' scores were slightly above	result in positive long-term academic and behavior outcomes for a subgroup of kindergarten children with attention problems?

Author (year)	Instruments	Results	Research Questions
		national mean.	
		*Advantage for math when retaining students in kindergarten.	
		*No consistent difference for behavior between two groups.	
Mantzicopoulos, P., & Morrison, D. (1992)	SEARCH screening instrument Revised Behavior Problem Checklist	(Same-age Comparison) *READING: Retained students scored significantly higher (almost one standard deviation above mean) than	What is the impact of retention at kindergarten on academic achievement and behavior?

Author (year)	Instruments	Results	Research Questions
		<p>promoted students on an equivalent test.</p> <p>*Advantage disappeared once retained group entered first grade (both group above mean).</p>	
		<p>*MATH: Retained group outperformed promoted group during retained year.</p>	
		<p>*Advantage disappeared by third year of schooling.</p> <p>(Same-grade Comparison)</p>	

Author (year)	Instruments	Results	Research Questions
		<p>*READING and MATH: Retained group was academically higher than peers during retained year.</p>	
		<p>* During second and third year of schooling retained students' achievement was similar to peers (mean scores close to national average).</p>	
		<p>*Retained students were rated by teachers as demonstrating significantly more immature behavior</p>	

Author (year)	Instruments	Results	Research Questions
		<p>and attention</p> <p>problems than same-age peers. Differences faded during retained year.</p>	
<p>Moser, S. E., West, S. G., & Hughes, J. N. (2012)</p>	<p>Woodcock-Johnson III Broad Reading W Scores and Broad Math W Scores Batería Woodcock Munoz: Pruebas de Aprovechamiento- Revisada</p>	<p>*Initial advantage in achievement for retained students when comparing their scores with those promoted.</p> <p>*Higher scores dissipated over time, by 5th lower scores in both math and reading for those retained than those promoted (compared with same-</p>	<p>What are the effects of retention or promotion in 1st grade on growth trajectories in mathematics and reading achievement over elementary school years?</p>

Author (year)	Instruments	Results	Research Questions
		grade not same age). >Students retained, if had been promoted would have performed as well as peers by 5th.	
Pagani, L., Tremblay, R. E., Vitaro, F., Boulerice, B., & McDuff, P. (2001)	Social Behavior Questionnaire	*Grade retention negatively affected children's developmental. *Sustained negative impact on anxiety and inattentiveness for retained students (strongest when retained earlier). *Dramatic and long- lasting impact on	What are the effects of grade retention on children's academic performance and behavioral development? Is early grade retention beneficial for children?

Author (year)	Instruments	Results	Research Questions
		<p>negative learning outcomes and disruptiveness.</p> <p>*BOYS: More disruptive and less inclined towards good academics performance, than their same-grade peers, when retained early.</p> <p>>Boys more likely for dropout during early adolescents.</p> <p>*GIRLS: Retention negatively affected academic performance through late elementary school. The impact on</p>	

Author (year)	Instruments	Results	Research Questions
Silverstein, M., Guppy, N., Young, R., & Augustyn, M. (2009)	None	<p>long-term</p> <p>consequences remains</p> <p>strong.</p> <p>*Short-term negative</p> <p>behavioral effects.</p> <p>*Post retention feeling</p> <p>of frustration,</p> <p>humiliation, shame,</p> <p>failure, and confusion.</p>	<p>What are the</p> <p>proportions of</p> <p>children who</p> <p>receive an</p> <p>Individualized</p> <p>Education Plan</p> <p>(IEP) following</p> <p>grade retention in</p> <p>elementary?</p> <p>performance in math</p>

Author (year)	Instruments	Results	Research Questions
		<p>and reading scores based on standard testing through fifth grade.</p> <p>*Between 65-75% never received an IEP</p>	

Table 3

Study Demographics

Author (year)	Location	*SES >Parent demographics (of retained students)	Participant's Demographics
Beebe-Frankenberger, M., Bocian, K. M., MacMillan, D. L., & Gresham, F. M. (2004)	Southern California	*All low-middle income (70% received free or reduced lunch)	65 White 24 Black 121 Hispanic 14 Other
Dong, Y. (2010)	California	*Low 40% *Middle 14% *High 24% >Single parent 22% >Two parents 15% Parents Education >Less than high school 21% >High School 18% >BA/BS or above 12%	5,724 White 2,948 Other

Author (year)	Location	*SES >Parent demographics (of retained students)	Participant's Demographics
Gleason, K. A., Kwok, O., & Hughes, J. N. (2007)	Southeast Texas	(60% received free and reduced lunch) >High school or less 25%	130 White 74 Black 132 Hispanic 12 Asian/Pacific Islander 2 Other
Hong, G. & Yu, B. (2007)	Toronto, Canada	*All low >Single/No parent 21% >High School or above 33% >Below high school 11%	Not Indicated
Hughes, J. N., Chen, Q., Thoemmes, F., & Kwok, O. (2010)	Texas	(62% received free and reduced lunch)	248 White 177 Black 285 Hispanic

Author (year)	Location	*SES >Parent demographics (of retained students)	Participant's Demographics
		>High School or less 9%	59 Other
Jimerson, S., Carlson, E., Rotert, M., Egeland, B., & Sroufe, L. A. (1997)	Minnesota	>Single parent 60% >Less than high school 40%	33 White 29 Black 15 Hispanic/Native American 16 Other
Mantzicopoulos, P. Y. (1997)	California	*Low 43% *Middle 43% *High 12%	27 White 13 Black
Mantzicopoulos, P., & Morrison, D. (1992)	California	*Low 36% *Middle 22% *High 37%	83 White 23 Black
Moser, S. E., West, S. G., & Hughes, J. N. (2012)	Southeastern States	(57% received free or reduced lunch)	123 White 98 Black 123 Hispanic

Author (year)	Location	*SES >Parent demographics (of retained students)	Participant's Demographics
		>Single parent 13%	19 Other
Pagani, L., Tremblay, R. E., Vitaro, F., Boulerice, B., & McDuff, P. (2001)	Canadian Provence	*Receiving government support 13% *Low class 34% *Middle class >50%	Not Indicated
		>Parents less educated	
Silverstein, M., Guppy, N., Young, R., & Augustyn, M. (2009)	Boston, Massachusetts	*Low 45% *Middle 15% *High 30%	160 White 50 Black 50 Hispanic 20 Asian
		>Single parent 33% (100)	20 Other
		>Two parents 66% (200)	
		>Greater than high school 20% (60)	

Author (year)	Location	*SES >Parent demographics (of retained students)	Participant's Demographics
		>High School or less 80% (240)	

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