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Meta-analysis of Grade Retention Research: Examining the Empirical Evidence from
the United States in the 21st Century

A dissertation submitted in partial satisfaction of the
requirements for the Doctor of Philosophy degree
in Counseling, Clinical, and School Psychology

by

Alessandra Mae Mittelstet

Committee in charge:

Professor Shane Jimerson, Chair

Professor Erin Dowdy

Professor Jon Goodwin

September 2025

The dissertation of Alessandra Mae Mittelstet is approved.

Dr. Erin Dowdy

Dr. Jon Goodwin

Dr. Shane Jimerson, Committee Chair

June 2025

Meta-analysis of Grade Retention Research: Examining the Empirical Evidence from the
United States in the 21st Century

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By

Alessandra Mae Mittelstet

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I would firstly like to thank each member of the dissertation committee for their time, consideration, and compassion during this process. I have been very fortunate to have worked with or learned from each member of the committee, and the experience has been invaluable to my development as a professional that I will carry with me throughout my lifetime. I would especially like to thank Dr. Shane Jimerson, for being not only a fountain of knowledge any person would be privileged to learn from, but also for being the supportive and understanding advisor to myself and many other students who might have otherwise felt they did not belong in an academic space. I attribute many of my successes to Dr. Jimerson's guidance, and I have endless thanks for his support.

I would also like to thank my peers and colleagues within the program, whom I have the fortune not only to learn from and with, but also to be able to call friends. I am especially grateful for many days and nights working together, sharing laughs, and finding comradery in commiserating. I would also like to thank my friends and community in the Santa Barbara area, for their encouragement and much needed moments of reprieve.

And I of course would like to express thanks to my family for emotionally supporting my doctoral journey. I am thankful for the encouragement from my parents during times of doubt, as well as the love and support received from my younger siblings. Lastly, I would like to thank my cat, Bubs, for being an ever-present being of love and entertainment.

VITA OF ALESSANDRA MAE MITTELSTET

June 2025

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EDUCATION

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Master of Education, School Psychology

Awarded: **June, 2021**

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Bachelor of Arts, Psychology

Awarded: **June, 2019**

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AWARDS

- **Outstanding Teaching Assistant Nominee (2024)**, *University of California, Santa Barbara*
- **SBCPA Student Equity Award (2024)**, *Santa Barbara County Psychological Association*
- **American Indian & Indigenous Cultural Resource Center (AIICRC) Scholarship (2023)**, *University of California Santa Barbara*
- **Presidential Citation Award (2023)**, *International School Psychology Association*
- **Doctoral Student Travel Grant (2023)**, *Graduate Council of UCSB*
- **Muscogee Nation Doctoral Scholar Award (2019; 2021; 2022; 2023)**, *Muscogee (Creek) Nation*
- **The Philip S. Rethis Award (2020)**, *University of California, Santa Barbara Department of Psychology*
- **John Mithun Foundation Scholarship (2019)**, *University of California Santa Barbara*
- **Zorich Family Scholarship (2019)**, *University of California Santa Barbara*

DOCTORAL INTERNSHIP

Santa Barbara Psychology Internship Consortium (SB-PIC)

Orcutt Unified School District

August 2024- June 2025

Director of Clinical Training: Dr. Erin Dowdy

Lead Clinical Supervisor: Dr. Deborah Umansky

The Santa Barbara Psychology Internship Consortium (SB-PIC) is a collaborative effort between the Santa Barbara County SELPA office, school districts throughout Santa Barbara county, and contributions of the school psychology faculty of the University of California, Santa Barbara, to share resources for the purpose of providing a range of clinical and didactic experiences that represent the necessary depth and breadth required for future professional psychological practice. The SB-PIC training program is a full-time doctoral internship experience, beginning in August and ending in June each year. Across training sites, interns engage in cognitive assessments, collegial consultation, direct service with individuals and schools, and other school psychologist related services in public schools. Interns complete over 1500 hours of training across 10.5 months. Interns are also expected to achieve the goals and objectives of the internship program, to abide by the APA Code of Ethics, the requirements of the SB-PIC training program, and the rules and regulations of the training site that employs them.

CLINICAL EXPERIENCE

Practicum School Psychologist

Mountain View Elementary, Goleta Unified School District

8/22- 6/23

Supervisor: Lea Behlman, M. Ed

- Assisted and led in cognitive assessments to make special education eligibility determination
- Conducted individual and group counseling
- Led consultation meetings with principal, teachers, school support staff, and parents
- Presented student data at IEPs, 504, Student Success Team meetings, and other progress report meetings
- Created behavioral intervention plans and conducts functional behavior assessments
- Assessed students as a part of a multidisciplinary team with other school support staff such as special education teachers, speech and language pathologists, BCBAs, occupational therapists, social workers, and others
- Attended weekly supervision meetings with site supervisor, as well as university supervisors for consultation and case-base support
- Assisted in student behavioral support and crisis interventions
- Provided support to the school's specialized program for children found eligible for special education under Intellectual Disability

Practicum School Psychologist

Brandon Elementary, Goleta Unified School District

8/21- 6/21

Supervisor: Kevin Delgado, M. Ed

- Assisted and led in cognitive assessments to make special education eligibility determination
- Conducted individual and group counseling
- Led consultation meetings with principal, teachers, school support staff, and parents
- Presented student data at IEPs, 504, Student Success Team meetings, and other progress report meetings
- Created behavioral intervention plans and conducts functional behavior assessments
- Held manifestation determination meeting
- Assessed students as a part of a multidisciplinary team with other school support staff such as special education teachers, speech and language pathologists, BCBAs, occupational therapists, social workers, and others
- Attended weekly supervision meetings with site supervisor, as well as university supervisors for consultation and case-base support
- Assisted in student behavioral support and crisis interventions
- Provided support to the school's specialized program for children with intensive speech and language needs

Practicum School Psychologist

Ellwood Elementary, Goleta Unified School District

8/20- 6/21

Supervisor: Joe Isaacson, M. Ed

- Assisted and led in cognitive assessments to make special education eligibility determination
- Conducted individual and group counseling

- Led consultation meetings with principal, teachers, school support staff, and parents
- Presented student data at IEPs, 504, Student Success Team meetings, and other progress report meetings
- Created behavioral intervention plans and conducts functional behavior assessments
- Assessed students as a part of a multidisciplinary team with other school support staff such as special education teachers, speech and language pathologists, BCBAs, occupational therapists, social workers, and others
- Attended weekly supervision meetings with site supervisor, as well as university supervisors for consultation and case-base support
- Assisted in student behavioral support and crisis interventions
- Provided support to the school's specialized program for children found eligible for special education under the Emotional Disturbance criteria utilizing the Santa Barbara SELPA's GROW program

Intern

Santa Barbara Response Network & Glendon Association

8/18- 9/19

Supervisor: Jina Carvalho, M.A

- Assisted in the development and implementation of Psychological First Aid training in the Santa Barbara Community
- Co-created professional development webinars for psychologists
- Attended community events to increase visibility of services and spread mental health awareness
- Administered Psychological First Aid in the community after adverse events and natural disasters

TEACHING AND MENTORSHIP

Lecturer- EDSC 612 - Determinants of Human Behavior and Development

California State University, Channel Islands

Fall 2024

- Instructor for a masters level course of 20 students in the department of School Counseling. The course covered topics of human development through a psychological and behavioral lens and its relation to the field of school counseling. This course also integrated the development of practical skills in school counseling into the learning of human development, such as creating case conceptualizations, researching treatment interventions across ages, and developing consultation skills with peers.

Teaching Assistant- CNCSP 102 - Research in Applied Psychology

Instructor: David Rivera, M. A.

University of California, Santa Barbara

Summer 2024

- Assisted in the instruction of a large undergraduate research class focused on developing research and data analytic skills in the field of psychology.

Conducted weekly sections, facilitated classroom discussions, assisted in coursework grading, and assisted in student development of research projects.

Teaching Assistant- CNCSP 274H/G/I- Advanced Practicum Supervision

Instructor: Dr. Erin Dowdy

University of California, Santa Barbara

**Summer 2023; Fall 2023;
Winter 2024; Spring 2024**

- Assisted in the instruction and supervision of school psychology graduate students in their fieldwork placements. Engaged in case-based consultation, observed and provided feedback on student implementation of interventions for K-12 students, and prepared materials for professional development. Conducted weekly supervision meetings with practicum students and prepared lecture materials, quizzes and assignments, and lead lectures on developing skills and interventions related to school psychology.

Guest Lecturer- CNCSP 223B- Developmental Psychopathology

Instructor: Dr. Shane Jimerson

University of California, Santa Barbara

Winter 2024

- Guest lecture to a graduate level course in developmental psychology, with an audience of both master level and doctoral level students. The topic of this lecture was an in depth analysis of ADHD and its diagnosis, including how to assess and provide interventions for the disorder, with a focus on treatment within the school setting. The lecture also approached matters of diversity and inequities surrounding accessibility of treatment and diagnosis.

Teaching Associate- CNCSP 97/197/199 Power of Play

University of California, Santa Barbara

Winter 2023; Spring 2023

- Instructor of records for a large undergraduate research class focused on administering structured social-emotional skills development intervention during recesses at local elementary school students that focused on prosocial engagement and problem solving. Developed class curriculums, designed quizzes, and kept track of the participation and field-work attendance.

Teaching Associate- CNCSP 114- Psychology of Gender

University of California, Santa Barbara

Summer 2022

- Primary instructor for a large undergraduate research class focused on exploring gender roles and gender diversity in the field of psychology. Created weekly lectures, developed exams, syllabus, and rubrics for written essays.

Teaching Assistant- CNCSP 97/197/199 Power of Play

Instructor: Dr. Shane Jimerson

University of California, Santa Barbara

**Winter 2020; Spring 2020; Fall 2020;
Winter 2021; Spring 2021; Fall 2021; Fall 2023; Spring 2024**

- Assisted in the instruction of a large undergraduate research class focused on administering structured social-emotional skills development intervention during recesses at local elementary school students that focused on prosocial engagement and problem solving. Developed class curriculums, designed quizzes, and kept track of the participation and field-work attendance. Experienced in assisting with this class both in person and online over the course of years.

Teaching Assistant- CNCSP 114- Psychology of Gender

Instructor: Dr. Adrien Valdez

University of California, Santa Barbara

Summer 2021

- Assisted in the virtual instruction of a large undergraduate research class focused on exploring gender roles and gender diversity in the field of psychology. Developed discussion lectures and questions, facilitated class discussions, graded quizzes, weekly reflections, and essay reports. Classes and sections were held both synchronously and asynchronously.

Graduate Student Assistant

Principal Researcher: Dr. Shane Jimerson

University of California, Santa Barbara

September 2020- June 2024

- Created lesson plans on social-emotional learning for undergraduate research assistants to administer to small groups of elementary students at a Harding University-Partnered school. Lead weekly supervision meetings for the undergraduate students on how to administer the designed curriculum and provide support.

Graduate Student Assistant

Principal Researcher: Dr. Shane Jimerson

University of California, Santa Barbara

September 2019- June 2020

- Worked in collaboration with the Santa Barbara County SELPA leading a group of undergraduate researchers in fidelity observation of designated specialized training. Utilized and taught data collection, analysis, and skills to undergraduate students.

RESEARCH EXPERIENCE

Graduate Student Researcher

August 2019- June 2025

Advisor: Dr. Shane Jimerson, UCSB

Field of Study: School Psychology

- Currently conducting a meta-analysis on grade retention research in the United States within the last 20 years to evaluate effect of intervention on students

- Research on school climate development utilizing multi-tiered systems of support
- Collaborated with international colleagues from 3 different countries to synthesize current topics and issues in school psychology training and organizations
- Worked in collaboration with colleagues in 21 different countries to develop a cultural congruity measure for international use
- Facilitation of Tier 2 social-emotional support services (social skills groups) to a local elementary school in both an online setting and in-person.
- Trained undergraduate students in the facilitation of both Tier 1 (Power of Play) and Tier 2 social-emotional support services (social skills groups) to a local elementary school in both an online setting and in-person
- Monitored fidelity implementation of a district program developed for therapeutic classrooms serving students with Emotional Disturbance eligibility (G.R.O.W)

Lead Research Assistant
2019

January 2018- June

Advisor: Dr. James Roney, UCSB

Field of Study: Evolutionary Psychology

- Investigated men's hormonal responses in an Evolutionary Psychology lab. Created weekly schedules, mediated needs between research assistants and lab managers, and administered experiment procedures. Collected, analyzed, and reported data.

Research Assistant

June 2018- June 2019

Advisor: Dr. Zoe Libermen, UCSB

Field of Study: Developmental Psychology

- Researched the cognitive social development in children between the ages of 3 to 11. Responsibilities included attending weekly lab meetings on the progress of current research, keeping up to date on studies run by other labs, as well as presenting poster boards, PowerPoints, and other presentations on relevant materials.

PUBLICATIONS

Jimerson, S. R., Reinke, A., Kaur, L., Holland, S., Quintanilla, J., **Mittelstet, A.**, & Alvarez, L

(2025). Understanding school psychology internationally: An introduction to pioneering

resources and research from the 1900's. *International School Psychology World-Go-Round*,

53 (2), 14-22. <https://ispaweb.org/wp-content/uploads/2025/06/WGR-ISPA-V53-N2.pdf>

Mittelstet, A., et. al. (In Progress) Cultural differences across School Psychology: Graduate student's perspective. *School Psychology International*.

Jimerson, S. R., Brock, S. E., Weber, M., **Mittelstet, A.**, & Zhang, Y. (2025). Multicultural and Cross-National Considerations in School Crisis Intervention. In C. Hatzichristou, B. K. Nastasi, & S. R. Jimerson (Eds.), *Handbook of School Psychology in the Global Context*. Springer.

Jimerson, S. R., Allen, J., Arora, P., Blake, J., Canivez, G., Chambers, C., Chan, M., Espelage, D., Gonzalez, J., Gormley, M., Graves, S., Holland, S., Huang, F., January, S., Kaur, L., Kim, E., LaSalle, T., **Mittelstet, A.**, Phelps, C., Reinke, A., Renshaw, T., Song, S., Sullivan, A., Wang, C., Worrell, F., & Yang, C. (2024). Advancing diversity, equity, and inclusion in school psychology science and scholarship: Changing training and practice in the field of school psychology. *Canadian Journal of School Psychology*, 39(4), 338-356. <https://doi.org/10.1177/08295735241266746>

Weber, M., Zhang, Y., **Mittelstet, A.**, Kaur, L. & Jimerson, S. R. (2022). Effective classroom management to support elementary students: Promoting student success

through reducing off-task problem behaviors. *Current Research in Psychology and Behavioral Science*, 3 (7), 1067-1072. [10.54026/CRPBS/1067](https://doi.org/10.54026/CRPBS/1067)

Zhang, Y., Weber, M., Kaur, L., **Mittelstet, A.**, & Jimerson, S. R. (2022). Toward a critical transactional ecological developmental theory: Informing and advancing practice and science. *Current Research in Psychology and Behavioral Science*, 3 (2), 1041-1047. [10.54026/CRPBS/1041](https://doi.org/10.54026/CRPBS/1041)

Weber, M., Zhang, Y., **Mittelstet, A.**, & Jimerson, S. R. (2021). School Cultural Congruity. In K-A. Allen, A. E. Reupert & L. G. Oades (Eds.), *Building Better Schools with Evidence-based Policy: Adaptable Policy Guidelines for Teachers and School Leaders*. Abingdon, UK: Routledge.

PRESENTATIONS

Kaur, L., Holland, S., Reinke, A., **Mittelstet, A.**, Quintanilla, J., Jimerson, S, (2024, October), *Perception of School Climate Among Diverse Adolescents*. [Conference Poster]. California Association of School Psychologist Conference, Palm Springs, CA, USA

Mittelstet, A., et al., (2023, July). *Symposium on Cultural Differences Across School Psychology: Graduate Students' Perspectives*. [Conference Symposium]. International School Psychology Association Conference, Bologna, Italy

Mittelstet, A., Holland, S., Kaur, L., (2023, July). *Developing a Safe, Supportive, and Effective School Climate: Promoting Student Engagement, Preventing Bullying, and Recognizing the Role of School Cultural Congruity* [Conference Workshop]. International School Psychology Association Conference, Bologna, Italy

Jimerson, S., **Mittelstet, A.**, Kaur, L., (2022, October). *Preliminary Development and*

Validation of the School Cultural Congruity Scale [Poster Presentation]. California Association of School Psychologist Conference, Universal City, CA, USA

Jimerson, S., Kaur, L., **Mittelstet, A.**, (2022, October). *Family-School Cultural Congruity and School-Based Parental Engagement: Some Evidence from PISA 2018 using Latent Class Analysis* [Poster Presentation]. California Association of School Psychologist Conference, Universal City, CA, USA

Nelson, B., Ruiz, O., Kaur, L., **Mittelstet, A.**, Zhang, C., (2022, February). *Technology and Positive Mental Health in Adolescents and Young Adults* [Virtual Poster Presentation]. National Association of School Psychologists Hybrid Conference. Boston, Ma, USA

Nelson, B., Ruiz, O., Kaur, L., **Mittelstet, A.**, Zhang, C., (2021, October). *Technology and Positive Mental Health in Adolescents and Young Adults* [Virtual Poster Presentation]. California Association of School Psychologists. Orange County, CA, USA

Jimerson, S., **Mittelstet, A.**, Weber, M., Zhang, C., (2020, October). *District-Wide Implementation of Multi-Tiered Systems of Support: Examining Processes, Fidelity, and Student Outcomes* [Virtual Paper Presentation]. California Association of School Psychologist Conference, Palm Spring, CA, USA

Jimerson, S., **Mittelstet, A.**, Weber, M., Zhang, C., (2019, October). *District-Wide Implementation of Multi-Tiered Systems of Support: Examining Processes, Fidelity, and Student Outcomes* [Paper Presentation]. California Association of School Psychologist Conference, Long Beach, CA

Mittelstet, A., Jimerson, S., Weber, M., Zhang, C., (2019, October). *Power of Play: Utilizing Recess to Promote Problem Solving Skills and Conflict Resolution* [Poster Presentation]. California Association of School Psychologist Conference, Long Beach, CA

Jimerson, S., Hoeberg, D., **Mittelstet, A.**, Weber, M., Zhang, C., (2019, October). *Supporting Students with Emotional Disturbance: Tier III Therapeutic Classroom Programs* [Poster Presentation]. California Association of School Psychologist Conference, Long Beach, CA

CERTIFICATIONS

Certifications and Trainings

ADOS Autism Assessment, *Santa Barbara County SELPA*

Patterns of Strengths and Weaknesses in SLD Assessment, *Orcutt Union School District*

California Child Abuse Mandated Reporter Training For School Personnel, *California Department of Social Services*

Racial Trauma Training, *Goleta Union School District*

Dyslexia Identification Training, *Goleta Union School District*
FBA to BIP Training *University of California, Santa Barbara*
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Abstract

Meta-analysis of Grade Retention Research: Examining the Empirical Evidence from the United States in the 21st Century

by

Alessandra Mittelstet

Grade retention is an intervention widely used in the United States that has students repeat a grade if they do not meet grade level benchmarks. Research on the effectiveness of this intervention has been studied for more than a century, and while individual studies have found varying results, previous meta-analyses have revealed no significant benefits for retained students. The most recent meta-analysis synthesizing retention research was published in 2001 (Jimerson, 2001), and in the over twenty years since its findings there have been numerous studies published and a number of mandatory retention policies have been passed in States across the US. This meta-analysis contributes a summary and synthesis of 45 studies from the 21st century to understand the current trends in retention research and how the results of contemporary studies compare to findings from previous time periods. Across 801 analyses, the overall average effect size was not statistically significant (Hedges' $g = .00$). Narrow effects within subcategories of academic achievement and social-emotional

adjustment were also not statistically significant, which supports previous meta-analysis conclusions regarding the lack of support for retention as an educational intervention. The lack of effectiveness shown calls into question the persistent use of grade retention, and a discussion on the importance of implementing evidence-based practices in the school system is warranted.

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I. Introduction

In the United States (US), for more than 100 years, a persistent and perplexing question among education professionals, policy makers, and parents has been – “To retain or not to retain?” (Jimerson, 2001; p. 435). Grade retention – also called repeating a grade or being held back – is the practice of requiring a student to repeat a grade level, typically for not meeting behavioral or academic benchmarks for promotion to the next grade level (Jackson, 1975; Jimerson, 2001; Jones & Waguespack, 2011). In the US, there are no federal guidelines or policies pertaining to grade retention. Instead, such policies are governed state by state (Cummings & Turner, 2020). Many states, such as California, allow for school districts to determine what retention policies they develop (California Department of Education, 1998). Other states have established more specific policies, such as Florida which delineates retention occurring for students who do not achieve a specific score on third grade state reading exams (Florida Department of Education, 2011). Presently, 17 states plus the District of Columbia have delineated grade retention policies, 12 states allow for retention to be decided at the local level, whereas the remainder of the states do not have clearly delineated policies in place (Cummings & Turner, 2020). National rates of retention reportedly decreased between 2000 and 2016 from 3.1% to 1.9%, given the total K–12 enrollment of about 50 million students in the United States, this percentage translates to roughly 950,000 students being retained annually (National Center for Education Statistics, 2019; Snyder, de Brey, & Dillow, 2019b; Warren & Saliba, 2012).

Though grade retention has been studied since 1908 (Ayers, 1909; Jackson, 1975), research examining the effectiveness of this strategy has yielded mixed results. The most recent meta-analysis examining grade retention research in the US (Jimerson, 2001) revealed that grade retention was an ineffective intervention for academic achievement and social-emotional adjustment. Jimerson concluded, “Specifically, studies examining the efficacy of grade retention on academic achievement and socioemotional adjustment that have been published during the past decade report results that are consistent with the converging evidence and conclusions of research from earlier in the century that fail to demonstrate that grade retention provides greater benefits to students with academic or adjustment difficulties than does promotion to the next grade.” (p. 434).

Many studies during the past two decades have similarly found no academic benefits of grade retention (Abbott, Wills, Greenwood, Kamps, Heitzman-Powell, & Selig, 2009; Allen, Chen, Willson, & Hughes, 2009; Tingle, Schoeneberger, & Algozzine, 2012), whereas other studies found that retained students have improved test scores in math and reading during the repeated school year, with no significant long term benefits (Fruehwirth, Navarro, & Takahashi, 2016; Moser, West, & Hughes, 2012). Additionally, there have been a number of studies correlating grade retention to increased school drop-out rates (Eren, Depew, & Barnes, 2017; Giano, Williams, & Becnel, 2021; Jimerson, Woehr, Kaufman, & Anderson, 2004). Retained students also face lower earning job opportunities post high school, and are more likely to engage in adult criminal activity compared to non-retained students (Eide, & Goldhaber, 2005; Eren, Lovenheim, & Mocan, 2018).

However, there are also some studies that suggest improvements in outcomes for students who are retained. Several studies report student initial improvements in academic achievement of retained students, particularly in the areas of reading and English Language Arts (Greene, & Winters, 2007; Mariano, & Martorell, 2013), and some of these positive effects can last up to five years before fading out for retained students (Schwerdt, West, & Winters, 2015; Winters, Cooksey, & Basney, 2014). One study suggests that English Language Learners (ELL) who are retained early in school show substantial improvement to their English skills, decreases the likelihood of additional remedial English classes later on, and increases the likelihood of participation in advanced placement and college-bearing classes in high school (Figlio, & Özek, 2020). Recent research on the behavioral outcomes associated with grade retention has found behavioral issues of repeating students can increase in the short term, but the effects dissipate and suggests that retention does not have a long-term effect on disciplinary incidents or attendance (Martorell, & Mariano, 2017; Özek, 2015). Finding prevalent patterns in the research on this topic is pertinent both to understand the impact of current retention policies and practices, but also to inform the development of effective interventions that will support students following below grade standards.

A. Purpose of the Present Study

The most recent synthesis and meta-analysis of research examining outcomes associated with grade retention was published more than 20 years ago, reviewing literature from 1990-1999 (Jimerson, 2001). Since then, there have been a number of policies passed in different states within the U.S focusing on grade retention, and as a result a plethora of new

research on its effects. With decades of new contexts, policies, insights and information available, the aim of the present study is to organize, synthesize, and examine existing empirical evidence using meta-analytic techniques to explore contemporary retention outcomes. This study will also identify any potentially new patterns of information formed in modern research. Findings from research since 2000 will be compared and contrasted with findings from previous meta-analyses. The results of this contemporary meta-analysis can then be used to inform education professionals, school administrators, and educational policy makers to create evidence-based decisions regarding grade retention practices and/or policies at the school, district, or state level (Allen et al., 2023).

II. Literature Review

Publications examining the effectiveness of grade retention date back over a hundred years (Ayers, 1909; Jackson, 1975). There have been three previous meta-analytic studies that consolidate literature on academic achievement and social-emotional adjustment, as well as synthesized information on the populations most experiencing retention – up to the year 1999 – as well as an additional meta-analysis on the moderating effect of design quality of retention studies on academic achievement. The following review of the extant literature summarizes the information in the previous meta-analyses, then discusses findings regarding academic achievement and social-emotional adjustment, and also explores characteristics of students who are retained.

A. Results of Previous Meta-analysis and Synthesis of Literature

Previous meta-analyses and systematic reviews of research examining outcomes associated with grade retention within the US have yielded notably consistent results throughout the years (Jimerson et al., 2006). Empirical studies examining outcomes associated with grade retention during the 1900's (1911-1999) have been featured in four seminal systematic reviews and meta-analyses (Holmes, 1989; Holmes & Matthews, 1984; Jackson, 1975; Jimerson, 2001). The findings from each of these studies is summarized below.

Jackson's 1975 systematic review provided a comprehensive overview of retention research between 1911 and 1973, with the purpose of examining the benefits of retention or promotion on academic achievement and social-emotional adjustment on students. Jackson categorized the studies into three design types: naturalistic studies (studies that occur through regular school policies; pre- and post-test studies); studies utilizing pre-post design methods to compare the performance of retained students before and after grade promotion; and experimental studies (studies that compared students who were randomly assigned for promotion or retention). Of these three categories of research, no design type found statistical significance of either academic or social emotional benefits favoring retained students (Jackson, 1975). Of the 204 analyses in naturalistic studies examining achievement and social adjustment, 51 found statistically significant results favoring promoted students (24 for achievement, 27 for social emotional), only five found statistically significant results favoring retained students (two achievement, three social emotional), and the rest found no significant difference between the retained and promoted students. However, 98 out of 114

analyses within pre-post studies found significant gains for retained students (69 achievement, 29 social emotional). Jackson notes on studies using only pre-post analyses of retained students that the studies may show stronger benefits in their conclusions due to lack of a comparison group of promoted students. Among studies using quasi-experimental designs, only one analysis found significant results for retained children and academic achievement, the other 39 analyses found no significant differences. Jackson concluded that while it is possible for grade retention to have some benefits to some students, the body of evidence is not reliable, and grade promotion appeared to have greater benefits.

Holmes and Matthews then followed with a meta-analysis published in 1984 that yielded similar conclusions. Synthesizing 44 studies addressing grade retention in elementary and middle school children between 1929 to 1981, the authors found that overall outcomes were more negative than positive for retained students compared to their promoted peers. Promoted students scored statistically significantly higher in an array of outcome measures—including subject grades, study skills, social and emotional adjustment, self-concept, and attendance. Holmes then extended this effort with a meta-analysis examining 19 additional studies published between 1981 to 1989 in which retained students were followed and compared to their promoted peers (Holmes, 1989). These results similarly concluded that retained students were more negatively affected by repeating a grade and further found that short-term positive results in terms of academic achievement and social adjustment were not long lasting and not seen in later schooling. This follow-up study also found that retained students had more behavioral problems, lower academic achievement, poorer attendance, and

demonstrated negative attitudes toward school compared to their promoted peers. In conclusion, the authors of these studies determined that the negative outcomes of grade retention consistently outweighed the positive and express an absence of empirical evidence to justify its continued use in schools (Holmes & Matthews, 1984).

The most recent meta-analysis of grade retention research in the United States was conducted by Jimerson published in 2001, examining literature between 1990 and 1999. The results of this meta-analysis and systematic review mirrored conclusions found by the previous studies in that the research concluded no significant benefits of grade retention for students. Jimerson found that 16 out of the 20 included studies did not find favorable results for retained students in either academic achievement or socioemotional adjustment, and further found that retention failed to demonstrate long-term effectiveness on socioemotional or achievement outcomes.

More contemporary meta-analysis suggests that the design quality of a study may play a role in the effect sizes yielded by previous research. This recent meta-analysis featured studies published between 1990 and 2007 (Allen et al., 2009), with notable article selection overlap to Jimerson's 2001 study. This meta-analysis included 22 studies, with 207 effect sizes focusing on "achievement", and focused on computing the effect size based on design quality of the study. Therefore, it did not permit the examination of outcomes by academic achievement and social emotional outcomes as featured in previously published meta-analyses. The findings from this meta-analysis revealed that 12 of the 22 studies found overall negative effect sizes, yet it also found that quality of design was associated with less

negative effects. The authors concluded that while their analyses offer “no justification for the benefits of retention” (p. 495), they also suggest that the results “challenge the commonly espoused view in the published literature that grade retention is negative” (p. 495). The authors also noted that among “studies that provide strong controls for selection effects fail to find benefits of grade retention.” (p. 495).

In summary, the results of the meta-analyses through 1999, comprising nearly 700 analyses of achievement, from over 80 studies during a 75 year period, did not support the use of grade retention as an early intervention to enhance academic achievement (Jimerson et al., 2006). Furthermore, the results of the meta-analyses synthesizing over 300 analyses of socio-emotional and behavioral adjustment, from over 50 studies during the past 75 years, fail to support the use of grade retention as an early intervention to enhance socio-emotional and behavioral adjustment (Jimerson et al., 2006). Even when considering the moderating effects of study design, research has found consistent negative results on achievement (Allen et al., 2009). Previous meta-analyses have arrived at similar conclusions about the effects of retention, considering the consistency of findings (see Table 1), yet retention laws continue to be implemented in many states (Cummings & Turner, 2020). An early example of this is the state of Florida, which first began implementing mandatory third grade retention policies in 2003. A recent example is the state of Arkansas, which will enact a new third grade retention policy beginning the 2025-2026 school year. Considering the extant literature, the current study will examine the results of research published since 2000 in the areas of academic achievement and social-emotional adjustment.

Table 1. *Summary of mean effect sizes (ES) from three meta-analyses examining the outcomes of studies exploring the effectiveness of grade retention (Jimerson et al., 2006).*

	Jimerson (2001a)	Holmes (1989)	Holmes & Matthews (1984)
Overall Effect Size	-.31 [246] ^a	-.15 [861]	-.37 [575]
Academic Achievement	-.39 [169]	-.19 [536]	-.44 [367]
Language Arts	-.36 [11]	-.16 [106]	-.40 [85]
Reading	-.54 [52]	-.08 [144]	-.48 [75]
Mathematics	-.49 [48]	-.11 [137]	-.33 [77]
Total/Composites	-.20 [13]	NA	NA
GPA	-.18 [45]	-.58 [4]	-.58 [4]
Socioemotional Adjustment	-.22 [77]	-.09 [234]	-.27 [142]
Social	-.08 [12]	-.09 [101]	-.27 [60]
Emotional	-.28 [13]	.03 [33]	-.37 [9]
Behavioral	-.11 [30]	-.13 [24]	-.31 [13]
Self-Concept	-.04 [16]	-.13 [45]	-.19 [34]
Adjustment Composite	-.15 [4]	NA	NA
Attitude Toward School	NA	-.05 [39]	-.16 [26]
Attendance	-.65 [2]	-.18 [7]	-.12 [6]

Note. Negative numbers represent that results of analyses favored the matched comparison group of students relative to the retained students. NA = not available.

^anumbers in brackets indicate the number of effect sizes used in calculating the mean effect size.

B. Grade Retention and Academic Achievement

Retention is primarily used as an academic intervention for students falling behind grade level standards. States determine grade level standards, as well as the retention guidelines for when students do not meet those standards. For example, the state of Florida has a mandatory retention policy that retains students who do not pass a state mandatory reading test in the third grade (Florida Department of Education, 2011). If any state is requiring students to repeat a grade based on their reading performance, then it is assumed that retention is being used as an intervention to support reading.

However, literature on the effects of retention on reading skills for students yields results contrary to that notion. Some research has found that retention has no significant effect on reading scores (Abbott, et al., 2009; Jimerson, & Kaufman, 2003; Silberglitt et al., 2006; Wu, West & Hughes, 2008), and some have found temporary benefits that do not exist long term (Fruehwirth, Navarro, & Takahashi, 2016; Jimerson & Ferguson, 2007; Moser, West, & Hughes, 2012; Schwerdt, West, & Winters, 2015). Others however have found retention to have negative effects on reading compared to their promoted peers (Hong & Raudenbush, 2006; Hong & Yu 2007). Using data from a longitudinal study, Lloyd, Lane, and Tankersley (2012) found that students retained between kindergarten and eighth grade had lower reading performance scores and lower reading comprehension in high school compared to their promoted peers. These retained students also had lower overall reading growth rates throughout grades compared to non-retained peers (Lloyd, Lane, & Tankersley, 2012). Similarly, a dissertation analyzing the longitudinal effects of Florida's mandatory retention policy reported that 93% of students retained in the third grade later continued to

score below proficiency on their tenth-grade state reading test and were less likely to graduate with a high school diploma than their non-retained peers (Jasper, 2016).

The impact on reading is particularly significant due to the connection between reading ability and academic success. Research has found that reading scores of students are strong predictors of later academic outcomes and do have a significant impact on test performance in math, language arts, science, and social studies (Churchwell, 2010; Cooper et al., 2014; La Paro & Pianta, 2000). Detriments to reading, especially at an early age, can have long term impact on many areas of academic success, so it is important that schools utilize reading interventions that are shown through data to support and improve reading skills.

Reading is not the only subject impacted by retention, however; research has shown similar results for math performance in retained students. Retention has been found to have similarly nonexistent or negative effects on mathematics skills for retained students compared to the performance of their non-retained peers (Hong & Yu, 2007; La Paro & Pianta, 2000; McCoy & Reynolds, 1999; Wu, West & Hughes, 2008; Vandecandelaere et al., 2016). Retention has shown to negatively impact academics on several fronts, with further research suggesting that retained students continue to fall behind throughout their academic experience and have a challenging time trying to catch up to comparable peers (Jimerson & Ferguson, 2007; Lloyd, Lane, & Tankersley, 2012; Ou & Reynolds, 2010; Roderick & Nagaoka, 2005). The proposed meta-analysis provides an opportunity to examine the aggregate of the results to determine the impact of grade retention on academic achievement.

C. Grade Retention and Social Emotional Development

Academics are not the only areas of a student's life impacted by repeating a grade. A large body of research in this area is dedicated to understanding the effect on social-emotional and behavioral adjustment of retained students. All previous meta-analysis and systematic reviews from the 70's, 80's, and 90's found grade retention impacted student's behavior, social adjustment, attitude, school attendance, and was a contributing factor to school dropout (Holmes, 1989; Holmes & Matthews, 1984; Jackson, 1975; Jimerson, 2001; Jimerson, Anderson, & Whipple, 2002; Jimerson et al., 2002). A plethora of concurrent literature agrees.

For example, research on teacher's perception of repeating a grade reveals a favorable view of the intervention, viewing it as a useful strategy for students to spend more time to gain mastery of academic material, as well as gain school motivation, maturity and social experiences with peers (Range et al., 2012; Tomchin, & Impara, 1992). In contrast however, a survey conducted on 1st, 3rd, and 6th grade students found that children listed being held back as a life event as stressful as losing a parent or going blind (Anderson, Jimerson, & Whipple, 2005). The heightened level of stress for children surrounding retention is understandable when considering the general perception of students who repeat.

Repeating students are often stigmatized by their peers for being held back (Anderson, Whipple & Jimerson, 2002; Andrew 2014). Perhaps as a result, research has shown that retained students experience significantly more bully victimization, as well

exhibit more bullying behavior (Crothers et al., 2010; Van Canegem, Van Houtte, & Demanet, 2022). Repeating a grade has been shown to damage the self-esteem and self-concept of students (Andrew 2014; Jimerson et al., 1997; Martin, 2011; Robles-Piña, 2011). Retained students also see a decrease in school motivation and engagement (Kretschmann et al., 2019; Martin, 2009; Stearns et al., 2007), which may contribute to the school absenteeism (Holmes and Matthews, 1984; Jimerson, 2001; Martin, 2011; Rhodes, Thomas, & Liles, 2018).

Retention is thus linked strongly in literature with subsequent school dropout rates (Eren, Depew, & Barnes, 2017; Giano, Williams, & Becnel, 2021; Jimerson, 1999; Jimerson, Anderson, and Whipple, 2002; Jimerson, Woehr, Kaufman, & Anderson, 2004). One study found that high school completion rates of students who repeat a grade are 60% less than that of non-retained siblings (Andrew, 2014). Retained students are also less likely to pursue higher education (Fine & Davis, 2003; Jimerson, 1999; Ou, & Reynolds, 2010), and have negative job outcomes compared to their non-retained peers (Eide, & Goldhaber, 2005; Jimerson, 1999). Literature suggests that retention not only has academic impacts on students, but also a social-emotional impact that can lead to lifelong consequences, suggesting again that the current use of the intervention should be critically evaluated.

D. The Cost of Retention

The estimated financial costs of grade retention in the United States are substantial, involving both direct educational expenditures, indirect societal costs, as well as opportunity

costs (Jimerson, 2001a; Jimerson et al., 2002). The following is a brief discussion of each of these financial costs:

(1) Direct educational costs are the most commonly cited and measurable costs. Including per-student cost of an additional year, on average, retaining a student costs approximately \$10,000–\$15,000 per year, depending on the state and school district. This figure reflects the per-pupil expenditure in public schools across the U.S., which varies by location but hovers around \$14,000 nationally as of 2024 (National Center for Education Statistics, NCES, 2023). At the national level, national annual cost estimates retaining ~2.3% of students annually (a common national rate) out of ~50 million K-12 students = ~1.15 million students retained each year. Thus, the total annual direct educational cost estimate is $1.15 \text{ million students} \times \$14,000 = \$16.1 \text{ billion per year}$.

(2) Long-term societal and economic costs of grade retention can lead to additional indirect costs over time, which are harder to quantify but equally important. For example, increased dropout risk, as research shows that students who are retained are significantly more likely to drop out of school, which is associated with: lower lifetime earnings, greater dependency on public assistance and higher rates of incarceration and unemployment. Moreover, there are estimated societal costs per dropout, for instance each high school dropout is estimated to cost society an average of \$260,000 over a lifetime due to lost wages, increased public service use, and criminal justice costs (Belfield & Levin (2007). Regarding retention-related dropouts, if even a fraction (e.g., 20%) of retained students

ultimately drop out due to retention, the long-term cost would increase dramatically (e.g., 230,000 additional dropouts $\times$ \$260,000 = \$59.8 billion in lifetime societal cost).

(3) Opportunity Costs includes funds spent on grade retention that could otherwise be invested in evidence-based preventive interventions and intervention programs (e.g., tutoring, mental health support, early literacy programs) that have been shown to be more effective and cost-efficient.

Overall, the use of grade retention in the United States has significant annual and ongoing costs. This includes annual direct costs of over \$16 billion and potential long-term societal costs that may exceed \$50 billion annually when factoring in increased dropout risk and reduced lifetime productivity. Considering the results of the present study that fails to demonstrate the effectiveness of grade retention, these costs underscore why many researchers and policymakers advocate for evidence-based alternatives to retention, such as targeted intervention programs.

E. Who Is Retained?

By 2019 an approximate 950,000 students were retained each year (National Center for Education Statistics, 2019). Amongst those students, research has found that higher retention rates are found in male students, students from low socioeconomic backgrounds, and ethnic minorities, especially Black or Hispanic students (Burkham et al., 2007; Davoudzadeh, McTernan, & Grimm, 2015; Frey, 2005; Jimerson, 2001b & 2004; Jimerson & Kaufman, 2003; Klapproth, & Schaltz, 2015). Additional predictors of school retention

include parental education level and parental involvement (Jimerson et al. 1997; Miedel, & Reynolds, 1999).

The demographics of who is retained reveals multiple considerations when providing support – considerations grade retention may not fully encompass. Taking into consideration Brofenbrenner’s ecological model of development (1994), we can view the student as having a number of systems of influence that mold their personality and development (e.g. Microsystem of a child’s immediate family or friendships, mesosystem of school environment, etc.). Those different systems have dynamic and reciprocal influences upon each other across time, as well as with the child inhabiting them, creating a transactional model of development that views a student and their needs holistically, rather than narrowly (Sameroff, 2009). In practice, engaging in a transactional-ecological developmental approach in educational or school psychology practice, practitioners can enact interventions that make meaningful impact by addressing those diverse, multifaceted needs of students rather than viewing them without context (Zhang, Weber, Kaur, Mittelstet, & Jimerson, 2022). In regard to grade retention, if research is finding that at-risk and underserved populations are disproportionately impacted by being held back, then that may suggest there are non-academic needs of the student going unmet.

III. Methodology

A. Procedures

A meta-analysis is the statistical analysis of results from a collection of individual studies with the purpose of synthesizing information (Allen, Kim, & Jimerson, 2023; Jimerson 2001; Glass, 1976). This research method examines the findings of a number of independent studies to calculate an overall effect of an intervention which can inform practitioners and researchers on evidence-based practices. The Effect Sizes (ES) of the independent studies are aggregated to calculate a mean effect size, thus providing information about the directionality and magnitude of intervention effects. The first step in completing a meta-analysis is the systematic search of current literature to identify extant studies that will be included in the meta-analysis.

B. Article Selection Criteria

The inclusion criteria of this study are reflective of methodology followed in previous meta-analysis on this topic (Holmes & Matthews, 1984; Jimerson, 2001), as well as guided by literature on criteria selection. Articles selected for review and analysis met the following inclusion criteria: (a) research must have been presented in a professional publication (e.g., journal article or book); (b) results must have addressed the effects of grade retention (i.e. achievement, socioemotional); (c) study must have included an identifiable comparison group of promoted students; and (d) research must have been published between January 2000 and December 2023. Each criterion point has been selected based on both the extant literature recommendation and to align with previous studies.

Criterion point *a - professional publication* is to ensure articles selected have gone through a peer review process to ensure the accuracy and quality of the reported information. Additionally, as this was a criterion point set in prior meta-analysis, it follows a set precedence that enables progress over time with more consistent parameters. Additionally, an international meta-analysis done on grade retention applied a publication bias analysis and found “no difference” in effect sizes from published versus unpublished literature on the subject (Goos et al., 2021), indicating that the use of this criterion will not create a disadvantage in interpreting results. Goos and colleagues accessed unpublished articles through targeted hand searches based on the reference list of known studies or authors on this topic, as well as through open access journals that include master or doctoral thesis on the topic. Criterion point *b - addressed effects of grade retention* is to address questions on intervention effect, and the two most common measures for examining the effects of retention are academic achievement and socioemotional adjustment. Generally, the rationale for using grade retention is to help struggling students falling below grade standards either academically or social emotionally “catch up” to their peers, however considering the confluence of previous data and conclusions from priors meta-analyses do not find empirical support for grade retention, its ongoing use as an intervention warrants further evaluation.

Criterion point *c- comparison group* is essential to ensure that an effect size could be calculated for analysis. Effect size was calculated by the difference between the means of the retained group and the means of the comparison group and dividing by the standard deviation. This revealed the effect of the intervention on the group that received it. Criterion

point *d- publication date* placed time parameters on articles selected. The last meta-analysis on grade retention collected research from 1990 to 1999 (Jimerson, 2001), therefore, the present study included the period since then, from the years 2000-2023.

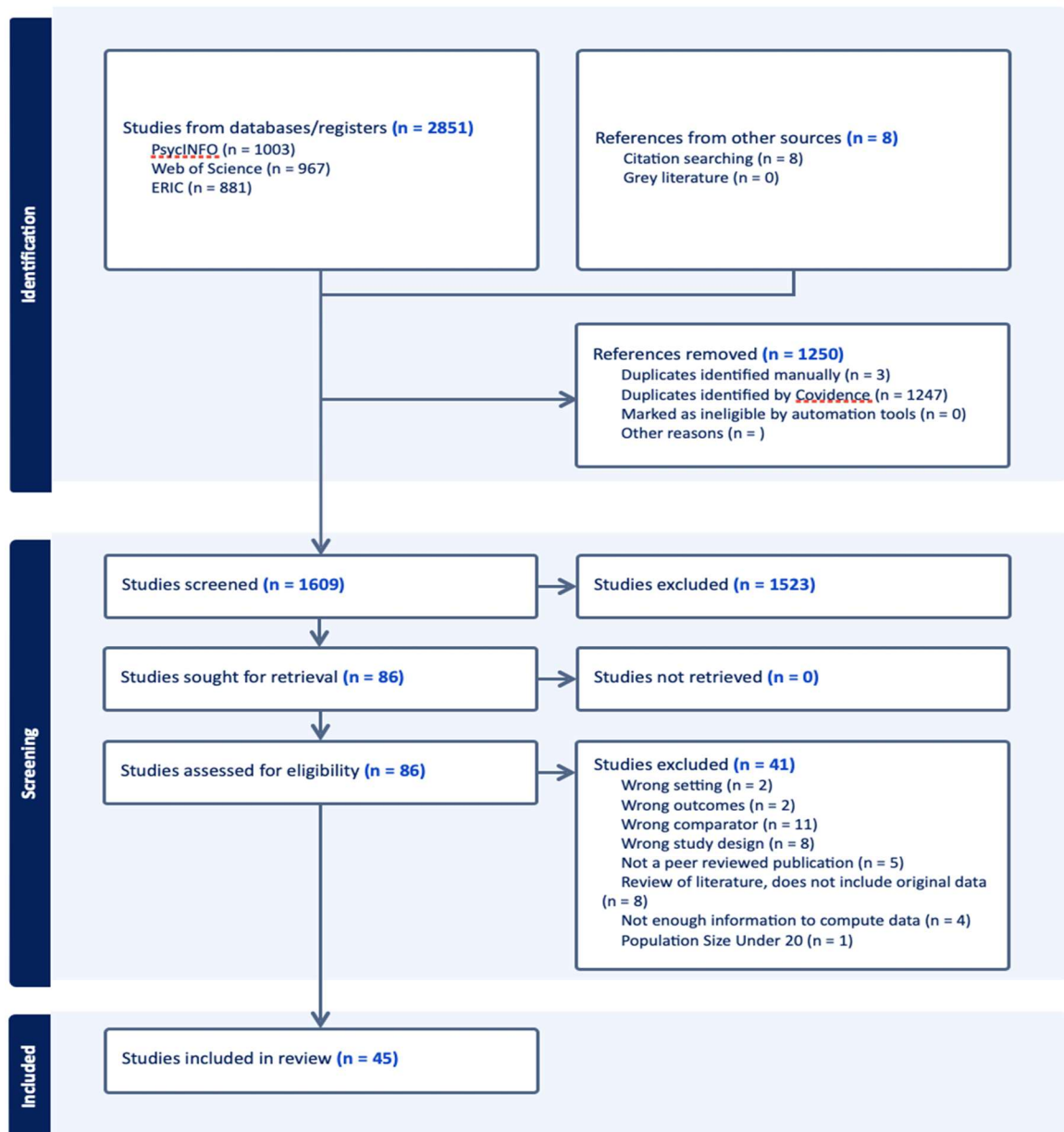
C. Article Search Procedures

Article selection procedures for this study were guided using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). PRISMA is an evidence-based set of items focused on evaluating intervention-based literature in the form of systematic reviews and meta-analyses (Page et al., 2021). A flowchart of the PRISMA inclusion and exclusion reporting guidelines is illustrated in Figure 1. Online digital databases (Education Research Information Center (ERIC), Psychological Information Abstracts (PsychINFO), and Web of Science) were used to filter publication searches using keyword search descriptors (i.e., grade retention, grade repetition, grade failure, repeating a grade, flunking, being held back, repeaters, retainees, or non-promotion) to find related articles. In addition, targeted searches were conducted based on the reference lists of the retrieved studies and the publication lists of known authors working in the field of grade retention effectiveness. The selected terms were searched in the title, abstract, and keywords of the online database search. Using PRISMA guidelines, duplicate studies and papers not found eligible by automated search tools were excluded (Figure 1). Systemic review and the data extraction process were used for further screening of criteria eligibility. For example, searching PsychINFO and ERIC using the above parameters yielded 1003 and 881 results, respectively, whereas Web of Science yielded 967 results. After the initial identification, the 2851 studies

were then screened through the Covidence meta-analysis software to identify duplicate articles, which left 1609 articles for the title and abstract screening phase (Figure 1). The title and abstract of each article was examined by two reviewers to determine if the information provided would find the article eligible for full text review, and 86 articles were voted by two reviewers to undergo review of the full article.

During the full text review, 41 articles were eliminated due to not meeting inclusion criteria, not including enough information to calculate effect sizes, or not including original data or analysis. In one instance there was an article with enough information to find effect sizes but had a total sample size of 18, and though there were not defined inclusion guidelines based on population size, this was deemed too small of a population size to include in the overall analysis. The details of article selection and exclusion for the present study are featured in the PRISMA Flowchart in Figure 1. Ultimately, 45 articles were selected for inclusion in the data extraction process. The data was used to calculate effect sizes associated with grade retention.

Figure 1. *PRISMA Flowchart*



D. Data Analysis

Meta-analytical statistics emphasize the computation and interpretation of effect size (Ferguson, 2009; Hansen et al., 2022; Hedges & Olkin, 1985). Effect size is important as it provides information regarding both the magnitude and direction of differences of an effect between groups (Durlak, 2009). The present study calculated the effect size for each of the included studies. Consistent with previously published meta-analysis (Holmes & Matthews, 1984; Jimerson, 2001), the Effect Size (ES) from each analysis was calculated using the difference between the means of the retained group and the means of the comparison group, divided by the standard deviation ($ES = (M1 - M2) / SD$). This is known as a Standardized Mean Difference and is commonly used for measuring ES between groups (Durlak, 2009). Not all articles provided means and standard deviations. For example, several articles were identified using propensity scoring, odds ratios, or OLS regressions methodology, thus did not report means and standard deviations and instead reported coefficients, t-scores, or p values. In these instances, an effect-size calculator created for meta-analytic studies was utilized in the calculation of effect sizes (Wilson, 2023). This calculator was created as a companion to the book *Practical Meta-analysis* by Mark W. Lipsey and David B. Wilson (2001) and it is updated and maintained through the Campbell Collaboration, a global group of researchers and policy makers with primary emphasis on the standards and methodology of systematic evidence. This organization also facilitates the *Campbell Systematic Reviews* open access journal.

It was also important to address potential inaccuracies in effect sizes through weighting effect sizes. Because the sample size of the individual studies varied in numbers,

the accuracy of the effect size and their subsequent standard error would be impacted. To address this, the included studies were weighted through an inverse-variance method that will give more empirical weight to studies with smaller standard errors and minimizing the imprecision of pooled effect sizes, called a Hedge's g (Deeks, Higgins, & Altman, 2022; Hedges & Olkin, 1985). Mean Effect Sizes reveal both the directionality of the effects of retention (e.g., negative mean effect size indicates a detrimental effect of retention on retained students), as well as the magnitude of the effect of retention (e.g., the further away from 0 in either direction the stronger the effect). Generally an effect size of .20 is considered small, .50 is considered a medium effect, and an effect size of .80 or higher is considered a large effect (Ferguson, 2009).

IV. Results

A. Overall Effect Sizes

Among the 45 articles included, a total of 801 effect sizes were calculated. Overall the effect sizes yielded an average Hedges' g of .00, indicating that there was not a significant effect associated with grade retention. Among the 514 analyses of academic achievement outcomes, there was not a significant effect associated with grade retention (average Hedges' g = .01). Among the 287 analyses of social-emotional adjustment outcomes, there was not a significant effect associated with grade retention (average Hedges' g = -.01). A detailed summary of the effect sizes within each outcome area is featured in Table 1 below.

Table 1*Mean Effect Sizes (ES) of Included Studies*

	# of ES	# of Studies	ES Weighted by Effect	ES Jimerson (2001)	ES Holmes & Matthews (1984)	ES Holmes (1989)
Overall Effect Size	801	45	.00	-.31	-.37	-.15
Academic Achievement	514	39	.01	-.39	-.44	-.19
English Language Arts	39	6	.02	-.36	-.40	-.16
Reading	151	28	.11	-.54	-.48	-.08
Mathematics	97	21	.05	-.49	-.33	-.11
Total/Composites	8	3	-.35	-.20	na	na
GPA	4	2	-.65	-.18	-.58	-.58
Attendance/Enroll	215	13	-.05	-.65	-.12	-.18

ment						
Socioemotional Adjustment	287	13	-.01	-.22	-.27	-.09
Social	34	5	.01	-.08	-.27	-.09
Emotional	18	6	.04	-.28	-.37	.03
Behavioral	221	7	-.03	-.11	-.31	-.13
Self-Concept	14	3	.05	-.04	-.19	-.13
Adjustment Composite	2	1	-0.91	-.15	-.16	na

Note: na = not available; Negative ES indicate outcomes in favor of the comparison promoted group

It is important to note that these overall effects include studies that measure both retention, as well as retention plus. While retention plus also engages in the practice of holding a student back, retention plus differs from traditional retention in that it includes additional interventions as a part of its retention (i.e.- targeted interventions, placing retained students in the classroom of high performing teachers, summer school enrollment). When

separating these studies between types of retention, there is a difference in effect sizes between the practices. 308 effect sizes from 33 articles measuring traditional retention found an effect size of -.01, while 493 effect sizes from 12 articles found an effect of .00 for retention plus research. Similarly, if we look at the effect sizes for the academic achievement and social-emotional adjustment for each retention type, there is a notable difference in effect. For traditional retention research, the overall effect size of academic achievement is -.01, whereas the effect on social-emotional adjustment yields an effect size of 0.02. As for retention plus research, the effect on academic achievement is 0.03, whereas the effect for social-emotional adjustment is -0.04. Though none of these scores yield even a minimal effect, the difference between the types of retention is worth noting for direction of future research.

The only overall effect sizes that indicate a small effect or higher is Total/Composites of academic achievement (-.35), effect on GPA (-.65), and measures of Social-Emotional Adjustment (-.91). All three significant effect sizes indicate a negative influence of retention on student progress. These subcategories do notably have less articles and population sizes contributing to their overall effect compared to reading scores, for example, which is more widely studied but yields no significant effect negative or positive. All other specific effects were found to be not significant.

B. Summary of Included Research

The second part of this analysis is a review of the included literature. In this, details of each of the 45 articles included in generating the overall effect size is outlined in a systematic summary. This information can be found in Table 2 below. It is noted that multiple studies included results for multiple samples, therefore, each sample size utilized to calculate an effect size is noted in the table. Similarly, many articles utilized matching procedures to create comparison groups, or controlled for different independent variables that prior research has found may impact the retention experience of a population, such as gender or socioeconomic status (Burkham et al., 2007; Davoudzadeh, McTernan, & Grimm, 2015; Frey, 2005; Jimerson, 2001b & 2004; Jimerson & Kaufman, 2003; Klapproth, & Schaltz, 2015). Table 2 includes this information in column 6. Additionally many of the articles found effects that were not accounted for in this study due to not meeting inclusion criteria (i.e.- comparing retention groups against each other, or effects that did not fit into the categories of academic achievement or social-emotional functioning).

In summary, approximately 26 of the authors concluded negative to non-significant results, while 19 reported positive results of grade retention as an intervention. The largest number of reported findings of one study that were included in this meta-analysis is 236 individual effect sizes. Interestingly, when the articles are once again separated between retention and retention plus, it is notable that 8 of the 19 articles that report a positive conclusion are from research on retention plus. This indicates that 67% of retention plus researchers report positive results whereas only 24% of retention researchers indicated positive results.

A list of citations for all included studies are as follows: Allensworth, 2005; Andrew, 2014; Buckmaster, Urick, & Ford, 2023; Burkam et al., 2007; Cham et al., 2015; Cooley-Fruehwirth et al., 2016; Dong, 2010; Eide & Showalter, 2001; Eren et al., 2017; Figlio & Ozek, 2020; Giano et al., 2022; Gleason et al., 2007; Greene & Winters, 2007; Griffith et al., 2010; Hill et al., 2011; Hong & Raudenbush, 2005; Hong & Raudenbush, 2006; Hong & Yu, 2007; Hong & Yu, 2008; Hughes et al., 2010; Hughes et al., 2017; Hughes et al., 2018; Hwang & Cappella, 2018; Hwang & Koedel, 2023; Im et al., 2013; Jimerson & Ferguson, 2007; Keller-Margulis & Gischlar 2014; Jacob & Lefgren, 2004; Jacob & Lefgren, 2009; Lorence, 2014; Lorence & Dworkin, 2006; Mariano & Martorell, 2013; Martorell & Mariano, 2018; Mendez et al., 2015; Moser et al., 2012; Ou & Reynolds, 2010; Özek, 2015; Park, et al., 2018; Roderick & Nagaoka, 2005; Schwerdt, et al., 2017; Winters & Greene, 2012; Silberglitt et al., 2006; Wu et al., 2008; and Wu et al., 2010. The included articles are also denoted in the reference section of this article through the inclusion of an asterisk (*) in front of the citation.

Table 2

*Systematic Summary: Conclusions, Characteristics, and Results of Analyses of
Retained Students and Matched Comparison Groups Results with Comparison Group*

Study (N) (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled		
		Academic	Emotional	Socio-		Gender	Age	Grade AA SES
Allensworth (2005) (n = 113937)	-	1	0	0	Plus	Y	Y	Y Y
Andrew (2014) (n = 4352; 8808)	-	5	0	0	Retention	Y	Y	Y Y Y
Buckmaster, Urick, & Ford (2023) (n = 364)	-	9	0	0	Retention	Y	Y	Y Y Y
Burkam et al., 2007 (n = 12780)	-	12	0	0	Retention	Y	Y	Y Y Y
Cham et al. (2015) (n = 561)	+	0	2	2	Retention	Y	Y	Y Y Y
Cooley- Fruehwirth, Navarro, & Takahashi (2016) (n = 3993)	-	12	0	0	Retention	Y	Y	N Y Y
Dong (2010) (n = 8672)	+	4	0	0	Retention	Y	Y	N Y Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Cooley-Fruehwirth, Navarro, & Takahashi (2016) (n = 3993)	-	12	0	K	Retention	Y	Y	N	Y Y
Dong (2010) (n = 8672)	+	4	0	K	Retention	Y	Y	N	Y Y
Eide & Showalter (2001) (n = 3046; 3291; 708; 764)	-	4	0	K-10	Retention	Y	N	N	N N
Eren et al. (2017) (n = 25406; 39007; 37272)	+	4	8	4	Retention	Y	Y	N	Y Y
Figlio & Ozek (2020) (n = 9446; 56156; 9134; 54423; 8789; 8382; 7854; 46064; 9182; 54026; 8908; 52150; 8524; 49964; 8219; 48343; 7991; 47122)	+	30	20	4	Plus	Y	Y	Y	Y Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Giano, Williams, & Becnel (2022) (n = 5000)	-	9	0	K-8	Retention	Y	N	Y	N Y
Gleason, Kwok, & Hughs (2007) (n = 350)	+	0	2	1	Retention	N	N	Y	Y Y
Greene & Winters (2007) (n = 73695; 71950; 7087)	+	4	0	3	Plus	N	N	Y	Y Y
Greene & Winters (2009) (n = 30109)	+	2	0	3	Plus	N	N	Y	Y Y
Griffith et al. (2010) (n = 1756)	-	4	0	K-8	Retention	Y	N	Y	Y Y
Hill et al. (2011) (n = 6900)	-	4	0	1	Retention	Y	Y	Y	Y Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Hong & Raudenbush (2005) (n = 7631)	-	2	0	K	Retention	Y	Y	N	Y Y
Hong & Raudenbush (2006) (n = 5385; 654)	-	4	0	K	Retention	Y	Y	Y	Y Y
Hong & Yu (2007) (n = 7631; 6267)	-	10	0	K or 1	Retention	Y	Y	Y	Y Y
Hong & Yu (2008) (n = 7632)	+	0	14	K	Retention	Y	Y	Y	Y Y
Hughes et al. (2010) (n = 321)	+	2	0	1	Retention	Y	Y	Y	Y N
Hughes et al. (2017) (n = 538)	-	1	0	1	Retention	Y	Y	Y	Y Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Hughes et al. (2018) (n = 734)	-	2	0	1	Retention	Y	Y	Y	Y
Hwang & Cappella (2018) (n = 547)	-	2	6	1 or 2	Retention	Y	Y	Y	Y
Hwang & Koedel (2023) (n = 8369; 7007; 5070; 3141; 8386; 7019; 5076; 3144; 8500; 7126; 5166; 3223; 8479; 7115; 5159; 3222)	+	8	8	3	Retention	Y	N	Y	Y
Im et al. (2013) (n = 374)	-	4	4	1-5	Retention	Y	N	Y	Y
Jacob & Lefgren (2004) (n = 8120; 8111; 7623; 7629; 5018; 5005; 4552; 4557)	+	8	0	3 or 6	Plus	Y	N	Y	Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Jacob & Lefgren (2009) (n = 7754; 7977; 9519; 11777; 8617; 9244; 3358; 2424; 3599; 2849; 3289; 3582; 2840; 3516; 2769)	+	43	0	6 or 8	Plus	Y	Y	Y	Y
Keller-Margulis & Gischlar (2014) (n = 49)	-	5	0	K-5	Retention	N	N	Y	N
Jimerson & Ferguson (2007) (n = 66; 53; 52; 51; 46; 42; 44; 40; 34)	-	5	3	K-2	Retention	N	N	Y	N
Lorence (2014) (n = 38731)	+	7	0	3	Retention	Y	N	Y	Y
Lorence & Dworkin (2006) (n = 38445)	+	21	0	3	Retention	Y	N	Y	Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Mariano & Martorell (2013) (n = 452; 556; 2652; 2717; 3158; 3315; 400; 561; 1992; 2700; 2079; 3303; 448; 553; 2609; 2673; 3105; 3261; 394; 555; 1957; 2654; 2049; 3243)	+	24	0	5	Plus	Y	N	Y	Y
Martorell & Mariano (2018) (n = 25898; 4753; 14186; 10475; 11684; 9171)	+	108	108	3	Plus	Y	Y	N	Y
Mendez et al. (2015) (n = 6707)	-	18	26	K	Plus	Y	N	Y	Y
Moser et al. (2012) (n = 363)	-	6	0	1	Retention	Y	N	Y	Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Socio-Emotional			Gender	Age	Grade	AA SES
Ou, S. R., & Reynolds, A. J. (2010) (n = 1367)	-	6	0	1-3 or 4-8	Retention	Y	N	Y	Y
Özek (2015) (n = 43793; 178248; 21712; 87924)	-	0	60	3	Plus	Y	Y	Y	Y
Park, et al. (2018) (n = 4429)	-	1	0	K	Retention	Y	Y	N	Y
Roderick & Nagaoka (2005) (n = 11625; 6214; 3257)	-	0	9	3 or 6	Plus	Y	Y	N	Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled				
		Academic	Socio-Emotional			Gender	Age	Grade	AA	SES
Schwerdt, et al. (2017) (n = 76208; 76091; 59652; 59334; 45804; 45760; 35051; 35057; 23253; 23230; 24944; 74443; 74327; 70596; 57122; 57042; 43909; 43884; 34311; 34290; 22999; 22977; 27063; 72644; 70811; 67933; 27724; 17147; 15687; 27724; 15687; 23816; 15687; 9816)	+	60	0	3	Retention	Y	Y	Y	Y	Y
Silbergitt et al. (2006) (n = 147)	-	6	0	K-5	Retention	Y	N	Y	N	Y
Winters & Greene (2012) (n = 30808)	+	32	0	3	Plus	Y	N	Y	Y	Y
Wu et al. (2008) (n = 196)	-	12	0	1	Retention	Y	Y	N	Y	Y

Study (N for Calculated Effects)	Author's Conclusion	Calculated Results Included (Number of Analysis)		Grade Retained	Retention/Retention Plus	Comparison Group Matched or Controlled			
		Academic	Emotional	Socio-		Gender	Age	Grade	AA SES
Wu et al. (2010) (n = 375)	+	0	30	1	Retention	Y	Y	N	Y Y

V. Discussion

A. Effects of Grade Retention

The results of this meta-analysis and systematic review of 45 studies published between 2000 and 2023 reveal no significant benefits of grade retention, as either an intervention for academic achievement or social-emotional adjustment (overall effect size of .00). These findings are consistent with previous meta-analyses of grade retention, which examined published studies across the previous decades. The previously found overall effect in Jimerson (2001) was considered a small negative effect (-.31), and comparable to the findings (-.37) from Holmes and Matthews (1984). Given the lack of demonstrated effectiveness in the research across the past two decades, the conclusion of the present meta-analysis is consistent with the conclusions from the preceding century: research does not support the use of grade retention as an effective intervention.

B. Key Considerations in Contemporary Studies

There are a few key differences between the present meta-analysis and the prior that warrant careful consideration in interpreting the results. One example of this is the statistical methods applied in several of the recent articles. Multiple studies compared the use of different statistical methods on measuring significance (such as comparing propensity score matched groups versus not), thus leading to a large number of included effect sizes. While in some of these cases the use of comparing methods yielded a difference in significance ($n=4$), in most cases there was no difference in the end calculated effect sizes. Additionally, many

of the studies studied the effects of retention over time (e.g., multiple grade levels following post grade retention), which include multiple time points of data, and similar to previous research on this topic, positive effects of retention are seen to diminish over time (Klapproth et al., 2016; Lamote et al., 2014). Thus, even when the article found a positive effect of retention in the short-term, it would often be preceded by multiple nonsignificant effects over time and may contribute to the overall non-effect found (e.g., Martorell & Mariano, 2018; Moser et al., 2012; Schwerdt et al., 2017; and Wu, et al., 2010).

A particularly poignant consideration in the present meta-analysis was the inclusion of “retention plus” research, which would not have been available at the time of previous analyses. Traditional grade retention simply involved having a student repeat the grade in which they were deemed to not have met passing standards in. “Retention plus” often involves the use of grade retention coupled with other intervention strategies (e.g., summer school, intensive reading intervention, high quality teachers, and other evidence-based intervention strategies). For example, those studies that included data from students in Florida each included some version of “retention plus.” (e.g., Green & Winters, 2007, 2009; Figlio & Ozek, 2020; Ozek, 2015; Roderick & Nagaoka, 2005; Schwerdt, et al., 2017; and Winters & Greene, 2012). Florida's grade retention policy, (Florida Statute ANN. § 1008.25; 2013) particularly for third-grade students who don't meet reading proficiency standards, emphasizes the importance of providing intensive interventions, high-quality teachers, targeted reading support, and progress monitoring. Florida's grade "retention plus" policy (Florida Statute § 1008.25; 2013) mandated that students must receive "intensive reading

interventions" designed to address their specific reading deficiencies. These interventions are required to include: (a) evidence-based, explicit, systematic, and multisensory reading instruction in phonemic awareness, phonics, fluency, vocabulary, and comprehension; (b) participation in the school district's summer reading camp; and (c) minimum of 90 minutes of daily, uninterrupted reading instruction incorporating the above strategies. In addition, the Florida "retention plus" mandated that "high quality teachers" are provided, such that students retained in 3rd grade be provided with a highly effective teacher. This teacher must be certified or endorsed in reading, indicating specialized training in literacy instruction and the teacher's effectiveness is determined by their performance evaluation as per Florida Statute 1012.34. Thus, the inherent confound in studies investigating "retention plus" is that the evidence-based interventions that are mandated are likely to be associated with student outcomes. As evidenced in these studies, the outcomes of students experiencing "retention plus" are generally comparable to those students who were promoted. (e.g., Figlio & Ozek, 2020; Greene & Winters, 2007, 2009; Ozek, 2015; Schwerdt, et al., 2017)

At least four of the research articles included in this meta-analysis explore a unique form of retention plus through the use of summer school programs in Chicago and New York (e.g., Jacob & Lefgren, 2004; Jacob & Lefgren, 2009; Mariano & Martorell, 2013; Martorell & Mariano, 2018). Students who did not pass their standardized state test were required to attend summer school where they received targeted intervention in the subjects or areas they failed. Students then took the test again after receiving the intervention, and if they scored in the satisfactory range they would progress to the next grade during the school year. Though

neither version of these retention practices yields a significant effect of retention on academic achievement (i.e., the .03 effect size yielded by “retention plus” compared to the -.01 effect size of traditional retention models). These findings appear to both obfuscate the potential impacts of grade retention and suggests further research is needed on the effectiveness of the summer school programs aimed at remediating and accelerating the reading skills of low performing students.

An additional methodological distinction evident in research published in the past two decades is the use of “regression discontinuity analysis” (RDA). RDA is a quasi-experimental method used to estimate the causal effect of an intervention by comparing outcomes of individuals just above and just below a cutoff point. Among studies included in the present meta-analysis, RDA was frequently used to examine large data sets that emerged following the implementation of state level grade retention and promotion policies (e.g., Figlio & Ozek, 2020; Greene & Winters, 2007, 2009; Jacob & Lefgren, 2004; Jacob & Lefgren, 2009; Mariano & Martorell, 2013; Martorell & Mariano, 2018; Ozek, 2015; Schwerdt, et al., 2017). Whereas some suggest RDA may have the potential to generate credible causal inferences when randomized experiments are not feasible, it also has significant shortcomings that can limit its utility and generalizability.

For example, because RDA estimates the treatment effects based on those individuals near the cutoff point (in this instance, most frequently 3rd grade reading scores), this means the findings apply only to individuals close to the cutoff threshold and may not generalize to those further away. For example, an intervention demonstrated to be effective for students

just below a test score cutoff may not be effective for students far below that score.

Therefore, this limits the external validity and the generalizability of the conclusions drawn. Indeed, limiting the comparison of students to those just above and just below the cutoff point would feature the highest performing students experiencing grade retention, thus, not addressing the extent to which lower performing students may be impacted by grade retention.

C. Implications for Practice and Policy

Contemporary research does not indicate that grade retention is an effective intervention to promote the academic achievement or social-emotional development of children. Though these findings are consistent with the results of previous meta-analysis on this topic, more and more states are adopting mandated retention policies. A recent example of this can be seen in the state of Arkansas, where the 2025-2026 school year marks the first year of the newly formed LEARNS Act that includes a policy of mandatory grade retention for students who do not pass the third-grade state reading test (Arkansas Senate Bill 294, 2023). Despite multiple systematic reviews and meta-analyses compiling the findings from research across the past century finding that research does not support the use of grade retention as an intervention, it is still being adopted by states, districts, and schools. As of June 2023, the Education Commission of the States found that 26 states and the District of Columbia had any type of policy, statute, or regulation regarding grade retention, including: Alabama, Alaska, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maryland, Michigan (repealed in 2024), Minnesota, Mississippi, Missouri,

Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, and Washington (Fischer, Jamieson, Silva-Padron, Peisach, & Weyer, 2023).

If an intervention fails to yield effective results, then it requires shifting to practices that are evidence-based (Farmer et al., 2020). Implementation of evidence-based interventions and practices in schools is found to increase academic achievement in students (Shanahan et al., 2010; Vaughn et al., 2014), improve the effectiveness of mental health support in schools (Owen & Murphy, 2004), and manage student behavior effectively (Simonsen, 2008). Additionally, de-implementing low-value practices helps allocate resources to interventions that are evidence-based (Farmer et al., 2020).

As stated, the overall effect size across the 45 studies in the current meta-analysis was .00, which indicates that there is neither positive magnitude or directionality of effect utilizing grade retention as an intervention. If a school, district, or state is going to put into practice an intervention aimed to support students in their academic and social-emotional development, then that intervention should be able to demonstrate statistically significant positive impacts on student outcomes. And if it does not, then either the restructuring of said intervention is in order, or the use of a different intervention entirely based on the empirical evidence. One way to find more appropriate and effective interventions to support students within schools is through the What Works Clearinghouse (WWC, US Department of Education, 2025). The WWC aims to provide evidence-based information to help educators, policymakers, researchers, and the public make informed decisions about educational

interventions. WWC systematically reviews research studies to assess the effectiveness of interventions (curricula, teaching strategies, professional development programs, etc.), and provides actionable recommendations for how to apply these interventions. Utilizing this would be a great service to schools, districts, and practitioners in making decisions for how to best service their population. The results of this study provide decision-makers in schools with additional evidence to select the best interventions to promote the success and development of their students.

D. Limitations and Directions for Future Research

While this study included a considerable number of research articles for the final calculations, it is not inclusive of all studies on grade retention due to exclusionary factors, or due to inadequate information needed to calculate effect size. This study chose to include only peer-reviewed published research largely to follow similar inclusion criteria set by previous meta-analysis to be able to track the progression of effects over time. This excluded non-published works and dissertations from being added to this study. However, as previously mentioned, an international meta-analysis on grade retention included a publication bias measure that found “no difference” in the effect sizes calculated between published and unpublished research (Goos et al., 2021). Future research on this topic may consider the inclusion of unpublished research to gain additional data that could provide meaningful information.

Similarly, some research was excluded due to not enough information being present to accurately calculate effect size, even with the use of an effect size calculator that accounts for many different statistical measures. For example, some articles did not include means, standard deviations, or standard errors, while other articles did not include demographic information about their population that would be needed to calculate effect size. This additional information may make it possible to run additional effect analysis on other characteristics, such as the effects of retention on specific populations.

E. Conclusions

As highlighted by Farmer et al. (2020), reducing the use of ineffective practices is not only beneficial for schools when allocating resources, but also beneficial in supporting the outcomes of students. Requiring students to engage in an intervention that has not been shown to have a meaningful impact on their progress not only wastes the time of the student and service provider, but it also raises ethical questions on whether best practice is truly being followed (Lilienfeld et al., 2012; Kratochwill & Shernoffm 2004). Practitioners such as school psychologists have an ethical obligation to uphold best practice when providing support to the students and schools they work for, and de-implementation of ineffective interventions supports long-term sustainability by clearing the path for proven methods to take root (Farmer et al., 2020; Montini & Graham, 2015; VanDerHeyden, 2018). By getting rid of ineffective practices, this clears up time and resources to introducing evidence-based practices, and as previously mentioned, implementing evidence-based practices has been

shown to provide better outcomes for students both academically and social-emotionally (Shanahan et al., 2010; Vaughn et al., 2014; Owen & Murphy, 2004).

An example of utilizing evidence-based practices within schools is the use of targeted intervention. A targeted intervention identifies specific areas of support needed by the student (i.e., for developing reading skills, targeting supporting reading fluency as opposed to reading as a whole) and provides evidenced-based support in that targeted area. A 2019 international meta-analysis conducted by Snyder and colleagues on the use of target interventions finds a moderate effect in both academic achievement ($g = .45$) and psychosocial outcomes ($g = .35$) of school children. These effects were also stronger for younger children, suggesting its use as an effective early intervention (Snyder et al., 2019a). Additionally, early identification of an underdeveloped skill addressed by targeted interventions helps prevent the need for grade retention in the first place.

The results of this study are a continuation of a series of work dating back over a century that fails to find evidence of effectiveness for grade retention as an intervention. It would behoove schools, districts, and policy makers to shift focus on applying evidence-based practices in order to support their students. The de-implementation of ineffective strategies allows for time and resources to be reallocated to services that would provide students with interventions that would facilitate their progress in an effective manner.

VI. References

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VIII. Appendices

Appendix A. Dissertation Matrix

Questions	Hypotheses	IV	DV	Analyses	Results
Q1: What does contemporary (2000-present) research reveal regarding the <u>academic outcomes</u> associated with grade retention?	H1: Contemporary research will yield similar results as the previous major meta-analysis. That grade retention will be associated with possible short-term academic gains (during the repeated year), and then yield neutral or negative impacts in studies focused on academic outcomes beyond the repeated year.	Retention status of student (ie– a retained student in comparison student who was not retained)	Achievement Standardized Tests (Language Arts, Reading, Mathematics, Total/Composites) and GPA <i>(categories are consistent with last 3 meta-analyses)</i>	Standard Meta-analysis with an inverse-variance method	<u>Supported.</u> Contemporary research shows that there is no significant effect of grade retention on academic achievement, as seen by the overall academic achievement effect size of .00.
Q2: What does contemporary (2000-present) research reveal regarding the <u>social-emotional outcomes</u>	H2: Contemporary research will yield similar results as the previous major meta-analysis. That grade retention will be associated	Retention status of student (ie– a retained student in comparison student who was not retained)	Social, Emotional, Behavioral, Self-Concept, Adjustment Composite, Attitude Toward School, Attendance	Standard Meta-analysis with an inverse-variance method	<u>Supported.</u> Contemporary research shows that there is no significant effect of grade retention on social-emotional adjustment as

associated with grade retention?	with possible short-term social-emotional gains (during the repeated year), and then yield neutral or negative impacts in studies focused on social-emotional outcomes beyond the repeated year.		<i>(categories are consistent with last 3 meta-analyses)</i>		seen by the overall social-emotional effect size of -.01.
Q3: How do the results of contemporary (2000-present) research examining outcomes associated with grade retention in the United States compare to previous meta-analyses?	H3: The pattern of results in the present meta-analysis will be comparable with previous meta-analyses.	Contemporary results vs results of previous meta-analyses	Patterns of significance in each of the areas of academic achievement and social-emotional development compared to findings in Jimerson, 2001.	Comparison of findings from present Meta-Analysis and previous Meta-Analysis (Jimerson, 2001)	<u>Supported.</u> The results of these finding are similar to the previous meta-analysis in that research does not support the use of retention as an effective intervention for either academic or social-emotional development.