Retention Beliefs and Knowledge of Primary, Elementary, and Middle School Teachers

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ABSTRACT

The purpose of this study was to present, compare, and contrast data collected from rural Georgia educators concerning their beliefs and knowledge of the benefits of student retention. This quantitative research study was conducted using survey research. The Teacher Retention Belief and Knowledge Questionnaire (TRBKQ) used in this project was used to gather the beliefs and knowledge of rural Georgia educators on retention. The beliefs and knowledge of primary teachers, elementary teachers, and middle school teachers were compared and contrasted to determine how these educators were similar and different in their views of retention. According to the research gathered during this study, educators tend to support retention as an effective measure for underperforming students. Educators believe retention helps students close the educational gaps, as well aids students to catch up. Educators do not always know the research associated with retention. However, when it came to beliefs and knowledge, the teacher groups did not always have the same thoughts and practices. Teachers most strongly believed that retention is an effective mean of preventing students from failure in the next grade level. They tended to believe that retention was an effective means of preventing students from facing daily failure in the next higher-grade level. Teachers most strongly disagreed with the statement: Children should never be retained. They also disagreed with the statement that retention in K-5 permanently labels a child. As for the factors that influence retention decisions, the teachers ranked academic performance, ability, and social-emotional maturity as the three most important retention factors. All educators ranked home environment and transient student status as the least important factors in deciding to retain a student

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Chapter I

INTRODUCTION

Overview of the Problem

Retaining students for academic reasons has been an educational practice since 1840 (Huddleston, 2014; Williams, 2014). Although it is common across the United States, it can be a controversial practice (Warren, Hoffman, & Andrew, 2014). Grade-level retentions occur when students repeat the same grade for a second time (Dombek & Connor, 2012), and educators tend to suggest retention despite the negative research surrounding this practice (Viland, 2011). Although teachers must make these decisions, there are few studies that examine how teachers formulate retention decisions for students (Range, Holt, Pijanowski, & Young, 2012). Within the realm of retention research, there can be vast differences between the thoughts of teachers of different grade levels (Range et al., 2012).

Retaining a student seems to be a significant strategy used as a short-term fix for students struggling to meet grade-level standards (Andrews, 2012). Student learning can take time, but providing additional time in the same grade level does not ensure that learning will occur (Andrews, 2012).

In most cases, the teacher is the most influential decision-maker when retaining a student (Tanner & Gallis, 1997). Despite the negative research associated with retention, teachers often make recommendations to retain students in order to keep an unprepared student from having to progress to even harder content (Range et al., 2012). Meisels and

Liaw (2001) stated that of all of the problems in education, retention is the clearest example of noncommunication between practice and research. In many instances, educators are much more likely to change their mindsets based on other educators' advice or based on their personal experiences (Kagan, 1992). Retention was initially designed to solve an educational dilemma, but now retention has become a significant problem (Bowman, 2005).

Problem Statement

The problem of retention is worth studying because it has a significant impact on schools and students (Andrew, 2014). Teachers typically have the best intentions for students, but retention is unlikely to accomplish the expected outcomes (Byrnes & Yamamoto, 2001). Although there may be an initial improvement for retained students, any positive effects fade over time (Huddleston, 2014). Retention leads to more negative school behaviors, poor student performance, and poor attendance (Darling-Hammond, 1998). Although there are few positive outcomes for retention, an estimated 10-25% of the student population is retained each year (US Department of Education, 2018). Despite negative impacts, teachers, administrators, and states suggest retention is a method to improve student performance. Researchers report that educators believe retention is a beneficial practice for students (Shepard & Smith, 1990; Tomchin & Impara, 1992). There is a discrepancy between what researchers have identified as best practices for students who are candidates for retention and what educators are actually doing in schools for low-performing students. The focus of this study was to identify retention beliefs and knowledge of rural Georgia teachers and how these educators' beliefs and knowledge align or differ when discussing student retention.

Purpose of the Study

The purpose of this study was to present, compare, and contrast data collected from rural Georgia educators concerning their beliefs and knowledge of the benefits of student retention. The researcher identified the most common areas of agreement and disagreement among educators concerning grade-level retention. Additionally, the researcher determined if primary teachers, elementary school teachers, and middle school teachers have similar beliefs about student retention. Moreover, the researcher attempted to determine if primary teachers, elementary teachers, and middle school teachers have similar or different knowledge of the benefits or problems caused of retention. Finally, the researcher attempted to determine if teachers share common thoughts about when retentions should occur.

Significance of the Study

Grade retention remains a widely used educational practice in American schools (Leckrone & Griffith, 2006). This study could be an asset to the literature on grade-level retention because it examined primary, elementary, and middle school teachers' beliefs and knowledge of grade-level retention in rural Georgia schools. The study could increase the knowledge base for retention and challenge educators' beliefs and retention knowledge. The information generated from this study could help change the conversations about retention in American schools.

This research may provide information to help understand teachers' motives for retaining students and may bring retention practices to the forefront of educational conversations. This study may help educators understand standard retention practices that may be harmful to students and schools. Further, it may help teachers explore

retention alternatives by understanding their beliefs and what they know and understand about retention practices. Finally, this study could foster conversations about educational reform and high-stakes testing ramifications and their role in retention.

A study of this type had not been conducted with teachers in rural Georgia; therefore, this study's information could fill a gap in the literature. There are no studies examining how primary teachers, elementary teachers, and middle school teachers differ in their views of retention in rural Georgia. There are few studies that ask educators when students should be retained if retention continues to be a policy in the future.

Collecting teacher belief and knowledge data can inform school leaders about retention practices in Georgia. The data may be used to begin conversations about best practices for students who are below grade level and do not meet state standards. Since retention research studies are not favorable for student performance, school leaders can help teachers find retention alternatives.

Theoretical Framework

Several basic philosophies align with grade-level retention. Teachers can retain a student to help learn the content which has not been mastered (Range et al., 2012) or teachers can choose to place a child in the next grade level to see if the child can fill the educational gaps with instructional interventions (Denton, 2001). Within the framework of learning, many theorists have studied the learning process (Smith & Thomson, 2014), and they provided an explanation for why students are not successful and must be retained.

There are many educational theories that explain and describe how students learn. Many theorists have studied how students learn best or how teachers can best educate

their students. For this study, the researcher chose both Vygotsky's (1934/1986) zone of proximal development (ZPD) and Piaget's (1936) theory of cognitive development. According to Ahmad (2021), when examining grade level retention, researchers typically consider both Vygotsky's and Piaget's theories of cognitive psychology because both theories focus on a child's mental development.

These are two of the most popular theories that explain why educators make decisions for students based on pedagogical training. The theories can be useful in determining why some students are struggling to learn the classroom content. Although these theories are dated, they are well-known and tried-and-true foundations to education. These theories were chosen to illustrate vital educational concepts that have been taught to education students. The theories can be useful in determining why some students are struggling to learn the classroom content.

The researcher believed both educational theories were foundational to the study. Both Piaget (1936) and Vygotsky (1934/1986) are widely accepted as educational fundamentalists, and their works are foundational cornerstones to educational philosophy and learning. When educators understand cognitive and behavioral theories of learning, they can better understand how to help students who are struggling to grasp the content. Educators need to know and understand the developmental stages of children so that they can provide the appropriate scaffolding for students to be successful.

A theory associated with retention research is Lev Vygotsky's ZPD, developed in the late 1920s and expanded until 1934. Vygotsky's ZPD theory (1934) suggests there are levels of learning to determine when a student can do things independently or with a skilled instructor's help. To ensure students are working within their correct ZPD,

educators must create flexible learning experiences that assist students with a broad range of needs and abilities (Lynch, 2019). When students need to move from one zone to another, they must go through a series of instruction and interventions. These zones of learning are the differences of support students need to learn content. In other words, there are things students can do independently, with assistance, or not at all. The series includes having someone with more knowledge assist them, having social interactions with a tutor to practice the skills, or having scaffolding or support activities to move the student through the current zone to the next intellectual zone (McLeod, 2019).

Students who do not master the content in a given school year must be missing one or more of these constructs. Vygotsky (1934/1986) believed learning was a social construct that occurs best with other beings supporting the learning. This support is called scaffolding. Students who are not mastering content need scaffolding at their current academic level. Carlton and Winsler (1999) stated it is counterproductive for teachers to wait for students to mature and do well in school because it may never happen. Instead, teachers need to scaffold learning experiences for students (Carlton & Winsler, 1999).

Smith and Thomson (2014) wrote about these cognitive processes and student growth. They indicated that students need opportunities to work at their own pace and to move onto new content once the concept has been mastered. Students who cannot stay focused or engaged can become disengaged (Smith & Thomson, 2014). However, as students work through a more personalized curriculum, they may have higher learning outcomes (Smith & Thomson, 2014).

Contrary to Vygotsky's (1934/1986) view of learning and obtaining information, but equally important as a foundation to educational theory, Jean Piaget's theory of cognitive development (1936) explained learning as more of an isolated event. Piaget (1936) believed children learned by passing through developmental milestones. He also believed students learned in stages and learned through environments.

Piaget's (1936) four different stages of cognitive development are: (a) sensorimotor (ages 0-2), (b) preoperational (ages 2-6), (c) concrete operational (ages 7-12), and (d) formal operational (ages 12 and up). Piaget believed that all children passed through these cognitive development stages within these time frames.

Piaget's (1936) theory is most closely associated with maturity and learning. Students who are not successful in school may not progress through the cognitive stages appropriately. Some students take more time to learn the content, and some need more time to mature to learn the grade-level content. Based on theoretical information, educators should create more meaningful learning environments that help support student learning experiences (Smith & Thomson, 2014).

Both Vygotsky's (1934/1986) ZPD and Piaget's (1936) theory of cognitive development can help determine why some students do not adequately progress through the learning process, whether it be due to maturity or need for scaffolding. When students lack fundamental skills for learning, educators must understand how these learning theories can help students who are struggling in the classroom. When a child needs more scaffolding, the educator needs to provide the interventions to help the student be more successful in the classroom before retention being an option (Smith & Thomson, 2014). When a child needs to move to the next stage of development,

educators must give students the proper support to move the child to the next developmental stage (Carlton & Winsler, 1999). These theories can directly be connected to factors for retention, the appropriate time for retention, and teachers' views of retention.

Although both theories are dated, the researcher believed both educational theories were foundational to the study. Both Piaget (1936) and Vygotsky (1934/1986) are widely accepted as educational fundamentalists, and their works are foundational cornerstones to educational philosophy and learning. When educators understand cognitive and behavioral theories of learning, they can better understand how to help struggling students. Educators need to know and understand the developmental stages of children so that they can provide the appropriate scaffolding for students to be successful.

Research Questions

Research Question 1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H1_{\Theta}$: The beliefs of primary teachers, elementary teachers, and middle school teachers on the topic of grade-level retention will not differ.

Research Question 2: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ regarding factors that influence their decisions to retain students?

$H2_{\Theta}$: Primary teachers, elementary teachers, and middle school teachers will not differ in their beliefs of the factors that influence their decisions to retain students.

Research Question 3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H3_{\Theta}$: The primary teachers', elementary teachers', and middle school teachers' knowledge base will not differ on the topic of grade-level retention.

Population and Sample

For this study, primary teachers, elementary teachers, and middle school teachers from schools located in rural Georgia were surveyed. Based on the fact there is limited research on the retention beliefs and knowledge of primary, elementary, and middle school teachers in rural Georgia, this population was selected. This population was chosen because of convenience, accessibility, and proximity. There are approximately 1,768 teachers who comprised the population for the study. According to the National Center for Education Statistics ([NCES], 2020) reporting of 2018-2019 school data, there were approximately 676 primary school teachers, 570 elementary school teachers, and 522 middle school teachers in the rural South Georgia area involved in this study.

Knowing all educators would not participate, the aim was to get at least half of the teachers to participate. According to the Raosoft.com calculator (2011), if the sample size is 1768, at least 316 fully completed surveys were needed to have a representative sample of the group, with a margin of error of 5% and a 95% confidence rate. Thus, 316 fully completed surveys would provide adequate data for the study.

Research Design and Methodology

This descriptive survey research study aimed to examine the retention knowledge and beliefs of primary teachers, elementary teachers, and middle school teachers in rural

Georgia. The selected design allowed a large sample of primary, elementary, and middle school educators from rural Georgia to participate. A survey was used to gather the beliefs and knowledge of Georgia educators on the topic of retention. Views of primary teachers, elementary teachers, and middle school teachers were compared and contrasted to determine how these educators were similar and different in their retention views.

The researcher used a tool initially developed by Tomchin and Impara (1992) entitled the *Teacher Retention Beliefs Questionnaire* (TRBQ). This instrument was later edited by Witmer, Hoffman, and Norris (2004) and renamed to *Teacher Retention Beliefs and Knowledge Questionnaire* (TRBKQ) and was used to survey primary, elementary, and middle school teachers in rural Georgia (see Appendix A).

The TRBKQ is comprised of 4 sections. The first section collected demographic information about the educators who participated in the study and was added by the researcher. The second section of the questionnaire consisted of 20 Likert-scale items that gave the researcher information concerning educator beliefs on retention. The third section of the questionnaire asked participants to rank order the factors that influence their decisions about student retention. The fourth section of the questionnaire gave multiple-choice knowledge questions that tested educator knowledge of retention. The survey's final section asked educators to select the grade level they believed is the most appropriate for retention.

Definition of Terms

Academic Achievement. The process of student learning content standards successfully.

At-risk students. Students who have attributes that could increase the probability of having academic concerns (poverty, low achievement, low cognitive concerns, poor learning skills (Hughes, West, Hanjoe, & Bauer, 2018).

Beliefs. Typically static, often described as attitudes, judgments, values, and opinions (Witmer, Hoffman, & Norris, 2004). Beliefs can be based on experiences and knowledge, that which people assume to be true (Haynes, 2007).

Elementary teachers. For the purpose of this study, elementary teachers are teachers who teach third-, fourth-, or fifth-grade students.

Grade-level retention. The act of keeping a student in the same grade level for two consecutive years, to hold back, or to repeat a grade (Byrnes & Yamamoto, 2001; Denton 2001; Dombek & Connor, 2012).

Interventions. Educational practices and strategies used by teachers to help close achievement gaps with students such as preschool programs, comprehensive school-wide programs, summer school or afterschool programs, looping or multi-age classrooms, school-based mental health programs, parent involvement, early reading programs, effective instructional and assessment strategies, as well as some behavioral and cognitive behavior modifications (Jimerson et al., 2006).

Knowledge. Complete certainty (Eddy, 2004), what individuals know to be true (Haynes, 2007).

Middle School teachers. For the purpose of this study, middle school teachers are teachers who teach sixth-, seventh-, or eighth-grade students.

Primary teachers. For the purpose of this study, primary teachers are teachers who currently teach Pre-K through second-grade students.

Social promotion. The practice of promoting a student to the next grade level regardless of the child learning the required content (Denton 2001; Di Maria, 1999).

Limitations of the Study

The primary limitation of this study is that it only included Georgia teachers. Grade-level retention is common across the United States, but this study only involved educators in rural Georgia.

Additionally, this study only involved teacher self-reported perception data on the topic of grade-level retention. This study did not examine student academic data.

Another limitation was this study only involved data from primary teachers, elementary teachers, and middle school teachers from rural South GA districts. Since this study only focused on rural Georgia teachers, this information is not generalizable to the general population. The study did not collect data from high school educators or administrators.

Organization of the Study

This quantitative research study has been organized into five chapters. The chapters included are an introduction, a review of literature, a discussion of the methodology, results of the study, and a final chapter of discussion.

Chapter 1 is an overview of the entire research study. It addresses the study's background, statement of the problem, theoretical framework, the purpose of the study, research questions, significance of the study, and definitions of the study's terms.

Chapter 2 provides a cohesive review of existing literature related to the topic of grade-level retention. The chapter provides an in-depth review of existing literature and addresses areas of needed additional research.

Chapter 3 addresses the research processes involved in the data collection for the study. This chapter also addresses the data analysis procedures for the study. Chapter 3 includes information concerning the research design, reliability and validity of the study, ethical considerations for the study, and limitations of the study.

Chapter 4 reports the findings of the study. In this chapter, data are reported for each of the research questions in the study.

Chapter 5 reveals the discussions of the findings of the research and implications for practice. Additionally, this chapter shows the need for any further studies.

Chapter II

LITERATURE REVIEW

Introduction

Retention is a common practice in American schools and has been an educational practice for many years (Huddleston, 2014; Williams, 2014). Grade-level retention occurs when students must repeat a grade for a second time (Dombek & Connor, 2012). Retention remains a topic of debate among educators and researchers (Chohan & Qadir, 2016).

Retention data are reported in various ways in the United States, so an exact identification of the number of school retentions is impossible (US Department of Education, 2018). It is estimated between 10% and 25% of American students are retained at least once during their educational careers (US Department of Education, 2018). Denton (2001) reported an estimated 15-20% of all students between the ages of 6 and 17 would repeat one grade while in school. From 1990-2000, there were approximately 2.4 million students retained (Dawson, 1998).

Of the students who were retained, economically disadvantaged and minority students were most likely to be retained (Denton, 2001). Additionally, boys were twice as likely to be retained over their female counterparts (Denton, 2001). While most people believe elementary school is the most common place for grade-level retentions, 9th-grade students were retained most frequently (Denton, 2001).

Retention can be a costly venture for schools (Jimerson et al., 2006). An estimated 7 million students in today's American schools have been retained at least one time (Denton, 2001). Retention can cost American school systems billions of dollars each year (Reschly & Christenson, 2013).

Retention was widespread in the 1970s, declined somewhat in the 1980s, then increased in popularity again in the 1990s (Marsh et al., 2017). In 1983, *A Nation at Risk: The Imperative for Educational Reform* heightened the awareness of educators, parents, and policymakers to the troubled state of our nation's schools (Williams, 2014). This report presented a less-than-desirable account of American public education (Renaud, 2013). It called for an expansion of graduation requirements and increased academic standards for American students (Renaud, 2013). As a result, accountability measures increased in schools, and retention rates increased as well (Briggs, 2013).

The National Association of School Psychologists ([NASP], 2003) released a paper on grade retention and social promotion. Despite the negative research on grade retention, the practice of retaining students increased over the past 25 years (NASP, 2003). NASP (2003) suggested that 15% of America's students are retained each year. The position paper indicated students who are African American or Hispanic, have late birthdays, experience development delays, live in poverty and/or single-parent households, have been diagnosed with ADHD, have behavior issues, and struggle with reading are more likely to be retained. NASP also indicated retention issues can impact secondary education and early adulthood. Grade repeaters were more likely to be unemployed, living on public assistance, or in prison.

In the past, students were most commonly retained in 1st, 7th, and 9th grades (Morris, 1993). These years represent particularly important levels at elementary, middle, and high school academic institutions. Morris (1993) stated that retentions occur most often at the points of school organizational change. The peak in retentions in 7th and 9th grades may be explained due to teachers retaining students for a second time (Morris, 1993). Many districts have rules mandating that teachers may only retain students one time at each educational level. Morris (1993) believed students who struggle academically may also struggle with transitions from one academic institution to the next. This could explain retention rates at each academic level. Class sizes become larger as students get into higher grades. As junior high schools transitioned to middle school concepts, the retention data did not seem to change (Morris, 1993). Since this study was published, NCLB was enacted, so retention rates most likely increased in grades 3, 5, and 8 since these are the retention years if students do not pass state-mandated tests.

History of Education in America

The age-grade structure in American schools was created to solve social problems (Levine & Levine, 2012). Age grading and compulsory attendance laws helped to develop the educational system used today. Before the Civil War, Horace Mann wanted a free and public education system for all children (Levine & Levine, 2012). In 1852, Boston established the first compulsory attendance laws. By 1929, each state had created attendance laws as well. With increasing school attendance, there was a need for schools to become organized. At this time, there were teacher and classroom shortages (Levine & Levine, 2012). The Superintendent of St. Louis schools and eventual US

Commissioner of Education, William T. Harris, organized schools by years and the quarter system (Levine & Levine, 2012). He is credited with the age-grade system that is used today in American schools. Once the age-grade system organized students, determinations had to be made about which children were promoted and which children needed additional time to learn the content (Levine & Levine, 2012).

Retention in Education

There is research available on retention in American schools dating back as far as 1911. American education has unresolved issues regarding how students should progress through the educational system (Merrick, McCreery, & Brown, 1998). Researchers question if retention should be based solely on academic performance or if other social and emotional factors should be considered in their decisions (Merrick et al., 1998).

Although there are estimations, it is difficult to fully understand the number of students who are retained each year in the United States (Warren et al., 2014). Warren et al. (2014) wrote, "Neither the NCES nor any other federal agency or private foundation routinely reports grade retention rates in the United States" (p. 440). There is no national database of grade retention in the United States (Reschly & Christenson, 2013).

Retention is not only a practice in the United States; it is a global educational practice. Goos et al. (2013) conducted a study in 34 countries associated with the Organization for Economic Cooperation and Development (OECD). They examined how and when countries tend to retain students and factors that lead to retention. Goos et al. (2013) discovered that students have an 11% probability of being retained at the primary level. Additionally, they found about 10% of the educational budget can be attributed to the retention of students at the primary and secondary levels.

Furthermore, researchers found 20%-25% of all retentions can be attributed to the educational philosophies of the countries involved (Goos et al., 2013). Additionally, national educational policies can predict the likelihood of a student being retained in those who promote retention to help students academically. Goos et al. (2013) concluded that national education policies are a decisive factor in student retention rates.

Many researchers believe retention is not likely to accomplish the intended outcomes (Byrnes & Yamamoto, 2001). While teachers have the best intentions for students and believe retention will help students, retention will not produce long-term, lasting effects (Byrnes & Yamamoto, 2001). Despite a lack of consensus in the research, grade retention persists in schools (Gottfried, 2013).

Many educators feel very strongly about the act of retaining students (Tomchin & Impara, 1992). Teachers often believe students should be retained in certain circumstances (Tomchin & Impara, 1992), while researchers and school psychologists discourage the practice. Educators who work with students every day want students to be successful. Lorence and Dworkin (2006) explained that many teachers believe an additional year of content could give students a better foundation for success.

Support for the practice of retention is higher in more conservative and rural areas (Bali, Anagnostopoulos, & Roberts, 2005). Areas with a higher concentration of Republican voters are more likely to support accountability measures and standardized tests as a measure for retention than those with more Democratic voters (Bali et al., 2005). Retention rates tend to be higher among larger urban districts with higher revenues and larger class sizes. These results can be attributed to higher percentages of students with lower test scores and a higher rate of minority and low-income students.

Additionally, larger school districts have larger financial budgets that allow for more available funds for student retention (Bali et al., 2005).

Educators typically have common thoughts as to why students should be retained. Most educators do not feel confident in sending students to the next grade level when they have not mastered the current grade-level content. Educators have difficulty promoting a student when they have struggled academically, socially, or if they have failed state-mandated end-of-the-year tests (Dombek & Connor, 2012). Even if teachers know and understand retention research, the decision to send an unprepared student to the next grade level can be stressful (Range et al., 2012; Tomchin & Impara, 1992). Educators give some popular reasons for retaining students, including maturity, academic difficulties, socioeconomic status, and mandatory state-testing failure (Dombek & Connor, 2012).

Retention in the United States

Regarding retention, Bowman (2005) wrote, "Although it was originally designed to be a solution, retention became a significant problem" (p. 43). The research on grade-level retention suggests that retention does not yield positive academic results for students (Jimerson & Kaufman, 2003). Jimerson and Kaufman (2003) cited three meta-analyses conducted between the years of 1925 and 1999. The most recent of these meta-analyses concluded that only 5% of 169 studies showed a positive effect for retained students. Despite these findings, teachers and states still recommend retention for students who are struggling academically (Gottfried, 2013). Teachers and administrators must make difficult decisions about student placement at the end of the school year (Bali et al., 2015). School districts typically have retention policies they are required to

consider. If students do not meet state standards or master the grade-level content, educators must decide the best placement for the students.

Retention committees are formed at the end of each school year to make student placement decisions for the next school year (Schnurr, Kundert, & Nickerson, 2009). These retention committees are typically comprised of teachers, parents, and administrators. Grade-level retention generally is viewed as a school-level decision with little input from the district (Bali et al., 2005). States have promotion policies, and they hold the districts responsible for upholding those policies. In turn, the districts hold the schools accountable for fulfilling those policies (Bali et al., 2005). Even with national attention for schools' accountability, local boards of education and states have their retention policies (Reschly & Christenson, 2013). However, the teacher remains the single most crucial decision-maker when retaining a student (Tanner & Galis, 1997).

Despite the research opposing retention, educators are passionate about helping struggling students, and many teachers feel strongly that struggling students need to be retained (Tomchin & Impara, 1992). Educators spend long days working with students on skills, and they expect them to master those skills. Most educators think that providing students with an additional year to learn the content will yield success (Lorence & Dworkin, 2006). Many educators take ownership of students' learning and have difficulty promoting a student to the next grade level if they have not mastered the current grade-level content (Dombek & Connor, 2012).

Educator Knowledge of Retention

Meisels and Liaw (2001) suggested that grade level retention is one of the most prominent examples of non-communication between American educators' research and

practice. Researchers report that educators believe retention is a beneficial practice for students (Shepard & Smith, 1990; Tomchin & Impara, 1992). Teachers recommend retention for most students because they want what is best for them. Reschly and Christenson (2013) stated that educators genuinely believe in the effectiveness of retention so much they continue to retain students despite the research. Most educators and the general public endorse the practice of retention (House, 1991).

When a teacher sees a student struggle to meet grade-level standards, it is difficult for them to allow those students to be promoted to the next grade level (Dombek & Connor, 2012; Jimerson & Kaufman, 2003). The last thing a teacher wants is for a student to struggle year after year. Teachers see the short-term effects of retention, but they may not be privy to retention's long-term effects (Larsen & Akmal, 2007; Range et al., 2012). Moser, West, and Hughes (2012) examined first-grade students who had been continuously promoted or retained. The study indicated an initial boost in achievement during the retention year for the students who had been retained, but those positive effects soon disappeared. The retained students eventually fell behind those students who had been continuously promoted (Moser et al., 2012). According to a large multiethnic, longitudinal study conducted on first-grade students in a southwestern state, when retention was initiated in first grade, the results were initially positive for reading and math national assessments. Still, the positive effects disappeared by the time the students were in 5th grade (Moser et al., 2012).

Gottfried (2012) conducted a study on third- and fourth-grade students in the Philadelphia area from 1994–2000. The researchers examined students who had been retained in kindergarten, first, second, or third grades. These students were compared

with students who had been continuously promoted. In the study, Gottfried found the achievement gap widened between students who had been retained and those who had been continuously promoted.

Teachers may know the research on retention, but it does not seem to influence many teachers' decisions regarding retaining students (Witmer et al., 2004). Witmer et al. (2004) conducted a study on elementary school teachers' thoughts and perceptions about grade retention. In the study, 77% of teachers believed retention could help students be more successful in later grades. Additionally, 94% of those same teachers did not agree that students should never be retained (Witmer et al., 2004). Teachers may know the data and the numbers, but it is not about data and numbers to teachers. It is about the students. There have been many studies about retention, but most studies do not consider the teacher's knowledge of retention practices (Witmer et al., 2004).

Maturity and Retention

When students exhibit very immature behaviors, even teachers who rarely believe in retention may retain a student for one year to give them more time to mature (Bowman, 2005). This is supported by Dombek and Connor (2012), who believe teachers often think students need to be retained based on their students' maturity. Most teachers believe some students need additional time to learn the skills or concepts, and retention provides them extra time (Tomchin & Impara, 1992). This belief is especially true at the elementary level. Reschly and Christenson (2013) believe students who are retained in the primary grades are performing below peers when they enter school. The researchers believe students who attend high-quality preschool programs can fill math and literacy gaps based on some Pre-K longitudinal studies.

Most educators believe that an additional year of learning will help students reach the goals and learn the curriculum for that grade level (Bonvin, Bless, & Schuepback 2008). However, in most instances, the instructional methods and/or learning objectives are rarely changed to meet the retained child's needs, making the retention year just repeat the same material (Bonvin et al., 2008).

Maturity can be crucial for student success at any educational level. Maturity can affect student readiness and success, and all students mature at different levels (Tomchin & Impara, 1992). This belief can be especially true for students who have late-summer birthdays or students who do not have a strong background in language and development during the crucial first years of life. Primary teachers believe the earlier students are retained, the better for the child (Di Maria, 1999; Tomchin & Impara, 1992).

The maturity gap can be very large at very young ages (Tomchin & Impara, 1992). The younger the child, the more difficult the maturity gap can be to overcome (Dombek & Connor, 2012; Tomchin & Impara, 1992). Teachers understand how much a child can grow and develop in just one year (Range et al., 2012). A year of maturity can be beneficial for a child to mature both socially and emotionally, in teachers' views.

Primary grade teachers see this most predominantly in the beginning years of a student's educational career (Hong & Raudenbush, 2006; Range et al., 2012). There can already be vast differences in students' abilities in kindergarten and first grade (Hong & Raudenbush, 2006; Range et al., 2012). Most teachers believe students need strong foundational skills to be successful (Range et al., 2012) and that students who lack those foundational skills need to be retained to be successful (Tomchin & Impara, 1992). However, Reschly and Christenson (2013) stated teachers who retain students early must

know and understand the ramifications retention can have on a student's entire educational career.

In a study conducted in Cyprus by Anastasiou, Papachritou, and Diakidoy (2017), both parents and students believed retention can be an effective practice for immature students or students who lag behind peers at a very early level in education. Additionally, middle grades educators believe that retention can also improve maturity levels at the middle-school level (Larsen & Akmal, 2007).

Gonzalez-Betancor and Lopez-Puig (2016) conducted a study about early retention. They concluded teachers should consider socioeconomic status and birthdays before retaining students too early in a child's educational career. Students with later spring to summer birthdays are younger than their peers. They may be less mature than their peers, but time could help these students close gaps. The researchers concluded that retaining these young students too early can be harmful to them. In their study, over 28,000 students were involved. Second-grade students with late spring and summer birthdays who were retained did not perform as well as those comparable students who had not been retained until the fourth-grade level. However, both groups performed worse than non-retained peers even though the later retained students performed better than the earlier retained students.

Most educators do not share these conclusions (Witmer et al., 2004). Educators believe early retention can close the educational gaps and level students' field (Witmer et al., 2004). However, Silberglitt, Jimerson, Burns, and Appleton (2006) concluded that early retentions do not benefit students any more than retentions that occur later in school careers (Silberglitt et al., 2006).

Andrew (2014) explored early school retentions and explained educational events that occur early in a student's schooling could leave lasting effects both socially and academically. Early school retention can reduce a child's odds of high school completion by 60% (Andrew, 2014). Educational scars are not definite, but they are highly likely (Andrew, 2014).

A follow-up study by Mantzicopoulos (1997) was conducted to examine possible benefits from kindergarten retention. The follow-up study did not find any positive results for students retained in kindergarten (Mantzicopoulos, 1997). Maturity is not the only topic to spark debate in the educational realm.

Academic Difficulty and Retention

Low academic performance is the most common reason for retaining a student, and it is the reason given for 80% of retentions (Nikalson, 1987). American schools are filled with students who struggle academically. It is an accepted belief that grade retention is the best help for poor student performance (Chohan & Qadir, 2016). The United States uses retention as an intervention, while many other nations stress social promotion and intense classroom interventions for students as an alternative to retention (Martin, 2011).

There are many and varied services and programs available to students who struggle in school. It is essential for educational policymakers to be strategic about closing the achievement gap for struggling learners (Tingle, Schoeneberger, & Algozzine, 2012). These services are meant to close academic gaps, but they do not always close the gaps completely.

There are common school interventions for struggling students (Dombek & Connor, 2012). Some of these programs come in the form of Early Intervention Programs (EIP) and Response to Intervention (RTI) programs. Early intervention programs can begin early with very young children. *Babies Can't Wait* is a statewide agency that seeks to identify children ages birth through three years old. The goal of this program is to provide early support for children who have developmental delays (Ozaydin & Gallagher, 2012). As students enter school in Georgia, the EIP program seeks to identify students in grades kindergarten through fifth grade who are at risk of needing additional support or who are not on grade level. The program provides additional support to students and decreases class sizes (Georgia Department of Education, 2020a). Further, RTI is a nationwide effort to improve instruction and improve student performance in schools (Hite & McGahey, 2015). Hite and McGahey (2015) reported that RTI is a tiered system where students progressively can receive additional support based on the child's needs.

There are also many other small group intervention services and computer-based programs schools use to help close achievement gaps. Students who qualify for special education services may be given an Individual Educational Plan (IEP), but this is only a limited number of students who can and should be eligible for additional intense assistance and services. The answer may be providing effective instruction (Dombek & Connor, 2012). These instructional practices must be basic and strong to help struggling students, and they must be researched-based interventions that identify specific instructional needs for struggling students (Tingle et al., 2012). Districts should invest in

research-based and effective intervention programs to help students with academic deficiencies (Tingle et al., 2012).

Social Promotion

Social promotion is often considered a taboo subject in American schools. In essence, social promotion and continuous promotion are the same concepts; however, they are viewed differently (Denton, 2001). Social promotion has negative connotations while continuous promotion is considered a positive concept by most retention researchers. Di Maria (1999) defined social promotion as the educational practice of sending a student to the next grade level regardless of academic achievement. Social promotion creates difficult educational issues for teachers, as this practice creates impossible student academic ranges for educators in the classroom (Di Maria, 1999). Social promotion creates an acceptance of poor academic grades so that students can remain with peers regardless of academic difficulties (Di Maria, 1999). Di Maria (1999) found 60% of teachers indicated underperforming students should not be socially promoted. In this 1999 study, Di Maria surveyed kindergarten through fifth-grade teachers in Bronx, New York on social promotion and retention practices. Seventy percent of the teachers surveyed believed it was more important to hold students back in a grade to remediate rather than keep students with their peers in the same grade level. Teachers in this study overwhelmingly favored retention for underperforming students.

Denton (2001) reported that continuous promotions yield better results than retention. Denton (2001) explained that legislators and policymakers are attempting to end social promotion in American schools by mandating retention for students who are not on grade level. Gottfried (2013) studied both students who were retained or

continuously promoted. These students were analyzed and studied in urban elementary schools in Philadelphia, Pennsylvania. The study found that students who were continuously promoted were more successful in school (Gottfried, 2013).

Denton (2001) explained neither social promotion nor retention are effective. Denton (2001) suggested that teachers need to identify student problems as early as possible, intervene to help struggling students, provide extra help to meet individual student needs, and monitor to ensure the intervention works well. Denton (2001) explained there are three keys to ending social promotion in schools: high expectations for students, early identification of learning issues, and timely and effective individualized help.

According to Huddleston (2015), legislators wanted to put an end to unsuccessful American schools many years ago. Laws were passed to ensure educators were teaching grade-level content, and students were learning grade-level content (Huddleston, 2015). Consequently, many states also passed laws indicating gateway grades in which students must pass state assessments to be promoted to the next grade level. In 2001, Georgia Governor Roy Barnes challenged Georgia legislators to end social promotion in his State of the State address (Huddleston, 2015). On March 21, 2001, Georgia legislators passed the *Georgia Promotion, Placement, and Retention Law*, which requires students to pass end-of-the-year state assessments in grades 3, 5, and 8 (Huddleston, 2015).

Despite much research indicating retention is not a successful practice, some states have mandated retention if students do not pass state assessments. As a result of these laws, retention numbers began to rise again (Huddleston, 2015). Although the premise for legislation to end social promotion was not intended to increase the number

of retentions in the United States, some educators interpreted this law as a need to retain lower-performing students (Jimerson, 2001).

Socioeconomic Status, Ethnicity, and Gender as Factors in Retention

Socioeconomic status can be a factor for student retention. A student's status of being economically disadvantaged and their age are significant factors for student retention (Wilson & Hughes, 2009). Retention of students from lower-incomes is significantly disproportionate to the middle to upper-income households (Bali et al., 2005). Even so, racial and class bias may play a factor in retention decisions. Bali et al. (2005) concluded minority students tend to be retained more often since they often score lower on state assessments. Hu and Hannum (2020) reported that schools in low-resource communities may be more inclined to retain students. These schools are also less likely to provide vital resources to support students after they are retained (Hu & Hannum, 2020).

Concerns have been raised about the effects of retention of particular racial and ethnic groups and students from lower socioeconomic backgrounds (Reschly & Christenson, 2013). It is estimated that only half of ethnic minority students graduate from high school with their original school peers (Leckrone & Griffith, 2006).

Retention rates appear to be related to gender, ethnicity, and socioeconomic status (Frey, 2005). Bali et al. (2005) explained that retention affects poor and minority students disproportionately. Ethnicity and gender have both been recognized as factors for retention (Frey, 2005). African American students are the students who are retained most often, and boys are twice as likely to be retained (Frey, 2005). When gender and ethnicity are combined, the retention possibility dramatically increases (Frey, 2005). In a

study by Meisels and Liaw (2001), males were retained almost two times more frequently than females, and African American students were retained most often. Of the students retained, boys, African Americans, and poor students are the most frequently retained (Frey, 2005). Jimerson and Kaufman (2003) concluded that males are twice as likely to be retained than their female counterparts. The majority of retained students are likely to male, poor, or minorities (Kinlaw, 2005; Parker, 2001).

Thomas (2018) indicated teachers need to be cautious and aware when recommending students for retention. Thomas (2018) warned of the over-identification of racial and ethnic groups on the topic of retention. Lorence and Dworkin (2006) stated that students with certain social and demographic characteristics are retained more often, regardless of cognitive abilities. In some cases, race, ethnicity, family issues, social status, and gender can influence grade retention (Lorence & Dworkin, 2006).

Although ethnicity and gender have both been recognized as factors for retention, poverty is most likely the most powerful indicator of retention (Frey, 2005). In a Chicago-based study of 1,164 low-income students, 298 had been retained at least once, while 19 of those students had multiple grade-level retentions (Frey, 2005).

In 1988, Meisels and Liaw examined data from the National Educational Longitudinal Study of students in grades kindergarten through Grade 8. Meisels and Liaw (2001) found minority students were retained proportionately more than White students. On average, 29.9% of Black students and 25.2% of Hispanic students were retained while 17.2% of White students were retained (Meisels & Liaw, 2001). Meisels and Liaw (2001) reported that students may be retained for reasons that are independent

of their academic ability. Children who fall into the categories of male, minorities, and low SES groups are disproportionately retained (Meisels & Liaw, 2001).

Lorence and Dworkin (2006) argued that the retention of minority students can cause many more disadvantages for these students. In a Texas study by Lorence and Dworkin (2006), the percentage of Hispanic and African American students retained were higher than other subgroups. On average, boys are more likely to be retained over girls (Lorence & Dworkin, 2006).

Other factors that contribute to retention are parents with low educational levels and parents who are not actively involved in a student's education (Kinlaw, 2005). Jimerson and Kaufman (2003) explained that parent involvement and parent IQ scores play a significant role in whether or not a student will be retained. Parents are the primary influence on a child's early development and success (Jimerson & Kaufman, 2003). Students with parents who are not involved in the education process are more likely be retained, and many low-income parents do not view literacy training as their job at home (Frey, 2005). Frey (2005) found that retained students typically had mothers with lower IQ scores than those students who were continuously promoted.

Primary School and Retention

Primary school is typically described as the grades kindergarten through second grades, and it is considered the foundation to a child's educational career (Chohan & Qadir, 2016). Children enter schools with a wide variety of backgrounds and maturity levels (House, 1991).

Each year, about 7% of the nation's 6-8-year-old students are retained (Andrew, 2014). Of the retained students in Grades K-3, 51.8% of the students are retained in first

grade (Karweit, 1999). Primary grade retention can have lasting effects long after the retention occurs (Andrew, 2014).

Some teachers believe that retaining students in the primary grades is most effective. However, Silberglitt et al. (2006) revealed primary grade retentions do not yield advantages in reading trajectories when compared to elementary grade retentions.

Range et al. (2012) conducted a study with teachers concerning early-grades retention. Teachers in this study believed primary-grades retention improves self-concept. Additionally, those same teachers believed retention in kindergarten was beneficial for immature students (Range et al., 2012). In another study, primary grades teachers strongly believed students in primary grades are too young to be negatively affected by grade retention (Tomchin & Impara, 1992).

Although the decision to retain in primary school takes place very early in a student's educational career, the effects of primary-grade retention practices can reduce the odds of high school graduation by 60-75% (Andrew, 2014). Additionally, primary grades retention can also affect college entry and completion (Andrew, 2014).

However, some studies indicate that the earlier the retention, the more a child can recover from the retention (Pomplun, 1988). Pomplun (1988) found that at the primary level, students were able to show more stable achievement, better self-concept, and higher motivation levels than students who were retained later in their educational careers.

In a study by Gonzales-Bentancor and Lopez-Puig (2016), the researchers found some common variables which can influence grade retention at the primary level, most specifically second grade. The researchers discovered variables such as being a boy and

being born in the second or fourth quarter of the year or attending preschool before three years of age (Gonzales-Bentancor & Lopez-Puig, 2016) as retention factors.

Elementary School and Retention

Where many teachers used to retain in primary grades, there has been an increase in retentions in later grades (Frederick & Hauser, 2008). This may be due to the implementation of mandatory grade retentions from end-of-year assessments. With the passing of the No Child Left Behind Act (NCLB, 2002), more emphasis was placed on students being retained based on end-of-the-year assessments. Retention rates have increased in elementary school since the implementation of test-based accountability, especially among African American and impoverished students (Huddleston, 2014). When considering retention rates among Grades 1-9, all grade levels have similar numbers except for first and ninth grades (Warren et al., 2014). In a study conducted from 1995-2010, retention rates were found to be quite similar among all grade levels nationally. Still, retentions in Grade 1 and Grade 9 were significantly higher than all other grade levels (Warren et al., 2014).

However, some other variables likely impacted grade-level retention in elementary school, more specifically, fourth grade. Gonzales-Bentancor and Lopez-Puig (2016) discovered belonging to a single-parent family and being a second-generation immigrant are variables that can increase retention for 4th-grade students.

At the elementary level, some students can maintain more stable achievement and motivation levels than students who are retained in later grades (Pomplun, 1988). However, when comparing primary school retentions and elementary school retentions,

the later the students are retained, the more rapid deceleration of progress students experienced (Silberglitt, et al., 2006).

In a study by Tomchin and Impara (1992), primary teachers believed strongly about retaining students to help them. Elementary teachers did not feel as strongly about retaining students, but they thought they did not have many alternatives to retention when students are struggling (Tomchin & Impara, 1992).

Middle School and Retention

Much of the research and literature on retention focuses on primary and elementary school studies (Larsen & Akmal, 2007; Rand, 2013). There is limited research as students age and enter into early adulthood (Rand, 2013). Westphal, Vock, and Lazarides (2019) reported that adolescents are retained most frequently in Germany. A potential reason for these statistics is that adolescent students are more vulnerable because they are transitioning from childhood to adolescence, causing many changes and challenges for students. Anderson, Whipple, and Jimerson (2003) surveyed sixth grade students and reported retention stress is greater than the stress of losing a parent or going blind. These students ranked retention as their single most stressful life event, which may be attributed to pressures imposed by standards-based testing programs (Anderson et al., 2003).

Maturity can be a factor for retention at any academic level but especially true at the middle school level. Students at this level can be very immature (Larsen & Akmal, 2007). When students enter school less prepared and less mature, there can already be large educational gaps (Dombek & Connor, 2012). These gaps can be difficult for teachers to close even at very young ages (Tomchin & Impara, 1992). Anderson et al.

(2003) explained that teachers believe another year of the same content is a gift for immature children.

Rand (2013) conducted a study involving four Pennsylvania middle school students on their beliefs and perceptions of grade retention. All the students involved in the study had been retained in middle school. The students indicated that retention helped them with academics and work ethic, but all middle school students agreed that retention had a negative impact on them socially (Rand, 2013).

Hu and Hannum (2020) also conducted a study on middle school students. The researchers reported that approximately 22% of middle school students had been retained in elementary school (Hu & Hannum, 2020). Students who live in more rural areas and more remote regions of the United States are much more likely to be retained (Hu & Hannum, 2020). Additionally, retained middle school students were weaker in academics and had lower psychosocial outcomes (Hu & Hannum, 2020).

Berry, Martin, and Martin (2019) examined data from a group of middle school students concerning their thoughts on grade-level retention. The researchers found that middle school students who had been retained experienced poor attitudes and poor self-efficacy (Berry et al., 2019). During this 2017-2018 urban research study conducted in one northeastern urban middle school, the researchers found that students who had been retained had increased GPAs and attendance. Forty-five middle school students aged 11-14 were surveyed using the School Climate Survey. These data may be useful to middle school professionals working with at-risk urban students.

Westphal et al. (2019) conducted a study of seventh- and ninth-grade students. They examined whether a child's personality is a factor in retention. Adolescents in

seventh and ninth grades exhibit strong personality traits during this period. Therefore, Westphal et al. (2019) specifically wanted to examine if retention decisions were made based on students' Big Five personality traits. The Big Five personality traits are openness, conscientiousness, extraversion, agreeableness, and emotional stability (Westphal et al., 2019). The study was centered around the premise that teachers may take a student's personality into account when making retention decisions. Researchers discovered that more conscientious students were less likely to be retained during the adolescent years, even when students had similar grades. Other personality traits had a less significant impact on a teacher's decision to retain a student. Conscientiousness was a good predictor of more substantial academic outcomes for secondary-aged students (Westphal et al., 2019).

Hwang, Capella, and Schwartz (2016) conducted a study of middle school retained students who exhibited "sleeper effects" after retention. The study was comprised of 5,586 students. Of those students, 295 had been retained in either first or second grades. The longitudinal study followed the group of students to determine academic and psychosocial retention effects on students. In the study, 58% of the retained students were males. Sixty-one percent of the students were minorities, and 22% of the students were later classified as receiving special education services. The study's goal was to determine if retention in first and second grades had any effects on student achievement and psychosocial outcomes in middle school. The study results were incomplete, but preliminary data indicated retained middle school students rated themselves low on psychosocial indicators, including self-concept, internal behaviors, and self-esteem (Hwang et al., 2016).

Larsen and Akmal (2007) conducted a study of middle school educators and parents in seven middle schools from Washington and California. Twenty-nine interviews were conducted in this study. Educators involved in this study believed that retention is a benefit for students when conducted early in a child's educational career. However, interviews revealed that teachers still retain students in later elementary and middle schools if they struggle with content. In this study, most educators admitted to believing retention was not an effective strategy, but most were unsure of the research associated with retention (Larsen & Akmal, 2007). One educator in the study admitted he likes to use retention as a motivation to encourage students. The educators and parents admitted to having retention policies, but most educators made up their own minds about who to retain and who to place in the next grade level.

Guevremont, Roos, and Brownell (2007) found that students who were male, young for grade level, and in Grades 1, 2, 7, and 8 were most likely to be retained. Of the students who had been retained once, these students were three times more likely to drop out of school. When students were retained twice, these students were eight times more likely to drop out of school. Of the students who were retained in third grade, only 25% of those students improved their score on end-of-year assessments during the retention year. The results of this Canadian study were similar to the research in American schools.

Kretchmann, Vock, Ludtke, Jansen, and Gronostaj (2019) examined students who had been retained in Grade 6 in Germany. The retained students were followed for three years in a longitudinal study. The study's goal was to examine the students' educational processes, student development, and psychosocial development. Researchers found that

students who had been retained in Grade 6 had negative effects on motivation. The motivational issues seemed to diminish after two years, but student achievement did not increase at this time. The researchers also discovered that retained middle school students experienced lower self-concept and academic interests.

Meisels and Liaw (2001) studied students who had been retained in kindergarten through eighth grade. The study indicated retained students were at a disadvantage on both academic and behavioral variables by the eighth-grade year. This study was very large (16,623 students), but the results were consistent with small studies that indicated retention had negative effects on students.

State Assessments and Retention

The impact of assessments for accountability has also demonstrated an effect on retention. Parker (2001) believed the number of retentions increased and the number of laws recommending retention increased as lawmakers called for improved student performance. Hu and Hannum (2020) agreed that when students have to pass a standardized test to move on to the next grade level, particularly in schools where teacher accountability is emphasized, retention rates may tend to be higher. Teachers struggle with decisions about student placement when students fail to pass grade-level, end-of-grade assessments. State assessments assess grade-level content mastery, and some states' laws have been enacted where students must pass these state assessments before advancing to the next grade level (Huddleston, 2014). During the 1990s, states began to introduce promotion policies that required students who do not perform well on state assessments to repeat that grade (Bali et al., 2005).

Several states, including Florida, New York, Georgia, Texas, Wisconsin, and Louisiana, have test-based retention policies and laws (Huddleston, 2014). According to Huddleston (2015), many states passed laws about test-based retention when No Child Left Behind (NCLB) was passed into federal law in 1999. In Georgia, students must pass reading in third grade, and they must pass reading and math in the fifth and eighth grades. Since these assessments measure grade-level content standards, students must pass them to advance to the next grade level. These laws were initially enacted to end social promotion and help improve American schools. These laws became popular with those who favor the practice of retention, but researchers on the topic of retention do not agree with them (Huddleston, 2014).

Assessments should only be a very small part of the data for retaining a student (Hartke, 1999). Darling-Hammond (1998) stated that standardized tests, which are largely in a multiple-choice format, give very little meaningful information about student knowledge. Leckrone and Griffith (2006) wrote that test publishers have to produce assessments that can be scored easily and quickly, and teachers have worried if these assessments are an accurate portrayal of student knowledge. Leckrone and Griffith (2006) also asked whether the tests accurately reflect essential skills and knowledge students should possess before being permitted to proceed to the next grade level.

In longitudinal studies, any positive effects of retention faded over time (Huddleston, 2014). Moser et al. (2012) conducted a study on first-grade students who had been retained. Initially, there were positive advantages of the retention, but these advantages dissipated over time. In a study by Nikalson (1987), results indicated an initial increase in math scores for retained students, but the growth was not lasting.

Silberglitt et al. (2006) published information indicating an initial rise in math scores for retained students, but these effects did not last long-term.

When students do not meet state standards or master content standards at the end of the year, tough decisions must be made. Schnurr et al. (2009) studied retention committees – committees that meet to determine student placement for the next school year. Retention committees are typically comprised of parents, teachers, and school administrators. Tanner and Galis (1997) reported that teachers are the most influential decision-makers in the retention process. Even though school psychologists typically know the research and long-term effects of educational decisions, they are generally not committee members for these meetings on retention (Schnurr et al., 2009).

Although most teachers do not make educational decisions based on a one-time assessment, research shows that using standardized tests as a basis for grade retention is an inadequate practice (Hartke, 1999). Retention was an unintended consequence of test accountability; overall school achievement was the intended means of test accountability, not retention (Huddleston, 2014).

Georgia Assessments and Retention

In Georgia, there are grades where students are required to pass state end-of grade assessments to advance to the next grade level (Georgia Department of Education, 2020b). In 2001, Governor Roy Barnes called for the end of social promotion in Georgia in his 2001 State of the State Address (Huddleston, 2015). He argued that the Texas test-based retention policy, initiated by then-Governor George W. Bush, was an effective model that Georgia should adopt (Huddleston, 2015). On May 21, 2001, the Georgia Promotion, Placement, and Retention Laws were enacted. State initiatives were

established in response to the impending NCLB Act (2002), which would begin to mandate standardized reading skills and tests for all students beginning at Grade 3 (Balkcom, 2014).

According to the National Council of State Legislators website ([NCSL], 2020), third grade has become a significant milestone in a child's educational career. Third grade marks a time when students should be able to read to learn instead of learn to read (NCSL, 2020). To encourage school personnel and parents to take assessments seriously, states have enacted legislation to retain students who are not on grade level by the end of third grade (NCSL, 2020). In Georgia, students in Grade 3 must pass the English Language Arts (ELA) assessment, while students in Grade 5 and Grade 8 must pass the ELA and Math assessments to advance. There are various end-of-course assessments that students must pass at the high school level to graduate.

Research studies have shown that students who are not reading proficiently by the end of third grade are four times more likely to drop out of school before graduation (NCSL, 2020). Georgia falls into this category. Georgia is not alone in the controversial third-grade reading laws (Balkcom, 2014). Between the years of 2013 and 2014, at least 13 states created and mandated students to pass state assessments or face retention (Balkcom, 2014). Currently, 16 states require retention at the end of third grade for students reading below grade level, but many of these states allow for conditional promotion or appeals to this process (NCSL, 2020). Although there have been negative consequences associated with test-based grade retention, the practice has continued to grow over the years (Huddleston, 2015).

There are some arguments as to why states have mandated retention policies associated with mandated assessment retentions. Although there may be negative educational behaviors related to school retention, some may argue the students could have exhibited those same negative characteristics before the retention (Balkcom, 2014). These behaviors and characteristics could have contributed to the reading level deficiency initially (Balkcom, 2014).

Lasting Effects of Retention

Most studies highlight the negative impacts of retaining students. According to Hartke (1999), extensive studies examine how grade-level retentions do not close achievement gaps or improve student academics. According to Darling-Hammond (1998), retention leads to many negative behaviors from students, including poor student performance, negative school behaviors, poor attendance, and higher drop-out rates.

Most educators believe retention can fill educational gaps for students. Not only does retention not help academically, but it can also affect students socially and emotionally. According to Jimerson et al. (2006), students retained in elementary school are between two and eleven times more likely to drop out of school than students who were not retained in school.

Additionally, retained students tend to have more school anxiety and fears than continuously promoted students (Byrnes & Yamamoto, 2001). Although retention increases the students' emotional states, teachers do very little to help retained students' fears and anxieties (Byrnes & Yamamoto, 2001).

Retained students tend to have worse school behaviors and poorer attendance than students who have not been retained (Jimerson et al., 2006). Silberglitt et al. (2006)

indicated that retained students had higher absenteeism rates and lower socioemotional scores than students who had not been retained. Similarly, Frey (2005) reported, in a study from a Minnesota project, retained students had significantly more behavior issues than students who had not been retained. Research by Lekrone and Griffith (2006) supported this, as they indicated that students who are retained in early grades have more behavior problems by sixth grade.

Research also suggests that retention significantly impacts a student's self-esteem. Jimerson (2001) explained that students who are retained experience lower self-esteem and poorer school attendance rates than those who were continuously promoted. Low self-esteem and poor student attendance can carry over into adult life (Jimerson, 2001). Frey (2005) linked grade-level retention to damaging effects on children's overall development, including social and emotional development factors.

Wu, West, and Hughes (2010) studied the behaviors of retained students. There were short-term advantages, but these were not sustained. Students felt less socially accepted and more sensitive for being over-age for their grade level in the long term. Andrew (2014) studied the lasting effects of student retention and found students retained in primary grades can have issues with student motivation or behavioral problems.

Not only are retained students less likely to graduate from college, but they are less likely to go to college (Jimerson et al., 2006). These students are also likely to earn less in wages over their lifespan. Andrew (2014) found students who were retained in the primary grades could experience lasting effects after high school completion affecting postsecondary entry.

Additionally, retentions can add stress to students. Jimerson et al. (2006) believed retention to be one of the most stressful life events, similar to the stress of losing a parent or going blind. Byrnes and Yamamoto (2001) conducted a survey asking students about retention. Eighty-four percent of those students surveyed had negative feelings about retention. They also surveyed retained students and their teachers and found very few attempts to help children deal with the fear and anxiety associated with retentions.

Teacher Knowledge and Beliefs About Retention

Knowledge and beliefs can be acquired or formed in many ways. There can be some discrepancy between teachers' beliefs and teacher knowledge of retention (Clandinin & Connelly, 2000).

Knowledge can be defined as complete certainty (Eddy, 2004). Others believe knowledge is what individuals know to be true (Haynes, 2007). Beliefs can be defined as attitudes, judgments, values, and opinions (Witmer et al., 2004). Beliefs can be based on experiences and knowledge that people assume to be true (Haynes, 2007).

Shepard and Smith (1988) identified two types of knowledge: propositional and practical. Propositional knowledge consists of information obtained from research findings. Practical knowledge is defined as knowledge is gained from personal experiences. Educators tend to rely on practical knowledge rather than propositional knowledge when making decisions dealing with student retention. Additionally, Kagan (1992) determined that educators are more likely to make decisions based on personal experiences and educators' opinions than research practices.

Teachers' beliefs form their judgments about students and influence decisions about how they implement school policies (Tomchin & Impara, 1992). In most cases,

teachers are unaware of how their beliefs form their judgments (Tomchin & Impara, 1992). Beliefs are typically formed early, and these beliefs can persevere through reason, time, schooling, and experience (Pajares, 1992).

Parajes (1992) stated that knowledge and beliefs are intertwined, but beliefs typically help determine how new information is interpreted. Additionally, the earlier the belief is incorporated into the mind, the more difficult it is to change the mindset. Pajares (1992) suggested that teaching beliefs are well-established by the time a person gets into college. Teachers rarely change their opinions based on research, but educators are much more likely to change their mindsets based on other educators' advice or based on their own experiences (Kagan, 1992).

Educator Retention Perception Data

Meisels and Liaw (2001) stated, "Of all of the major issues in education, grade retention represents one of the clearest examples of non-communication between research and practice" (p. 69). Just as there are differences among researchers, school psychologists, and students, there are also differences among educators themselves. There are vast differences between the thoughts of teachers of different grade levels. In a study on teacher perceptions, Witmer et al. (2004) found significant differences between perceptions among primary teachers (K-2) and elementary teachers (Grades 3-5). Most likely, the teachers of younger students have mindsets centered around students' abilities, while teachers of older students' beliefs are focused on motivation (Witmer et al., 2004).

Although teachers have the most contact with students, administrators serve as instructional leaders of the school. Thus, they have opportunities to shape the school's decisions concerning retention practices (Range et al., 2012). However, when

administrators were surveyed on grade-level retention effectiveness, administrators' perceptions were not much different from teacher perceptions. Range et al. (2012) conducted a study consisting of primary grade teachers and elementary principals on retention effectiveness. In this study, teachers and administrators differed slightly on some aspects of grade-level retention, but there were no significant differences across the board. The study did find that even when teachers know the research, they remain strong supporters of retention.

Another stakeholder in retention is parents. Parents are typically involved in the retention process, but most of the time, the parents rely on the education experts to help guide them to make the best decision for the student. Most parents let the teachers make the retention decision since they typically have the best interest of the students and educational expertise to make the decision (Williams, 2014).

Although the thought of retention can make parents uneasy, with retained students being separated from friends and having to repeat another year of school, most parents still support retention as a way to help their children (Williams, 2014). Lynch (2013) indicated that collaboration between school and home can help improve student success. When parents are involved in a child's education, it can significantly increase success. Parents can help students establish academic and career goals.

Teacher Perception Studies

As with many researchers, Pouliot (1999) believed there are differences between what educators believe about retention and what the research reports about retention efficacy. Meisels and Liaw (2001) indicated that school practices and research are

moving in different directions because schools are still retaining a significant number of students. Teacher beliefs have a strong effect on educational practice (Pouliot, 1999).

Most retention studies are centered around student achievement, not teacher beliefs and knowledge. When reviewing the research, some studies involve teacher views and knowledge of retention. Teachers struggle to make the best decisions for students (Kinlaw, 2005). In a study by Byrnes and Yamamoto (2001), the authors explained that teachers (Grades 1, 3, and 6) do feel sensitive to retained students' feelings, but they do little to change the curriculum during the student's retention year.

Pearson (2018) studied the knowledge and attitudes of veteran teacher educators and preservice teachers. In this study, Pearson surveyed both groups of teachers on the effectiveness of grade retention. The preservice teachers were more likely to retain students than veteran teachers. Pearson (2018) found preservice teachers were less likely to have knowledge of retention practices.

Thomas (2018) completed an interpretive phenomenological analysis of teacher's experiences with grade-level retention. In this study, teachers choose to retain students despite the negative research associated with retentions. Thomas (2018) found the practice of retaining students was embedded in the culture of the school. Additionally, Thomas found teachers play a significant role in the retention process; however, teachers are not familiar with the research associated with grade retention. Teachers were not bothered by the negative research from retention, and they continued to use retention as an intervention for struggling students.

In a case study, Haynes (2007) reviewed principals' and teachers' beliefs and knowledge in a Missouri school district. In this school district, grade level retention was

widely used by teachers. Although administrators disagreed with retaining students, the practices remained active in the public school district. Teachers believed students should be retained to help them meet grade-level standards, and they thought there were benefits to retaining students. Teachers believed at-risk students should be retained before Grade 3, and they believed retention was most successful in the primary grades.

Patterson (1996) reviewed perception data from principals and teachers from 11 states. In this study, teachers and administrators were asked about retention beliefs and practices. Results from this study indicated teachers favored the practice of retention while administrators did not favor retention. Most teachers believed the benefits of retention outweigh the negative benefits of retention. Administrators participating in the study believed retention would hurt students' performance and understood that students did not typically perform well during the retention year. Administrators did not believe the benefits were stronger than the negative effects of retention.

Byrnes and Yamamoto (2001) interviewed first-, third-, and sixth-grade teachers who had retained students. Most of these teachers worried about the decision to retain students. These teachers only wanted to make the best possible decision for the students. Additionally, the majority of the teachers involved in this study worried about the decisions to retain students, and they wanted information to make more informed decisions.

In another study by Parker (2001), only 8% of the teachers expressed doubt about retaining students. Parker (2001) reported 89% of the teachers believed retaining students was an effective practice. Most of the teachers believed the students would rise from the bottom of the class to the top of the class the next year after the retention.

In a study of 227 kindergarten and elementary teachers in Quebec, Pouliot (1999) found teachers believe retention is an effective way to prevent students from struggling daily in the next grade level. Additionally, the study found the teachers did not believe retention did not harm a student's self-concept, but they did not know the retention's long-term effects (Pouliot, 1999). Pouliot found teachers indicated retention had positive effects on students. Teachers of all grade levels thought retention was an effective way to keep students from failing in later grades.

Range et al. (2012) surveyed teachers about student retention. In the study, 332 respondents participated, 293 pre-kindergarten through second-grade teachers and 39 elementary principals. Results suggested that retention research does not alter the thoughts of the teachers. Teachers believed students who exhibited poor academic performance should be retained, and 64% of teachers and 68% of principals would retain students again despite the research. The teachers additionally indicated retention would increase the parents' involvement in the child's education.

Witmer et al. (2004) surveyed primary teachers (K-2) and elementary teachers (Grades 3-5) about retention practices. The findings revealed educators believed retention was an acceptable practice, but there were significant differences about why teachers retained students. In the study, researchers found 77% of elementary teachers agreed with the process of retention. These teachers believed it was an effective practice in preventing failure in later grades. Furthermore, 94% of the teachers disagreed that students should never be retained. These researchers also found academic performance was the most common reason teachers retain these students (Witmer et al., 2004). When reviewing teachers' retention knowledge, only 9% of those surveyed indicated retention

knowledge came from educational journals or conferences on retention. Forty-four percent of the group surveyed indicated personal education experiences comprised retention experiences (Witmer et al., 2004).

Range et al. (2012) studied primary grade teachers and elementary principals concerning the effectiveness of retention. Teachers and administrators differed slightly on several aspects of grade level retention, but there were not significant differences across the board. The results of the study indicated teachers agreed more significantly that retention helped prevent future failure, helped students meet academic standards, provided support, and motivated students. Administrators who participated in the study did not rate these reasons as high as the teachers.

Range et al. (2012) reported that teachers and administrators agreed academic performance was the leading reason for retention. Both teachers and administrators agreed that retention in kindergarten can help immature students. Additionally, the study found that even when teachers knew the research, they were still strong retention supporters. Further, teachers were extremely supportive of retention as an intervention to help students.

In a case study, Haynes (2007) examined teachers' perceptions of retention in schools. This researcher determined 60% of teachers agreed retention was an effective method of preventing failure. Administrators in the study disagreed with the same statement at a rate of 68%.

Pearson's (2018) study of preservice and teacher educators' knowledge of grade retention found preservice teachers were not knowledgeable about the effects of grade-level retention. The results of the study revealed educators understood the research

surrounding retention, but teachers and college preparation programs were not sharing the information with preservice teachers.

Summary

Retention can bring about negative educational after-effects. Retained students have a higher rate of dropping out of school. No matter when the retention occurs, retained students have higher school drop-out rates as compared to continuously promoted students (Hughes, Cao, West, Allee Smith, & Cerda, 2017). Hughes et al. (2017) conducted a study of 538 students. Retained students dropped out of school at a rate of 16.3% compared to 6.3% for continuously promoted students. In another study, retained students were shown to be much more likely to drop out of school than complete high school when compared to students who were continuously promoted (Hughes et al., 2018). Although retention affected the likelihood of students dropping out of school, it did not affect the completion of GED programs (Hughes et al., 2018)

Retention can have academic and nonacademic ramifications on students. According to Martin (2011), students who were retained exhibited negative self-concept and completed homework less frequently. Additionally, these students had lower motivation and lower school attendance rates.

Although most retention research is negative, some studies suggest retention can have positive benefits to students. Marsh et al. (2017) conducted a six-year longitudinal study on self-beliefs, anxiety, social relations, school grades, and test scores. This study concluded the effects of retention were mostly positive. There were very few negative effects of retention in this study (Marsh et al., 2017).

Student retention has always been a topic of confusion for educators and parents. Most educators want students to be successful. They want to make the best possible decisions for students. Retention information can be confusing for teachers. Educators who retain students always hope their students will benefit from the retention (Witmer et al., 2004). Teachers retain students for various reasons, but the most common reasons for retention are maturity reasons, academic difficulties, and failure to pass end-of-year state assessments (Dombek & Connor, 2012).

Another confusing aspect of retention deals with state laws. Despite research mostly reporting negative aspects of retention, state lawmakers have passed laws in many states requiring educators to retain if students do not pass the end-of-the-year state assessments (Huddleston, 2014). Education professionals and lawmakers may not always be on the same page. Educators want what is best for their students.

It is a difficult choice to promote students to the next grade level when they have not mastered the current grade-level content. Additionally, teachers do not have the benefit of knowing what each student accomplishes after the retention because teachers typically only have students for one year. Teachers must make the best decision with the information at hand. Each student is very different, and education is not a one-size-fits-all profession. Educators have to look at students on a case-by-case basis. Each child is entirely different. Teachers must treat each child as an individual, special case. They must make the best educational decisions for each child they encounter. If the educator committee chooses to retain a child, the school must support the child with intense interventions and support (Tingle et al., 2012).

If a retention committee chooses to continuously promote a child, the school must also foster and support that child with all available resources to close the achievement gaps. Schools must do this on a long-term basis as well. Educators must try to make the most appropriate decisions for every child every year. Education is a challenging profession in which teachers must make the most educated and sincere decision for each child who passes through his or her classroom.

Chapter III

METHODOLOGY

In America, retention is a common practice. Most researchers conclude retention has negative effects on students for years after the retention occurred. Retention numbers have increased in American schools in recent education history (Jimerson & Kaufman, 2003). A publication entitled *A Nation at Risk: The Imperative for Educational Reform* (1983) presented an unpopular account of American education (Renaud, 2013). The report was meant to be a pivot point for American schools. It included ideas to increase rigor, use assessments to guide instruction, and hold schools accountable for student learning. However, as accountability measures have increased in schools, retention rates have increased as well (Briggs, 2013).

Problem Statement

The problem of retention is worth studying because it has a huge impact on schools and students (Andrew, 2014). Teachers typically have the best intentions for students, but retention is unlikely to accomplish the expected outcomes (Byrnes & Yamamoto, 2001). Although there may be an initial improvement for retained students, any positive effects fade over time (Huddleston, 2014). Retention leads to more negative school behaviors, poor student performance, and poor attendance (Darling-Hammond, 1998). Although there are few positive outcomes for retention, an estimated 10-25% of the student population is retained each year. Despite negative impacts, teachers, administrators, and states suggest retention is a method to improve student performance.

Researchers report that educators believe retention is a beneficial practice for students (Shepard & Smith, 1990; Tomchin & Impara, 1992). There is a discrepancy between what researchers have identified as best practices for students who are candidates for retention and what educators are actually doing in schools for low-performing students. The focus of this study identifies retention beliefs and knowledge of rural Georgia teachers and how these educators' beliefs and knowledge align or differ when discussing student retention.

Purpose of the Study

The purpose of this study was to present, compare, and contrast data collected from rural Georgia educators concerning their beliefs and knowledge of the benefits of student retention. The researcher identified the most common areas of agreement and disagreement among educators concerning grade-level retention. Additionally, the researcher determined if primary teachers, elementary school teachers, and middle school teachers have similar beliefs about student retention. Moreover, the researcher attempted to determine if primary teachers, elementary teachers, and middle school teachers have similar or different knowledge of the benefits or problems caused of retention. Finally, the researcher attempted to determine if teachers share common thoughts about when retentions should occur.

Research Questions

The following research questions guided this study:

Research Question 1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H1_{\Theta}$: The beliefs of primary teachers, elementary teachers, and middle school teachers on the topic of grade-level retention will not differ.

Research Question 2: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ regarding factors that influence their decisions to retain students?

$H2_{\Theta}$: Primary teachers, elementary teachers, and middle school teachers will not differ in their beliefs of the factors that influence their decisions to retain students.

Research Question 3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H3_{\Theta}$: The primary teachers', elementary teachers', and middle school teachers' knowledge base will not differ on the topic of grade-level retention.

Research Design

This quantitative research study was conducted using survey research. Creswell (2014) described quantitative research as an approach that examines the relationship between variables. The design chosen for this project allowed many educators from rural Georgia to participate in the study. Survey research provides a numeric representation of attitudes and opinions of a sample of a population (Creswell, 2014). The survey used in this project was used to gather the beliefs and knowledge of rural Georgia educators on retention. The beliefs of primary teachers, elementary teachers, and middle school teachers were compared and contrasted to determine how these educators were similar and different in their views of retention

The quantitative data were collected from the TRBKQ survey, which included six demographic questions, 20 Likert-scale belief statements, 10 rank order factors related to retention, and nine multiple-choice questions (see Appendix A).

The independent variables in this project were the primary teachers, elementary teachers, and middle school teachers. The independent variables were categorical in nature since they were grouped into different categories such as gender, grade level taught, and the number of years' experience of the educators involved in this study. These categories were covariates for the study. These independent variables were continuous in nature.

This research project's dependent variables were the retention knowledge and beliefs of South Georgia primary teachers, elementary teachers, and middle school teachers.

Methodology

Population and Sample

This study's target population was Georgia primary, elementary, and middle school teachers who work in rural South Georgia school districts. Since Georgia has mandatory retention laws for students who do not pass end-of-year exams, the researcher used educators from this state to determine the educators' beliefs on the topic of retention. According to the National Center for Education Statistics (NCES) Report of 2018-2019 school data, around 676 primary school teachers, 570 elementary school teachers, and 522 middle school teachers in the rural South Georgia district were available to be involved this study.

The researcher used stratified sampling to select the participants for the study. Stratified sampling was chosen since it uses the individuals' specific characteristics in the survey (Creswell, 2014). With stratified sampling, the sample will reflect the "true proportion" of the educator population, since the entire sample contains individuals with certain characteristics (Creswell, 2014). All certified primary teachers, elementary teachers, and middle school teachers in the Regional Education Service Agency were given the survey.

A total of 958 educators began the survey. The survey was distributed via email using Qualtrics. Of the 958 surveys that were started, the following chart is a breakdown of the demographics of the survey participants. From 958 surveys, 649 were fully complete. The demographic data was taken from the Qualtrics.com reports tab. Table 1 shows the number of responses per grade level.

Table 1

Survey Respondents

Respondents identification	Number of Responses
No grade specified	30
Kindergarten	64
First Grade	62
Second Grade	65
Third Grade	56
Fourth Grade	60
Fifth Grade	70
Sixth Grade	62
Seventh Grade	67
Eighth Grade	58
Resource	57
Special Education	94
Other	148

Of those who initially responded, there were a total of 197 primary teachers, 168 elementary teachers, and 170 middle grades teachers. Of the respondents, 804 were female, while 87 were male. Additionally, among those who responded to the survey, 243 held a Bachelor's degree, 366 possessed a Master's degree, 241 possessed a Specialist's degree, and 27 held a Doctoral degree, according to a Qualtrics.com report.

The age range of the respondents are as follows: 44 respondents were in the 18-25 age range, 165 educators were in the 26-34 age range, 288 educators were in the 35-44 age range, 293 were ages 45-54, 102 educators were in 55-64 age category, and 6 respondents were ages 65 or older.

The level of experience of the survey participants were broken down in the following ranges: 173 survey participants had 0-5 years of experience, 142 survey participants had 6-10 years of experience, 140 survey participants had 11-15 years of experience, 149 survey participants had 16-20 years of experience, 152 survey participants had 21-25 years of experience, 99 survey participants had 26-30 years of experience, and 40 participants had 30 or more years of experience. according to a Qualtrics.com report.

Since there were three content sections of the survey, there were various respondents in each section of the survey. These exact demographics will be discussed in each of the appropriate sections.

Instrumentation

Tomchin and Impara (1992) originally developed the Teacher Retention Beliefs Questionnaire (TRBQ) for a research study. The researchers included a Retention Decision Simulation Exercise (RDSE) consisting of scenarios to examine educator

knowledge of retention. Witmer et al. (2004) edited the instrument to rename it the Teacher Retention Belief and Knowledge Questionnaire (TRBKQ) and included multiple-choice knowledge questions. The researcher used Witmer's (2004) version of the instrument for this research study with her permission (see Appendix B).

The TRBKQ is comprised of four sections. The first section collected demographic information about the educators who participated in the study. The demographics collected by the researcher were gender, age, number of years' experience, highest degree earned, grade level taught, and experience with retention. The second section of the questionnaire consists of 20 Likert-scale items that provided information concerning educator beliefs on retention. The responses for this section of the survey were *Strongly Agree*, *Agree*, *Neutral*, *Disagree*, or *Strongly Disagree*. The third section of the questionnaire asked participants to rank order ten educational factors that influence decisions about student retention: (a) parental input, (b) learning disability, (c) academic performance, (d) social/emotional maturity, (e) transient student, (f) age in relation to others, (g) home environment, (h) effort being put forth, (i) child's self-esteem, and (j) ability. The fourth and final section of the questionnaire included nine multiple-choice questions that tested educators' knowledge of retention. The survey's final question asked educators to determine the most appropriate grade level to retain a student.

The researcher made minor changes to the survey instrument to match the parameters of this study. The original survey used K-3 as a grade band. The researcher changed this to K-5 on questions 3, 11, 15, and 17. Additionally, the original survey used a grade band of 4-5. The researcher changed this grade band to 6-8 to reflect middle grades. These changes affected questions 7, 12, 16, and 18.

Reliability and Validity

The TRBKQ has proven reliability and validity. For the first study, Tomchin and Impara (1992) field-tested the questionnaire items before the initial research project. The survey items were field-tested with 135 kindergarten through 12th grade educators in a different school system than where the research project was conducted. The tool was developed from information obtained from student records, school policies, and interviews with teachers and administrators (Tomchin & Impara, 1992). The researchers made changes and revisions based on the feedback from the field test. This pertained to Part II and Part III of the survey, and this established content validity for these sections of the survey. Scimemi (2019) determined an internal consistency coefficient (Cronbach's alpha of .63) for the beliefs section, while the knowledge section had an internal consistency coefficient (Cronbach's alpha) of .77.

Additionally, Range et al. (2012) used a version of the tool to study elementary principals' perceptions of retention. Range (2012) calculated the Cronbach's alpha for the Likert-scaled items as 0.82. Haynes (2007) reported Likert-scale items (Part 1I) of the TBRKQ had a reliability factor of .482. Haynes (2007) reported Cronbach's alpha (.858) for Part II of the survey.

Haynes (2007) reported construct validity for Part 2 of the TRBKQ based on a research project in which the survey tool was used. Neuberger (2011) found the instrument to have internal consistency reliability at .858 using Cronbach's alpha. Haynes (2007) reported that Part 1 and Part II had a combined reliability factor of .264.

Witmer et al. (2004) added a section to include knowledge and established reliability and validity for the TRBKQ. Scimemi (2019) reported that researchers

determined construct validity for the tool by using probability statistical analysis (p = 0.05) using the varimax rotation with a correlation of .60. Witmer et al. (2004) also established a cumulative variance at 72.2%. Scimemi (2019) reported the reliability and validity of these tools for her study based on these recommendations. Haro (2015) and Witmer et al. (2004) cited the TRBKQ as being a valid and reliable tool.

The knowledge section (Part IV) of the TRBKQ has established content validity. This was obtained by surveying ten teachers enrolled in a university graduate course taught by Tomchin and Impara (1992). Revisions were made to the instrument based on the reviewer's comments. Witmer (2004) also reported Part IV of the TRBKQ had construct validity based on her research. Witmer (2004) reported content validity for the knowledge section of the instrument was obtained by having five professors from a private university's educational department provide feedback on the validity of the questions. Neuberger (2011) reported a study that found the instrument to have internal consistency reliability of .86 (Cronbach's alpha). This supports reliability for the instrument. Haynes (2007) reported Cronbach's alpha (.68) for a study conducted by Gaddis in 2009. Witmer (2004) and Haynes (2007) also reported the knowledge section of the TRBKQ (Part IV) based on research projects. For the knowledge section, Haro (2015) found an internal consistency coefficient of .71.

Haro (2015) reported construct validity for the TRBKQ by conducting a factor analysis and a varimax rotation (0.04 correlation). The coefficients of the survey reported Cronbach's alpha of .86, which suggests good internal reliability (Haro, 2015). In a study by Neuberger (2011), acceptable reliability was reported, and content and external validity were established by interviewing educators and reviewing school policy.

The final portion of the survey asks educators what grade level they believe is the most appropriate for retention. The researcher added this question.

Data Collection

The Institutional Review Board (IRB) granted permission for this study (see Appendix C). Once the IRB granted permission to survey certified primary teachers, elementary teachers, and middle school teachers, the researcher obtained permission to administer the survey to teachers from the RESA district (see Appendix D). Prior to sending out the survey, the researcher asked for permission to be on the agenda to speak to all superintendents to gain permission to conduct the study. The researcher addressed all superintendents in the RESA at one of the monthly superintendent meetings to bring awareness for the proposed study, which all approved (see Appendix E). After obtaining approval from the area superintendents, the researcher sent an informed consent letter to all school principals requesting permission to conduct the study in the representative schools (see Appendix F).

Prior to the survey being administered, a follow-up letter was mailed to principals asking them to encourage survey participation in their building. A letter was mailed to the schools and given to teachers explaining the survey (see Appendix G). The researcher asked that the administrative secretary place the letters into the teachers' mailboxes. The letter should have been given to teachers prior to the survey being administered. Afterward, the survey was sent out electronically to teachers. Two weeks after the survey was sent out, the researcher sent a follow-up email to teachers reminding them to complete the survey.

Once the IRB approval was granted, the TRBKQ (Witmer, 2004) was sent to participants to gather information about the beliefs and knowledge from the Georgia educators. The same survey was sent to each type of educator: primary teachers, elementary teachers, and middle school teachers. The data were collected to determine similarities and differences in the educators' beliefs and knowledge.

The survey included demographic information and three additional sections: one section for educators to rank order factors for retention, one section including 20 Likert-scale questions about teachers' beliefs towards retention, and a final section consisting of nine multiple-choice questions about educator knowledge of retention. An online survey tool, Qualtrics™, was used to administer the survey to teachers. The data were collected electronically.

Paper copies of the data were stored in a confidential and locked filing cabinet. Additionally, data were protected on a locked computer, with the researcher being the only one with access to the computer.

Demographics such as gender, grade level taught, age, number of years in education, and highest degree earned were variables in the study.

Once the researcher gained permission of the Okefenokee RESA director to conduct the survey in the RESA district, the researcher sent a letter to all the superintendents at the monthly Board of Controls meetings. This method was changed due to COVID-19 since the researcher could not go into the meeting in person. After the letter was distributed by the RESA director, the researcher followed up via email with all superintendents obtaining permission to conduct the survey in each county. All superintendents responded giving the researcher permission to conduct the survey in each

respectable district. The researcher contacted the technology director in each county to obtain email addresses for all primary, elementary, and middle school teachers in each district. A total of 1,973 email addresses were collected. The survey was sent out to all primary, elementary, and middle school teachers in the eight-county RESA district. The original survey was sent out on January 11, 2021. A follow-up email was resent on January 19, 2021, as a final attempt to collect more survey responses.

Data Analysis

The researcher used SPSS to analyze the data for this quantitative research project. Data were obtained from Qualtrics™. The data were cleaned and prepared for analysis by the researcher. The researched used Little's Missing Completely at Random (MCAR) Test to test for missing survey items. Since there are three different sections of the survey, the data were prepared and cleaned for analysis by section. Some participants only completed certain sections of the survey. If a participant only completed a partial section of a survey, those responses were removed from the data set. The researcher only kept complete responses from each section of the data for analysis.

RQ1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

For this research question, the researcher determined if there was a significant difference among the beliefs of rural primary teachers, elementary teachers, and middle school teachers. Exploratory factor analysis (EFA) was used to examine the data sets in with the Likert-scale questions and multiple-choice questions. EFA is a statistical procedure commonly used in educational research (Williams, Onsman, & Brown, 2010). Factor analysis can reduce the number of variables into smaller sets called factors, can

establish connections between variables and the constructs, and can provide construct validity to the tool used (Williams et al., 2010). Factor analysis will help explain the common variance of correlation of variables (Field, 2018).

The researcher used EFA to analyze the correlation between each pair of variables, as well as explore for patterns in the variable correlations to reduce the number of variables in the Likert-scale section and multiple-choice section of the questionnaire. The researcher was interested in determining the group of survey items that are strongly correlated. An *R*-Matrix was used to report the data. EFA helped the researcher understand the overall variance in the variables. The factors were listed by the amount of variance they contained using eigenvalues. The researcher looked at eigenvalues greater than or equal to 1. Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin (KMO) were also conducted. Varimax rotation was used to attempt to clarify the relationships among each of the factors.

For this section of the survey, the researcher used Analysis of Covariates (ANCOVA) to compare the responses and determine the statistical differences between the means of each independent, educator group: years of experience, specific grade level taught, teacher gender, and highest degree earned. There were approximately 676 primary school teachers, 570 elementary school teachers, and 522 middle school teachers in the rural South Georgia districts involved in this study. Since there were three independent variables, ANCOVA was used (Ary, Jacobs, & Razavieh, 1996). In the ANCOVA statistical procedure, *F*-ratio will compare the differences of the error term (Ary et al., 1996). The *F*-ratio will be used to test the hypothesis among the different variables (Ary et al., 1996).

RQ2: How do the primary teachers, elementary teachers, and middle school teachers differ in their beliefs of factors that influence their decisions to retain students?

For this research question, the researcher examined the factors that cause educators to retain students at the elementary level in rural South Georgia. Survey participants rank-ordered factors that influence retention. Friedman, a non-parametric test, was used to disaggregate the data for the rank order section of the survey. This statistical procedure gave the researcher the mean rank. This statistical procedure was used to disaggregate the data for this rank order section of the survey and was used to find differences in treatments for multiple test items. Afterward, the researcher used a post hoc test as well to determine the Bonferroni correction.

To use the Friedman test, data must meet the three following assumptions. The group must be a random sample of the population, the dependent variable must be ordinal or continuous, and the samples do not have to be distributed normally (Laerd Statistics, 2018).

The mean rank was determined for the retention factors portion of the survey. The median values were reported for each factor. The test statistics, value (chi-square), degrees of freedom (*df*), and significance levels (asymp. sig.) were reported as well.

RQ3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

For this research question, the researcher determined if there was a significant difference among the knowledge of rural primary teachers, elementary teachers, and middle school teachers. This factor analysis helped the researcher identify the variables that were highly correlated with each other. The researcher used EFA to analyze the

correlation between each pair of variables. EFA helped the researcher analyze the correlation between each pair of variables and to understand the overall variance in the variables. EFA helped the researcher identify groups of items that can explain the covariance or factors and identify meaningful patterns in the multiple-choice items on the questionnaire which can be grouped together in a predictable way. Varimax rotation was used to attempt to clarify the relationships among each of the factors. The factors were listed by the amount of variance they contained using eigenvalues. The researcher looked at eigenvalues greater than or equal to 1.

For this section of the survey, the researcher used one-way ANCOVA to compare the responses from each independent and determine the statistical differences among the educator groups, as well as years of experience, specific grade level taught, teacher gender, and highest degree earned. The population included the same educators: an estimated 676 primary school teachers, 570 elementary school teachers, and 522 middle school teachers in the rural South Georgia district.

The researcher checked for effect sizes, using one-way ANCOVA, as well as used the Bonferroni adjustment to control for Type 1 errors. In the ANCOVA statistical procedure, *F*-ratio compares the differences of the error term (Ary et al., 1996). The *F*-ratio is used to test the hypothesis among the different variables (Ary et al., 1996). Since the researcher used three educator groups, ANCOVA was used to test the differences between the means of the groups, as well as the independent variables of years of experience, specific grade level taught, teacher gender, and highest degree earned.

An ANCOVA assumption is that groups being compared were random samples from the chosen population. In order for these assumptions to be true, the within-group

means and between-group means should not be different (Ary et al., 1996). The researcher expected the null hypothesis to be closely equal to 1.0. If the null hypothesis is rejected, the mean square should have a value greater than 1.0.

Summary

This descriptive research study was conducted in rural South Georgia with primary teachers, elementary teachers, and middle school teachers. The descriptive design was chosen to allow many educators from rural Georgia to participate in the study. This study's survey was used to gather the beliefs and knowledge of rural Georgia educators on the topic of retention. Primary teachers, elementary teachers, and middle school teachers' responses were compared and contrasted to determine how these educators were similar and different in their views of retention.

Chapter IV

RESULTS

Chapter 4 includes an overview of the study, which includes the purpose of the study, methodology and design, and data collection, including participation rate for the survey. The research questions are stated, and the results of the data collection are discussed by research question.

The purpose of this study was to examine the grade-level retention beliefs and knowledge of primary, elementary, and middle school teachers. Educator responses from the TRBKQ questionnaire were used to gain information and insight into the beliefs and knowledge of grade-level retention.

This quantitative study was conducted using survey research. The design chosen for this project allowed educators from rural Georgia to participate in the study. The beliefs of primary teachers, elementary teachers, and middle school teachers were compared to determine how these educators were similar and different in their views of retention. The researcher used SPSS to analyze the data for this study.

Data Management

Data were collected using Qualtrics™. The data were cleaned and prepared for analysis by the researcher. The researcher checked to see if the data were missing in a random or nonrandom way. The researcher used Little's Missing Completely at Random Test (MCAR) to check for missing values to ensure the hypothesis that data were missing at random. Missing values cannot be ignored. When examining the expectation

minimization means data table, the missing values were not significantly significant for the beliefs section (p = .774) or the knowledge section of the survey (p = .668). So, the researcher failed to reject the null hypothesis. This means that the data were most likely missing completely at random (see Appendix H and I).

Since there were three different sections of the survey, the data were prepared and cleaned for analysis by section. Some participants only completed certain sections of the survey. If a participant only completed a partial section of a survey, those responses were removed from the data set. The researcher kept only complete responses from each section of the data for analysis.

Research Questions

The following research questions guided this study:

Research Question 1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H1_{\Theta}$: The beliefs of primary teachers, elementary teachers, and middle school teachers on the topic of grade-level retention will not differ.

Research Question 2: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ regarding factors that influence their decisions to retain students?

$H2_{\Theta}$: Primary teachers, elementary teachers, and middle school teachers will not differ in their beliefs of the factors that influence their decisions to retain students.

Research Question 3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H3_{\Theta}$: The primary teachers', elementary teachers', and middle school teachers' knowledge base will not differ on the topic of grade-level retention.

Table 2 shows the participants' demographic data.

Table 2

Participant Demographic Data

Demographic Category	Groups	Percentages	*N*
Gender	Male	9.8%	87
	Female	90.2%	804
Age	18-25 years	4.9%	44
	26-34 years	18.4%	165
	35-44 years	32.1%	288
	45-54 years	32.6%	293
	55-64 years	11.4%	102
	65 and older	0.07%	6
Years of experience	0-5 years	19.3%	173
	6-10 years	15.9%	142
	11-15 years	15.6%	140
	16-20 years	16.6%	149
	21-25 years	17.0%	152
	26-30 years	11.1%	99
	30 years or more	0.04%	40
School Level	Primary	36.8%	197
	Elementary	31.4%	168
	Middle Grades	31.8%	170
Highest Degree Earned	Bachelor's	27.7%	243
	Master's	41.7%	366
	Specialist's	27.5%	241
	Doctoral	0.03%	27

The response rate for the survey was 54.19%. The researcher calculated descriptive statistics for each section of the survey.

Of those who initially responded, there were a total of 197 primary teachers, 168 elementary teachers, and 170 middle grades teachers. Of the respondents, 804 were

female, while 87 were male. Additionally, among those who responded to the survey, 243 held a bachelor's degree, 366 possessed a master's degree, 241 possessed a specialist's degree, and 27 held a doctoral degree, according to a Qualtrics.com report.

The age range of the respondents included: (a) 44 respondents in the 18-25 age range, (b) 165 educators in the 26-34 age range, (c) 288 educators in the 35-44 age range, (d) 293 were ages 45-54, (e) 102 educators were in the 55-64 age category, and (f) six respondents were age 65 or older.

The levels of experience of the survey participants included: (a) 173 survey participants with 0-5 years of experience, (b) 142 survey participants had 6-10 years of experience, (c) 140 survey participants had 11-15 years of experience, (d) 149 survey participants had 16-20 years of experience, (e) 152 survey participants had 21-25 years of experience, (f) 99 survey participants had 26-30 years of experience, and (g) 40 participants had 30 or more years of experience. according to a Qualtrics.com report.

Since there were three content sections of the survey, there were various respondents in each section of the survey. The exact demographics will be discussed in each of the appropriate sections.

Results for Research Question 1

Research Question 1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H1_{\Theta}$: The beliefs of primary teachers, elementary teachers, and middle school teachers on the topic of grade-level retention will not differ.

Demographics for RQ1

For RQ1 and the beliefs section of the TRBKQ, there were 517 fully completed surveys for this section. Of those surveys, 181 were primary teachers, 165 were elementary teachers, and 171 were middle school teachers. Of the respondents, 465 were female and 50 were male. Additionally, among those who responded to the survey, 169 held a bachelor's degree, 212 possessed a master's degree, 126 possessed a specialist's degree, and 10 held a doctoral degree, according to a Qualtrics.com report.

The age range of the respondents included: (a) 29 respondents in the 18-25 age range, (b) 103 educators in the 26-34 age range, (c) 169 educators in the 35-44 age range, (d) 167 in the 45-54 age range, (e) 46 educators in the 55-64 age range, and (f) three respondents were age 65 or older.

The levels of experience of the survey participants were found to be in the following ranges: (a) 116 survey participants had 0-5 years of experience, (b) 91 survey participants had 6-10 years of experience, (c) 83 survey participants had 11-15 years of experience, (d) 77 survey participants had 16-20 years of experience, (e) 82 survey participants had 21-25 years of experience, (f) 56 survey participants had 26-30 years of experience, and (g) 12 participants had 30 or more years of experience, according to a Qualtrics.com report. The researcher calculated percentages, mean averages, and standard deviations for all survey questions.

Descriptive Statistics

There were 20 Likert-scale items asking about respondents' beliefs of retention practices. The mean values for these items ranged from 2.23 to 4.23. When considering all educators (n = 517), teachers most strongly agreed on the B9 (M = 2.23, SD = .85) and

B1 statements (M = 2.25, SD = .89). They tended to agree that students who do not make passing grades in two of the three major subject areas (reading, ELA, and math) should be retained, as well as believing retention is an effective means of preventing students from facing daily failure in the next higher-grade level. Additionally, educators believe retention in grades K-5 is an effective means of giving the immature child a chance to catch up, according to statement B11 (M = 2.33, SD = .92).

Teachers most strongly disagreed with the B20 statement: Children should never be retained (M = 4.23, SD = .772). They also disagreed with the B17 statement (M = 3.77, SD = .87), that retention in K-5 permanently labels a child. Table 3 shows the means and standard deviations for the belief statements and Table 4 shows a comparison of these statistics across grade-level groups.

When considering primary teachers, elementary teachers, and middle grades teachers' responses in grade-band groups, some survey items are closely aligned as well as some that are vastly different. On survey item B1, elementary educators (M = 2.40, SD = .93) and middle grades educators (M = 2.37, SD = .96) answered this question similarly. Primary grades teachers (M=2.00, SD = .73) believed that retention is an effective means of preventing failure in the next grade level.

Primary grades teachers and elementary grades teachers had common responses on the survey items. There was a small discrepancy between survey items B2 and B9. For item B2, primary teachers (M = 2.41, SD = .862) and elementary teachers (M = 2.72, SD = .96) were not as aligned as the primary teachers and middle grades teachers (M = 2.47, SD = .97). This held true for survey item B9 as well. For item B9, primary teachers

(M = 2.08, SD = .80) and elementary teachers (M = 2.41, SD = .88) were not as aligned as the primary teachers and middle grades teachers (M = 2.21, SD = .84).

Table 3

Belief Statement Descriptive Statistics

Belief Statement	*N*	Mean	Standard Deviation
B1. Retention is an effective means of preventing students from facing daily failure in the next higher-grade level.	517	2.25	.893
B2. Retention is necessary for maintaining grade level standards.	517	2.53	.939
B3. Retaining a child in grade K-5 harms a child's self-concept.	517	3.41	.905
B4. Retention prevents classrooms from having wide ranges in student achievement.	517	3.59	.904
B5. Students who do not apply themselves should be retained.	517	3.19	1.014
B6. Knowing that retention is a possibility does motivate students to work harder.	517	2.65	.940
B7. Retaining a child in grades 6-8 harms a child's self-concept.	517	2.61	.973
B8. Retention is an effective means of providing support in school for the child who does not get support at home.	517	3.00	.975
B9. Students who do not make passing grades in 2 of the 3 major subject areas (reading, ELA, and Math) should be retained.	517	2.23	.846
B10. Students who make passing grades, but are below grade level, should be retained.	517	3.54	.803
B11. Retention in grades K-5 is an effective means of giving the immature child a chance to catch up.	517	2.33	.917
B12. Retention in grades 6-8 is an effective means of giving the immature child a chance to catch up.	517	3.15	.987
B13. Students receiving services from a learning support teacher should not be retained.	517	3.38	.830
B14. If students are to be retained, they should be retained no later than third grade.	517	2.95	1.100
B15. In grades K-5, over-age children (more than a year older than classmates) cause more behavior problems than other children	517	2.98	.948
B16. In grades 6-8, over-age children (more than a year older than classmates) cause more behavior problems than other children	517	2.65	.902
B17. Retention in grades K-5 permanently labels a child.	517	3.77	.867
B18. Retention in grades 6-8 permanently labels a child.	517	3.20	1.031
B19. Children who have passing grades, but excessive absences, should be retained.	517	3.61	.841
B20. Children should never be retained	517	4.23	.772

Table 4

Belief Statement Comparative Descriptive Statistics

	Primary Teachers			Elementary Teachers			Middle Grades Teachers		
Belief Statement	*N*	Mean	Standard Deviation	*N*	Mean	Standard Deviation	*N*	Mean	Standard Deviation
B1	181	2.00	.730	165	2.40	.929	171	2.37	.958
B2	181	2.41	.862	165	2.72	.961	171	2.47	.972
B3	181	3.49	.827	165	3.19	.973	171	3.54	.883
B4	181	3.55	.891	165	3.63	.871	171	3.58	.950
B5	181	3.40	.886	165	3.37	.995	171	2.80	1.049
B6	181	2.75	.869	165	2.73	.933	171	2.47	.996
B7	181	2.42	.830	165	2.36	.910	171	3.06	1.018
B8	181	2.85	.942	165	3.15	1.008	171	3.03	.961
B9	181	2.08	.802	165	2.41	.876	171	2.21	.835
B10	181	3.39	.820	165	3.61	.786	171	3.64	.780
B11	181	2.18	.851	165	2.39	.909	171	2.43	.976
B12	181	3.23	.895	165	3.28	.985	171	2.93	1.049
B13	181	3.41	.752	165	3.34	.866	171	3.37	.875
B14	181	2.66	1.013	165	2.80	1.105	171	3.39	1.048
B15	181	2.98	.989	165	2.96	1.011	171	3.00	.840
B16	181	2.59	.850	165	2.55	.900	171	2.81	.941
B17	181	3.89	.759	165	3.68	.981	171	3.73	.847
B18	181	3.14	1.006	165	3.06	1.057	171	3.39	1.008
B19	181	3.70	.802	165	3.62	.792	171	3.51	.916
B20	181	4.33	.649	165	4.07	.842	171	4.29	.801

On survey item B5, elementary grades teachers (M = 3.37, SD = 1.00) and primary teachers responses (M = 3.40, SD = .89) differed from middle grades teachers (M = 2.80, SD = 1.05) on the topic of retaining students who do not apply themselves. The same held true on B7. Elementary grades teachers (M = 2.36, SD = .91) and primary teachers (M = 2.42, SD = .83) differed from middle grades teachers (M = 3.06, SD = 1.02) on the topic of middle grades retention hurting the child's self-concept.

Finally, on survey item B14, primary teachers (M = 2.66, SD = 1.01) and elementary teachers (M = 2.80, SD = 1.11) had differing views than middle grades teachers (M = 3.39, SD = 1.05) on the topic of retaining a child no later than third grade.

Primary teachers (M = 2.98, SD = .99), elementary teachers (M = 2.96, SD = 1.01), and middle grades teachers (M = 3.00, SD = .84) were most closely aligned on survey item B15, which pertained to retained students being a potential behavior issue. The same held true on survey item B19. Primary teachers (M = 3.70 SD = .80), elementary teachers (M = 3.62, SD = .79), and middle grades teachers (M = 3.51, SD = .92) answered similarly about retaining students who have excessive absences.

Exploratory Factor Analysis

The researcher completed an exploratory factor analysis (EFA) on the Likert-scale data to reduce the number of variables into smaller sets, as well as to establish connections between the variables and the constructs. The sample (n = 517) size was appropriate for factor analysis. Table 5 shows the results from the Kaiser-Meyer-Olkin and Bartlett's tests.

Table 5

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling		.816
Bartlett's Test of Sphericity		
	Chi Square	3152.52
	Df	190
	Sig	.000

When working with a sample with many variables, researchers must check for the proportion of variance within those variables. Higher values, closer to 1, generally indicate factor analysis is needed and useful with the data set. The Kaiser-Meyer-Olkin Measure (KMO) statistic can vary between 0 and 1. Values closer to 0 may indicate that factor analysis may not be appropriate, but values closer to 1 indicate that the patterns of correlation can be compact, which would yield reliable and distinct factors (Field, 2018). With this data sample, KMO of Sampling Adequacy (.816) was preferred since the value is above .06 and therefore closer to 1. A score between .8 and .9 is strong, so the researcher should be confident of appropriateness of the factors (Field, 2018).

Bartlett's Test of Sphericity measures whether the correlation matrix is significantly different from an identity matrix (Field, 2018). For factor analysis to work, there needs to be some relationships between the variables. A significance test needs to be less than 0.05 in order to confirm the R-matrix is not an identify matrix. This helps the researcher conclude that there are some relationships between the variables (Field, 2018). With Bartlett's Test of Sphericity (p <.001), this means that the variances were equal for the samples, and therefore factor analysis was appropriate. Table 6 shows the variances by belief statement.

Table 6

Total Variance Explained

Belief Statement	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
B1	5.205	26.026	26.026	5.205	26.026	26.026
B2	2.232	11.162	37.188	2.232	11.162	37.188
B3	1.525	7.627	44.815	1.525	7.627	44.815
B4	1.197	5.986	50.801			
B5	1.076	5.379	56.181			
B6	.973	4.865	61.046			
B7	.908	4.541	65.587			
B8	.857	4.285	69.872			
B9	.764	3.819	73.691			
B10	.746	3.730	77.422			
B11	.672	3.361	80.782			
B12	.663	3.314	84.096			
B13	.556	2.779	86.875			
B14	.522	2.610	89.485			
B15	.485	2.424	91.910			
B16	.410	2.048	93.958			
B17	.338	1.690	95.648			
B18	.324	1.621	97.268			
B19	.310	1.550	98.819			
B20	.236	1.181	100.000			

The researcher completed the EFA to reduce the number of variables into smaller sets, as well as to establish connections between the variables and the constructs. For the factor analysis, SPSS initially extracted five factors or components for this section of the survey. These five factors accounted for 56.75% of the variance of the survey items or variables. There were five factors above the eigenvalue of 1. With EFA, eigenvalues tell the researchers about the substantive importance of the factors, and these eigenvalues help tell the researcher which factors to retain (Field, 2018). Higher values, closer to 1,

generally indicate factor analysis is needed and useful with the data set. Values closer to 0 may indicate that factor analysis may not be appropriate, but values closer to 1 indicates that the patterns of correlation can be compact, which would yield reliable and distinct factors (Field, 2018). The five factors extracted were examined to determine how the survey items were similar in nature, therefore reducing the number of variables. The other 15 factors were below the eigenvalue of 1, so they were not extracted.

The original five factors could not be explained well by the researcher. After examining the five factors, the researcher could not find common patterns among those survey items. The researcher decided not to retain the five-factor solution. The researcher conducted another EFA and forced SPSS to extract three factors. The three factors more clearly explained survey items. The survey items could be explained more clearly with the three factor rather than the 5 items. So, the researcher forced the three-factor solution.

By forcing SPSS to only extract three factors, the researcher was better able to find some common, distinguishable factors. These three factors explained 44.82% of the variance of the variables or survey items. According to Hair et al. (2014), variances in social sciences are often less precise than in natural sciences. It is common that having the factors that account for 60% of the variances or even less can be satisfactory. Williams et al. (2010) stated that best fits and factorial suitability should be used. The researcher must examine items and determine if some should be discarded based on what factors conceptually fit the factor structures.

The scree plot in Figure 1 shows the five factors with the eigenvalues above 1. It showed inflections that would justify retaining the five factors, but the researcher retained

only three of the factors because of the large number of survey items, as well as the factors not being able to be combined into common factor groups.

Figure 1

Scree Plot

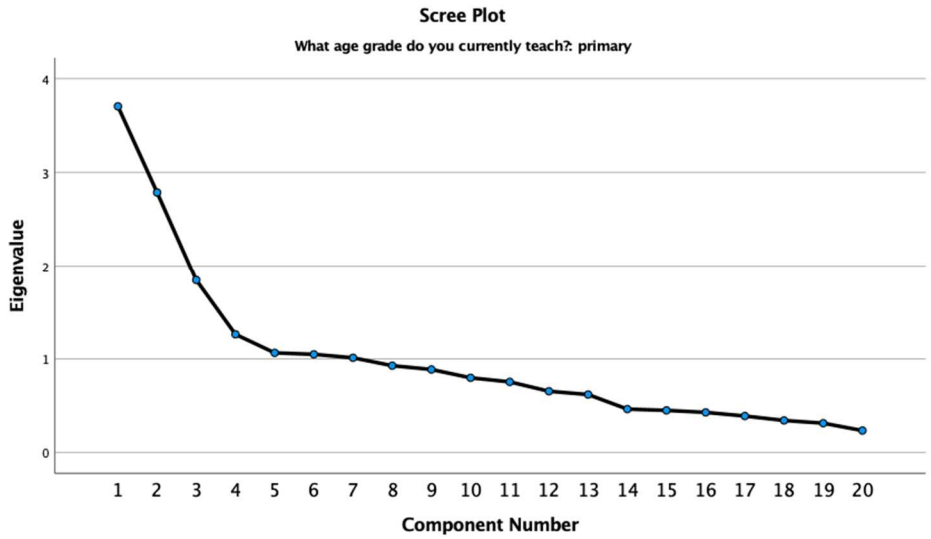


Table 7 shows the belief factors according to statement. Looking at the rotated factor matrix, the researcher sorted the coefficient display format by size, as well as suppressed factor loadings with the small coefficients under .30. These numbers represent clusters of variables that correlated highly with each other (Field, 2018). Factors with less than .30 can have few commonalities and differences can occur (Field, 2018). In other words, factors under .30 do not correlate well with each other. There were very strong loadings, variables grouped with similar values, with some of the belief items in this section of the survey. There were also some negative factor loadings which suggests there could be some issues with the survey itself. It may not have measuring exactly what it was intended to measure.

Table 7

Belief Factors

Belief Statement	Factor 1 Beliefs on Retention Policies	Factor 2 Beliefs on Behaviors and Self-Concept	Factor 3 Beliefs on School Standards and Student Motivation
B1. Retention is an effective means of preventing students from facing daily failure in the next-higher grade level.	.737		
B20. Children should never be retained.	-.723		
B2. Retention is necessary for maintaining grade level standards	.691		
B9. Students who do not make passing grades in 2 of the 3 major subject areas (reading, ELA, and Math) should be retained	.660		
B17. Retention in grades K-5 permanently labels a child.	-.625	.383	
B11. Retention in grades K-5 is an effective means of giving the immature child a change to catch up.	.606		
B8. Retention is an effective means of providing support in school for the child who does not get support at home.	.538		.389
B3. Retaining a child K-5 harms a child's self-concept.	-.524	.404	
B13. Students receiving services from a learning support teacher should not be retained.	-.411		
B6. Knowing that retention is a possibility does motivate students to work harder.	.395		
B16. In grades 6-8 overage children more than a year older than their classmates cause more behavior problems than other children.		.743	
B18. Retention in grades 6-8 permanently labels a child.	-.310	.700	
B7. Retaining a child in grades 6-8 harms a child's self-concept.		.665	-.311
B15. In grades K-5, overage children more than a year older than their classmates cause more behavior problems than other children.		.656	
B14. If students are to be retained, they should be retained, no later than third grade.		.610	
B12. Retention in grades 6-8 is an effective means of giving the immature child a chance to catch up.		-.331	.612
B19. Students who make passing grades, but excessive absences, should be retained.			.600
B5. Students, who do not apply themselves, should be retained.			.550
B4. Retention prevents classrooms from having wide ranges of student achievement.			.530
B10. Students who make passing grades, but are working below grade level, should be retained.			.355

For factor 1, there were strong loadings on questions B1, B2, B6, B8, B9, and B11. For factor 2, there were very strong factor loadings on questions B3, B7, B14, B15, B16, B17, and B18. For factor 3, there were very strong factor loadings for questions B4, B5, B10, B12, and B19.

In the studies that use the TRBKQ, only one study used EFA to reduce the number of variables. According to Haynes (2007), who conducted a research analysis using the TBRKQ, four factors were identified by principal factor analysis. Using a varimax rotation, four factors were identified by this 2007 study: factor 1 and 3, negative effects of retention; factor 2, retention policies; factor 4, student behavior. Typically, different factors are not grouped using the same name. However, this researcher chose to identify factors using the same name. For the purpose of this study, the researcher did not name factors with the same name since this is not the usual practice for EFA. With EFA, naming two factors by the same name goes against the main idea of the statistical procedure. Additionally, naming items with the same name can be distracting to the readers.

The TBRKQ has been used in over 20 studies, but only one study (Haynes, 2007) has used factor analysis to reduce the number of factors to analyze. There are 20 items in the first section of the survey, so EFA was chosen for this study to reduce the number of variables into smaller sets, as well as to establish connections between the variables and the constructs. Since there is only one study that used factor analysis, the researcher decided to use EFA instead of Confirmatory Factor Analysis (CFA) to check to see what factors would be extracted in the current study. Only items with an eigenvalue of greater than 1 were retained. Higher values, closer to 1, generally indicate factor analysis is

needed and useful with the data set. Values closer to 0 may indicate that factor analysis may not be appropriate, but values closer to 1 indicate that the patterns of correlation can be compact, which would yield reliable and distinct factors (Field, 2018).

Other dissertation researchers have used different methods to examine the data. Scimemi (2019) used a combination of mean score and sum of items to examine all the factors. Neuberger (2011) used descriptive statistics and analyzed percentages for both the belief and knowledge portions of the survey. The EFA, with the current sample, with varimax rotation, identified three factors. Factor 1 accounted for 26.80% of the variance, factor 2 for 11.24% of the variance, and factor 3 for 7.64% of the variance. This research identified component 1 as beliefs on retention policies, component 2 as beliefs of behavior and self-concept, and component 3 as beliefs on school standards and student motivation.

Analysis of Covariance

For this part of the analysis, the researcher looked at ANCOVA data. After the factors had been identified, the researcher then calculated the subscale scores by taking an average or sum of items used for each factor in order to perform ANCOVA on the data. New variables were formed by combining variables that were highly correlated with each other from EFA. After combining the variables, the researcher began to perform an ANCOVA on the data. According to Field (2018), ANCOVA, or analysis of covariance, is a statistical procedure used to compare group means, but the researcher also may adjust for those means for covariables that could affect the outcome. Ary et al. (1996) stated that ANCOVA is used to partially adjust for the pre-existing differences between groups. An ANCOVA was conducted on the covariates of gender, age, years

teaching, and highest degree earned. In this case, the researcher was specifically seeking whether there were differences in the dependent variable (belief factors) by the levels of the independent variables (grade level taught) while controlling for the effect of the covariates of gender, age, years taught, and degree level.

Before the ANCOVA could be performed, the researcher had to check for assumptions. The researcher checked for the assumptions for ANCOVA including normality, independence of the covariate and treatment effect, homogeneity of regression of slopes, and homogeneity of variances.

Assumption of Normality. The assumption of normality was not met since the Shapiro-Wilk was statistically significant on most of the independent variables (Table 8). The assumption was violated on the belief factor 1 and belief factor 3. The researcher rejected the null hypothesis that there is not a significant difference in the responses. This means that the data may be skewed. The researcher assumed there was a significant difference in the survey responses and that the survey responses were not normally distributed. The null hypothesis was rejected for belief factor 2. The researcher assumed the data were normally distributed for belief factor 2. However, ANCOVA is considered a robust statistical test against the assumption of normality; therefore, the violation of these data can be tolerated very well. Since the sample size was greater than 20, the researcher proceeded with the other assumption tests.

When considering the belief survey responses, only B20 has absolute values higher than 3.29. When looking at the belief factors 1, 2, and 3, there were some outliers. For belief factor 1, case numbers 10, 21, and 51 were all greater than 3.29. And for belief

factor 3, case numbers 781 and 782 were less than -3.29. These five outliers were changed to no longer be outliers.

Table 8

Tests of Normality for Belief Factors

	Belief Factor 1			Belief Factor 2			Belief Factor 3		
	Shapiro-Wilk								
	Statistic	*df*	Sig.	Statistic	*df*	Sig.	Statistic	*df*	Sig.
Primary Teachers	.981	181	.013	.988	181	.131	.979	181	.008
Elementary Teachers	.977	165	.008	.988	165	.171	.978	165	.013
Middle Grades Teachers	.982	1671	.028	.987	171	.115	.976	171	.006

However, when visually examining the histograms and plot graphs, the data did look normally distributed, so the researcher retained the outliers for this one survey question. The researcher did look at the data both with and without the outliers, and the data did not change when the outliers were removed. So, the researcher retained the outliers.

Assumption of independence of the covariate and treatment effect. The covariates were the same across of the educator groups. This assumption was met.

Assumption of homogeneity of regression of slopes. The assumption of homogeneity of regression of slopes was examined on the relationships between the dependent variables and each of the covariates. The slope lines were similar, which suggests the assumption of the homogeneity of regression slopes was met (Appendices J, K, and L).

Looking at the histograms and plot tests (Figures 2, 3, and 4), there are some outliers in the data sets. The researcher analyzed the *z*-scores to determine if any of the outliers in the belief factors were more than -3.29 or 3.29 as absolute values, as this is the standard.

Figure 2

Boxplot for Belief Factor 1 – Retention Policies

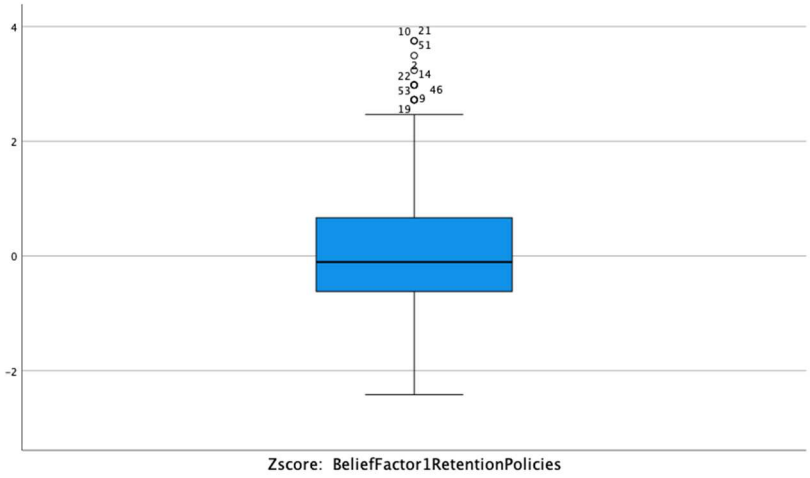


Figure 3

Boxplot for Belief Factor 2 – Behaviors/Self-concept

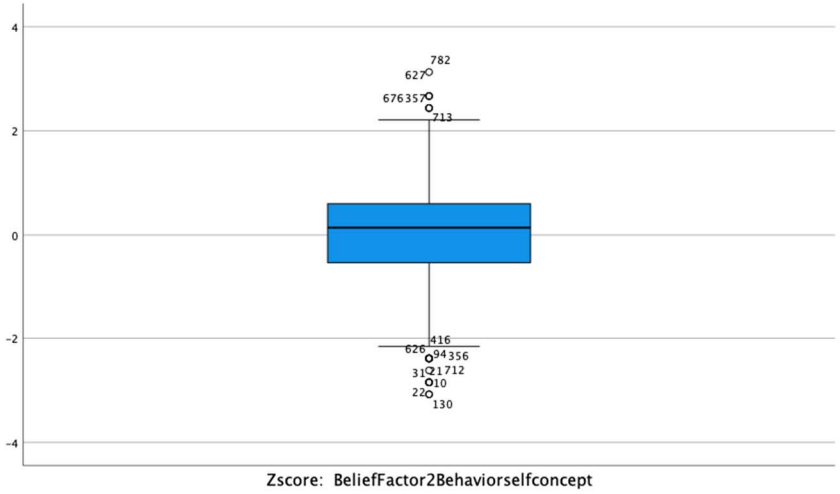
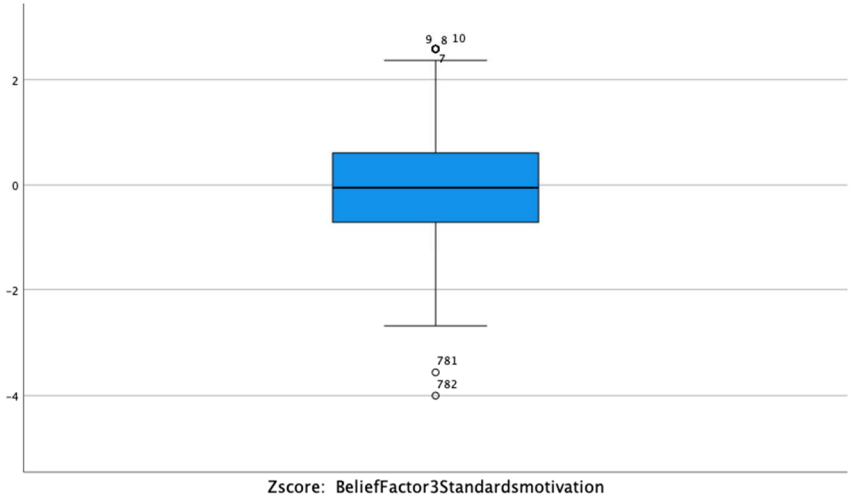


Figure 4

Boxplot for Belief Factor 3- Standards Motivation



Additionally, checking this statistically, all the IV and covariate combinations were not significant, with the exception of grade taught and highest degree. This suggests there may not be linearity between this IV and covariate. Table 9 shows the tests of between-subjects effects.

Table 9

Tests of Between-Subjects Effects

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.
Grade Taught* Gender	1.79	2	.894	2.71	.067
Grade Taught *Age	.224	2	.112	.338	.713
Grade Taught *Years Teaching	.278	2	.139	.420	.657
Grade Taught *Highest Degree	2.10	2	1.05	3.19	.042

Assumption of homogeneity of variances. The Levene's Test of equality of error of variances was conducted on the three belief factors (Table 10). This test was used to test the variance across the teacher groups.

Table 10

Levene's Test of Equality of Error Variances – Belief Factors

Factor 1: Beliefs on retention policies				Factor 2: Beliefs on behavior and self-concept				Factor 3: Beliefs on standards and motivation			
F	*df*1	*df*2	Sig.	*F*	*df*1	*df*2	Sig.	*F*	*df*1	*df*2	Sig.
3.140	2	514	.044	.603	2	514	.547	1.79	3	778	.147

The analysis showed non-statistical values of primary teachers ($p = .04$), elementary teachers ($p = .55$), and middle grades teachers ($p = .15$) respectively ($p > .05$). This indicated that there were significant differences between on belief factor 1. The other data indicated that there were not significant differences between the other two belief factors 2 and 3. This means that the equal variances assumption was met.

Belief Factors Descriptive Statistics Discussion

On belief factor 1, the elementary teachers ($M = 2.63$, $SD = .69$), on average, had the highest scores on the beliefs on retention policies. Primary teachers ($M = 2.38$, $SD = .52$) had the lowest scores on average. The middle grades teachers' responses ($M = 2.50$, $SD = .66$) were in between the elementary and primary teachers.

On belief factor 2, beliefs on retention policies, the middle grades teachers ($M = 3.27$, $SD = .61$) had the strongest feelings amongst the three educator groups. The second strongest feelings towards beliefs on retention policies came from the primary teacher group ($M = 3.02$, $SD = .58$). The elementary teacher group ($M = 2.94$, $SD = .66$) had the lowest average on belief factor 2.

On belief factor 3, beliefs on immaturity and motivation, the three educator groups answered the survey questions most similarly. The elementary teachers ($M = 3.26$

SD = .46) had the strongest feelings towards immaturity and motivation while the middle grades teachers (*M* = 3.09, *SD* = .44) had the lowest scores. The primary teachers (*M* = 3.17, *SD* = .38) were in the middle on this belief factor. Table 11 summarizes the descriptive statistics for all three belief factors.

Table 11

Descriptive Statistics – Belief Factors

	Factor 1: Beliefs on retention policies			Factor 2: Beliefs on behavior and self-concept			Factor 3: Beliefs on standards and motivation		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
Primary Teachers	181	2.38	.522	181	3.02	.575	181	3.17	.380
Elementary Teachers	165	2.63	.689	165	2.94	.663	165	3.26	.462
Middle Grades Teachers	171	2.50	.662	171	3.27	.606	171	3.09	.440

The means in this chart are adjusted slightly. This chart output provides adjusted means on the dependent variable for each of the groups. The means have been adjusted due to the fact that the effect of the covariate has been statistically removed.

The teacher groups rated the statements similarly. For belief factor 1, the elementary teachers rated the belief statements on retention policies slightly higher than the other teacher groups (*M* = 2.62), while the primary teachers (*M* = 2.35) rated this factor the lowest. For belief factor 2, the middle grades teachers (*M* = 3.19) rated the belief statements the highest, while the elementary teachers (*M* = 2.85) rated those statements the lowest. For belief factor 3, primary (*M* = 3.44) and middle grades (*M* = 3.49) educator groups rated the belief statements on standards and motivation very

similarly, while the middle grades teacher group rated it slightly higher (M = 3.32). Table 12 shows the estimated marginal means for all three belief factors.

A one-way ANCOVA was conducted to determine whether a statistically significant difference existed between the primary, elementary, and middle grades teachers on belief factors 1, 2, and 3, controlling for gender, age, years teaching, and highest degree earned. For belief factor 1, an ANCOVA analysis was performed using gender, age, years teaching, and highest degree earned as covariates, and grade level taught as the independent variable, while belief factor 1 was the dependent variable.

The ANCOVA results for belief factor 1 indicated the overall model was significant at F(6, 517) = 4.67, (p <.001, $\eta^2 = .06$). Grade taught F(2, 517) = 8.20, (p = .01, $\eta^2 = .01$) was the main variable. Since the p-value was less than .001, this means that there was a statistically significant difference between the educator groups for belief factor 1. This means there is evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

Additionally, gender F(1, 517) = 7.61, (p = .01, $\eta^2 = .01$) was significantly related to the belief factor. Age F(1, 517) = .78, (p = .38, $\eta^2 = .00$), years teaching F(1, 517) = .12, (p = .73 , $\eta^2 = .000$), and highest degree earned F(1, 517) = 1.59, (p = .21 , $\eta^2 = .01$) were not significantly related to the DV. Therefore, it can be concluded that belief on retention policies was significantly influenced by the educator's gender, but none of the other any of the covariates. Table 13 demonstrates the tests of between-subjects effects and Table 14 shows the pairwise comparisons for belief factor 1.

Table 12

Estimated Marginal Means – Belief Factors

	Factor 1: Beliefs on Retention policies				Factor 2: Beliefs on Behavior and Self-concept				Factor 3: Beliefs on Standards and Motivation			
		95% confidence Interval				95% confidence Interval				95% confidence Interval		
	Mean	Lower bound	Upper bound	Std. Error	Mean	Lower bound	Upper bound	Std. Error	Mean	Lower Bound	Upper Bound	Std. Error
Primary Teachers	2.35	2.26	2.45	.047	3.01	2.91	3.10	.046	3.44	3.36	3.52	.040
Elementary Teachers	2.62	2.52	2.72	.049	2.95	2.85	3.04	.048	3.49	3.40	3.57	.041
Middle Grades Teachers	2.53	2.44	2.63	.049	3.29	3.19	3.38	.04	3.32	3.24	3.41	.042

Table 13

Tests of Between-Subjects Effects – Retention Policies

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA squared
Corrected Model	10.78*	6	1.80	4.67	<.001	.062
Intercept	27.83	1	27.83	72.32	<.001	.137
Grade Taught	6.31	2	3.16	8.20	<.001	.034
Gender	2.93	1	2.93	7.61	.006	.010
Age	.301	1	.301	.781	.377	.004
Years Teaching	.047	1	.047	.122	.727	.000
Highest Degree	.613	1	.613	1.59	.207	.005
Error	196.28	510	.385			
Total	3433.31	517				
Corrected Total	201.05	516				

*R squared = .052(Adjusted R squared = .041)

When examining for Belief factor 1 data, there was a significant difference in the beliefs of retention policies between the primary teacher group and the elementary teacher group (p = <.001). There was not a significant difference in the elementary teacher group and the middle grades teacher group (p = .92). There was also not a significant difference in the primary teacher group and the middle grades teacher group (p = .11).

The ANCOVA results for belief factor 2 indicated the overall model was significant at F(6, 517) = 2.45, (p <.001, $\eta^2 = .07$). Grade taught F(2, 517) = 4.97, (p = .01, $\eta^2 = .31$) was the main variable. Since the p-value was less than .001, this means that there was a statistically significant difference between the educator groups for belief factor 2. This means there is evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

Table 14

Pairwise Comparisons for Belief Factor 1 – Belief on Retention Factors

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	-.267*	.067	<.001	-.428	-.105
	Middle grade teachers	-.180	.070	.031	-.348	-.012
Elementary teachers	Primary teachers	.267*	.067	<.001	.105	.428
	Middle grade teachers	.086	.070	.665	-.083	.256
Middle grade teachers	Primary teachers	.180	.070	.031	.012	.348
	Elementary teachers	-.086	.070	.665	-.256	.083

Based on estimated marginal means
*The mean difference is significant at the .05 level
b. Adjustment for multiple comparisons: Bonferroni

The ANCOVA results for belief factor 2 indicated the overall model was not significant at F(6, 517) = 6.59, (p <.001 , $\eta^2 = .07$). Additionally, gender F(1, 517) = .99, (p = .31), age F(1, 517) = .09, (p = .77, $\eta^2 = .00$), and years teaching F(1, 517) = .12, (p = .73 , $\eta^2 = .00$) were not significantly related to the dependent variable. Highest degree earned F(1, 517) = .12, (p =.00, $\eta^2 = .02$) was significantly related to the dependent variable. Therefore, it can be concluded that beliefs on behavior and self-concept were significantly influenced by the educator's degree earned, but none of any of the other covariates. Table 15 demonstrates the tests of between-subjects effects and Table 16 shows the pairwise comparisons for belief factor 2.

Table 15

Tests of Between-Subjects Effects – Beliefs on Behavior and Self-concept

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA Squared
Corrected Model	14.68*	6	2.45	6.59	<.001	.072
Intercept	82.94	1	82.94	223.30	<.001	.305
Grade Taught	9.94	2	4.97	13.39	<.001	.050.
Gender	.371	1	.371	.999	.318	.002
Age	.032	1	.032	.087	.768	.000
Years Teaching	.044	1	.044	.120	.730	.000
Highest Degree	3.91	1	3.91	10.52	.001	.020
Error	189.43	510	.371			
Total	5109.88	517				
Corrected Model	204.11	516				

*R squared = .072 (Adjusted R squared = .061)

When examining the belief factor 2 data, there was a significant difference in the beliefs of behavior and self-concept beliefs of the primary teacher group and the middle grades teacher group (p = <.001). There was also a significant difference in the elementary teacher group and the middle grades teacher group (p = <.001). There was not a significant difference in the primary teacher group and the elementary grades teacher group (p = .97).

The ANCOVA results for belief factor 3 indicated the overall model was significant at F(6, 517) = 4.16, (p <.001, $\eta^2 = .06$). Grade taught F(2, 517) = 3.68, (p = .03, $\eta^2 = .01$) was the main variable.

Table 16

Pairwise Comparisons for Belief Factor 2 - Beliefs on Behavior and Self-concept

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	.065	.066	.968	-.093	.224
	Middle grade teachers	-.276*	.069	<.001	-.441	-.111
Elementary teachers	Primary teachers	-.065	.066	.968	-.224	.093
	Middle grade teachers	-.341*	.069	<.001	-.507	-.175
Middle grade teachers	Primary teachers	.276*	.069	<.001	.111	.441
	Elementary teachers	.341*	.069	<.001	.175	.507

Based on estimated marginal means
*The mean difference is significant at the .05 level
b. Adjustment for multiple comparisons: Bonferroni

Since the *p*-value was less than .05, this means that there was a statistically significant difference between the educator groups for belief factor 3. This means there is evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

The ANCOVA results for belief factor 3 indicated the overall model is not significant at F(6, 517) = 4.16, ($P = <.001$, $\eta^2 = .05$). Age F(1, 517) = 1.33, ($p = .25$, $\eta^2 = .00$), years teaching F(1, 517) = 1.45, ($p = .23$, $\eta^2 = .00$), and highest degree earned F(1, 517) = 1.88, ($p = .17$, $\eta^2 = .00$) were not significantly related to the dependent variable.

Additionally, gender F(1, 517) = 5.82, (P = .016, $\eta^2 = .01$) was significantly related to the dependent variable. Therefore, it can be concluded that beliefs about immaturity and motivation are significantly influenced by the educator's gender, but none of any of the other covariates. Table 19 demonstrates the tests of between-subjects effects and Table 20 shows the pairwise comparisons for belief factor 3.

Table 17

Tests of Between-Subject Effects – Beliefs on Standards and Motivation

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA Squared
Corrected Model	6.97*	6	1.16	4.16	<.001	.047
Intercept	78.99	1	78.99	282.70	<.001	.357
Grade Taught	2.06	2	1.03	3.68	.026	.014
Gender	1.63	1	1.63	5.82	.016	.011
Age	.370	1	.370	1.33	.250	.003
Years Teaching	.404	1	.404	1.45	.230	.003
Highest Degree	.526	1	.526	1.88	.171	.004
Error	142.50	510	.279			
Total	6180.52	517				
Corrected Total	149.48	516				

*R squared = .047 (Adjusted R square = .035)

When examining the belief factor 3 data, there were no significant differences between the beliefs of immaturity and motivation of primary teachers and elementary teachers (p = 1.00) or the elementary teacher and middle grades teachers (p = .18). There were significant differences between the primary and middle grades teachers (P = .02) on the beliefs of immaturity and motivation.

Table 18

Pairwise Comparisons for Belief Factor 3 - Beliefs on Standards and Motivation

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	-.047	.057	1.000	-.185	.090
	Middle grade teachers	.113	.060	.178	-.030	.256
Elementary teachers	Primary teachers	.047	.057	1.000	-.090	.185
	Middle grade teachers	.160	.060	.024	.016	.304
Middle grades teachers	Primary teachers	-.113	.060	.178	-.256	.030
	Elementary teachers	-.160	.060	.024	-.304	-.016

Based on estimated marginal means
*The mean difference is significant at the .05 level
Adjustment for multiple comparisons: Bonferroni

Results for Research Question 2

Research Question 2: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ regarding factors that influence their decisions to retain students?

$H2_{\Theta}$: Primary teachers, elementary teachers, and middle school teachers will not differ in their beliefs of the factors that influence their decisions to retain students.

Demographics for Research Question 2

For RQ2 and the retention factors section of the TRBKQ, there were 476 completed surveys. For the retention factors portion of the survey, 167 primary teachers, 155 elementary teachers, and 154 middle school teachers completed this section of the

survey. There were 226 respondents who identified themselves as special education, resource, or other. Table 19 shows the number of responses to this section of the survey.

Table 19

Number of Respondents in Each Teacher Group

Teacher Group	Number of Respondents
Primary Grades Teachers	167
Elementary Grades Teachers	155
Middle Grades Teachers	154
Total	476

Of the respondents, 432 were female and 43 were male. Additionally, among those who responded to the survey, 151 held a bachelor's degree, 197 possessed a master's degree, 118 possessed a specialist's degree, and 10 held a doctoral degree.

The age range of the respondents included: (a) 26 respondents in the 18-25 age range, (b) 97 educators in the 26-34 age range, (c) 150 educators in the 35-44 age range, (d) 154 in the 45-54 age range, (e) 47 educators in the 55-64 age range, and (f) two respondents were age 65 or older.

The levels of experience of the survey participants were in the following ranges: (a) 104 survey participants had 0-5 years of experience, (b) 84 survey participants had 6-10 years of experience, (c) 77 survey participants had 11-15 years of experience, (d) 67 survey participants had 16-20 years of experience, (e) 77 survey participants had 21-25 years of experience, (f) 54 survey participants had 26-30 years of experience, and (g) 13 participants had 30 or more years of experience. The researcher calculated percentages, mean averages, and standard deviations for all survey questions.

Friedman's Test and Kendall's *W* Test

For RQ2 and the retention factors section of the TRBKQ, the researcher performed the Friedman Test as well was the Kendall's *W* Test on the ranked order data. The Friedman's Test is used to measure the analysis of variances for rank order data. This test is used for repeated measurements.

Friedman's Test and Kendall's *W* Test were performed on the rank order data for the factors of retention section of the TRBKQ. Friedman's Test is performed on rank order data. The Friedman Test is a nonparametric test that compares and ranks group responses. Kendall's *W* Test is used to assess the agreement amongst the survey respondents. The tests were performed on each group individually as well as all groups combined. All the educator groups ranked academic performance and ability as the two most important factors in deciding to retain a student. Both primary teachers and elementary teachers thought the third most important factor was a child's social/emotional maturity. Middle grades teachers indicated that effort was the third most important factor. All three educator groups believed that home environment and transient student status were the least important factors to consider when retaining a student.

The primary teacher group data and elementary teacher group data were very similar. In the primary educator data set (n = 167), the teachers ranked academic performance (M = 1.62, SD = 1.41), ability (M = 2.95, SD = 1.88), and social emotional maturity (M = 4.79, SD = 2.06) as the three most important retention factors. Educators ranked home environment (M = 7.95, SD = 1.80) and transient student status (M = 8.28, SD = 1.94) the least important factors in deciding to retain a student. A Chi square test of

independence was performed to measure the relation between the three educator groups. The relation between these variables was significant. There was a significant difference in rating of factors $x^2(9, N = 167) = 706.35$, $w = .470$, $p < .01$). A Kendall's W was calculated to measure the agreement among the primary educators ($n = 167$). There was a significant difference in rating of factors ($w = .470$, $p < .01$). The null hypothesis was rejected since $p < .001$, indicating that not all the factors' medians were equal. Tables 20 and 21 show the mean rank of educator data by grade-level group for the factors that influence retention decisions.

Table 20

Friedman's Mean Rank of Educator Data for Factors that Influence Retention Decisions

	Primary Educator Retention Factors Data	Elementary Educator Retention Factors Data	Middle Grades Educator Retention Factors Data	All Educator Retention Factors Data
Factor	Mean Rank	Mean Rank	Mean Rank	Mean Rank
Parental Input	6.51	6.02	6.47	6.34
Learning Disability	4.90	5.39	5.80	5.35
Academic Performance	1.62	2.17	2.27	2.01
Social / Emotional Maturity	4.79	4.88	4.82	4.83
Transient Student	8.28	8.23	8.19	8.24
Age in relation to others	6.27	6.31	5.87	6.15
Home environment	7.95	7.74	7.85	7.85
Effort being put forth	5.15	5.01	3.68	4.43
Child's self-esteem	6.49	5.92	6.82	6.41
Ability	2.95	3.00	3.39	3.11

Table 21

Friedman's Median Rank of Educator Data for Factors that Influence Retention Decisions

	Primary Educator Retention Factors Data	Elementary Educator Retention Factors Data	Middle Grades Educator Retention Factors Data	All Educator Retention Factors Data
Factor	Median Rank	Median Rank	Median Rank	Median Rank
Parental input	7.00	6.00	7.00	6.00
Learning disability	4.00	5.00	6.00	5.00
Academic performance	1.00	1.00	2.00	1.00
Social-emotional maturity	5.00	5.00	5.00	5.00
Transient student	9.00	9.00	9.00	9.00
Age in relation to others	6.00	6.00	6.00	6.00
Home environment	8.00	8.00	8.00	8.00
Effort being put forth	5.00	5.00	3.00	4.00
Child's self-esteem	7.00	6.00	7.00	6.00
Ability	2.00	3.00	3.00	4.00

In the elementary educator data set (n = 155), the teachers ranked academic performance (Mdn = 1.00), ability (Mdn = 3.00), and social-emotional maturity (Mdn = 5.00) as the three most important retention factors. These were the same as the primary educator group: academic performance (Mdn = 1.00), ability (Mdn = 2.00), and social-emotional maturity (Mdn = 5.00). All three educator groups ranked home environment and transient student status the least important factors in deciding to retain a student. A Kendall's W was calculated to measure the agreement among the elementary educators (n = 155). A Chi square test of independence was performed to measure the relation between the three educator groups. The relation between these variables was significant. Table 22 demonstrates the test statistics.

Table 22

Test Statistics and Kendall's W

	Primary Teachers	Elementary Teachers	Middle Grades Teachers	All Educators
N	167	155	154	476
Kendall's W	.470	.384	.420	.389
Chi-Square	706.35	535.72	581.97	1775.54
df	9	9	9	9
Asymp. Sig.	<.0001	<.0001	<.0001	<.0001

There was a significant difference in rating of factors $x^2(9, N = 155) = \eta^2 = 535.72$, $w = .384$, $p < .01$). The null hypothesis was rejected since $p < .001$, indicating that not all the factors' medians were equal.

In the middle grades educator data set ($n = 154$), the teachers ranked academic performance (*Mdn* = 2.00), ability (*Mdn* = 3.00), and effort being put forth (*Mdn* = 3.00) as the three most important retention factors. The first two were the same as the primary and elementary educator group, but the third factor changed to effort instead of social-emotional maturity. A Chi square test of independence was performed to measure the relation between the three educator groups. The relation between these variables was significant. There was a significant difference in rating of factors $x^2(9, n = 154) = \eta^2 = 581.97$, $w = .420$, $p < .01$). A Kendall's *W* was calculated to measure the agreement among the middle grades' educators ($n = 154$). There was a significant difference in rating of factors ($w = .384$, $p < .01$). The null hypothesis was rejected since $p < .001$, indicating that not all the factors medians were equal.

In the overall data sample set ($N = 476$), all teachers ranked academic performance (*Mdn* = 2.00), ability (*Mdn* = 4.00), and social-emotional maturity (*Mdn* = 5.00) as the

three most important retention factors. All educators ranked home environment (*Mdn* = 8.00) and transient student status (*Mdn* = 9.00) as the least important factors in deciding to retain a student. Since there were 10 retention factors, the degrees of freedom equaled nine (*df* = 9). A Chi square test of independence was performed to measure the relation between the three educator groups. The relation between these variables was significant. There was a significant difference in rating of factors $x^2(9, N = 476) = \eta^2 = 1775{,}54$, w = .389, $p < .01$). A Kendall's *W* was calculated to measure the agreement among all educators ($N = 476$). There was a significant difference in rating of factors ($w = .389$, $p < .01$). The null hypothesis was rejected since $p < .001$, indicating that not all the factors medians were equal. Table 23 shows the pairwise comparisons analyzed using Dunn's test.

Since the relation of the factors were significant, the researcher performed a post hoc test. Post hoc analysis with Wilcoxon ranked tests were performed on the data with a Bonferroni correction. Significance was found between all variables except: (a) effort being put forth and social emotional maturity ($p = .302$), (b) age in relation to others and parental input ($p = .35$), (c) age in relation to others and home environment ($p = .18$), (d) parental input and child's self-esteem ($p = .68$), and (e) home environment and transient student ($p = .01$).

Table 23

Pairwise Comparisons – Dunn's Test

Sample 1–Sample 2	Test Statistic	Std Error	Standard Test Statistic	Sig	Adjusted Sig.
Academic performance – Ability	-1.11	.196	-5.64	<.001	.000
Academic performance-Effort put forth	-2.63	.196	-13.39	.000	.000
Academic performance – Social/emotional maturity	-2.83	.196	-14.43	.000	.000
Academic performance – Learning disability	3.34	.196	17.01	.000	.000
Academic performance – Age in relation to others	-4.15	.196	-21.12	.000	.000
Academic performance – Parental input	4.33	.196	22.05	.000	.000
Academic performance – Child's self-esteem	-4.41	.196	-22.46	.000	.000
Academic performance – Home environment	-5.86	.196	-29.87	.000	.000
Academic performance-Transient student	-6.19	.196	-31.53	.000	.000
Ability – Effort put forth	1.52	.196	7.76	<.001	.000
Ability - Social/emotional maturity	1.73	.196	8.79	.000	.000
Ability – Learning disability	2.23	.196	11.37	.000	.000
Ability – Age in relation to others.	3.04	.196	15.48	.000	.000
Ability – Parental input	3.22	.196	16.41	.000	.000
Ability – Child's self-esteem	3.30	.196	16.82	.000	.000
Ability – Home environment	4.76	.196	24.23	.000	.000
Ability – Transient Student	5.08	.196	25.89	.000	.000
Effort being put forth – Social/emotional maturity	.203	.196	1.03	.302	1.00
Effort being put forth – learning disability	.710	.196	3.62	<.001	.013
Effort being put forth – Age in relation to others	1.52	.196	7.73	<.001	.000
Effort being put forth – Parental Input	1.70	.196	8.66	.000	.000
Effort being put forth – Child's self-esteem	-1.78	.196	-9.07	.000	.000
Effort being put forth – Home environment	3.23	.196	16.48	.000	.000
Effort being put forth – Transient student	3.56	.196	18.13	.000	.000
Social/emotional maturity – Learning Disability	.51	.196	2.59	.010	.438

Social/emotional maturity – Age in relation to others	-1.31	.196	-6.70	<.001	.000
Social/emotional maturity -Parental input	1.50	.196	7.63	<.001	.000
Social/emotional maturity -Child's self-esteem	-1.58	.196	-8.03	<.001	.000
Social/emotional maturity -Home environment	-3.03	.196	-15.44	.000	.000
Social/emotional maturity -Transient student	-3.36	.196	-17.10	.000	.000
Learning disability – Age in relation to others	-.81	.196	-4.11	<.001	.002
Learning disability – Parental input	.99	.196	5.40	<.001	.000
Learning disability – Child's self-esteem	-1.07	.196	-5.45	<.001	.000
Learning disability – Home environment	-2.52	.196	-12.86	.000	.000
Learning disability – Transient student	-2.85	.196	-14.52	.000	.000
Age in relation to others – Parental input	.18	.196	.93	.35	1.000
Age in relation to others -Child's self esteem	-.26	.196	-1.34	.18	1.000
Age in relation to others – Home environment	-1.72	.196	-8.75	.000	.000
Age in relation to others – Transient student	2.04	.196	10.41	.000	.000
Parental input – Child's self esteem	-.08	.196	-.41	.68	.000
Parental input – Home environment	-1.53	.196	-7.81	<.001	.000
Parental input – Transient student	-1.86	.196	-9.47	.000	.000
Child's self-esteem – Home environment	1.45	.196	7.41	<.001	.000
Child's self-esteem -Transient student	1.78	.196	9.07	.000	.000
Home environment – Transient student	.33	.196	1.66	.010	1.000

Results for Research Question 3

Research Question 3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H3_{\Theta}$: The knowledge base of primary teachers, elementary teachers, and middle school teacher' knowledge base will not differ on the topic of grade-level retention.

Demographics for Research Question 3

For RQ3 and the knowledge section of the TRBKQ, 389 completed surveys for this section were submitted. For the retention factors portion of the survey, 138 primary teachers, 128 elementary teachers, and 123 middle school teachers completed this section.

Of the respondents, 351 were female and 37 were male. Additionally, among those who responded to the survey, 113 held a bachelor's degree, 167 possessed a master's degree, 101 possessed a specialist's degree, and 8 held a Doctoral degree.

The age range of the respondents included: (a) 19 respondents in the 18-25 age range, (b) 80 educators in the 26-34 age range, (c) 129 educators in the 35-44 age range, (d) 123 in the 45-54 age range, (e) 35 educators in the 55-64 age range, and (f) 23 respondents were age 65 or older.

The levels of experience of the survey participants were found to be in the following ranges: (a) 80 survey participants had 0-5 years of experience, (b) 72 survey participants had 6-10 years of experience, (c) 65 survey participants had 11-15 years of experience, (d) 53 survey participants had 16-20 years of experience, (e) 64 survey participants had 21-25 years of experience, (f) 46 survey participants had 26-30 years of experience, and (g) nine participants had 30 or more years of experience. The researcher calculated percentages, means, and standard deviations for all survey questions.

Descriptive Results for Research Question 3

For the knowledge portion of the data analysis, a total of 649 total teachers responded to all of the knowledge multiple choice questions. Some knowledge questions had as many as 597 who answered the multiple-choice questions. There was a total of

eight knowledge questions. For data analysis purposes, they were labeled K1, K2, K3, K4, K5, K6, K7, and K8. Table 24 shows the percentages of selected answers for knowledge question #1.

Table 24

Knowledge Question #1

What is the current educational position on retention and social promotion?								
Multiple-choice answers	All educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Schools should keep both social promotion and grade retention	240	61.7	89	64.5	74	57.8	77	62.6
Schools should end both social promotion and grade retention.*	29	7.5	10	7.2	14	10.9	5	4.1
Schools should end social promotion and keep grade retention	97	24.9	34	24.6	29	22.7	34	27.6
Schools should keep social promotion and end grade retention	23	5.9	5	3.6	11	8.6	7	5.7

For the first knowledge question, 92.7% of educators in all groups chose the wrong answer overall. Only 7.3% of the educators who completed the survey answered this question correctly. The correct answer was the lowest-ranked answer for all teacher groups except primary teachers. The primary group did rank *keeping social promotion and ending grade retention* the lowest of all answers. The teachers indicated that social promotion and grade retention should be an active practice in schools, but this is in direct opposition to the research. Table 25 shows the percentages of selected answers for knowledge question #2.

Table 25

Knowledge Question #2

Whether a student is promoted or retained, what does the majority of the current research say about the long-term effects on students' academic achievement?								
Multiple-choice answers	All Educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Retention does not effectively increase academic achievement among low-achieving students. *	88	22.6	22	15.9	38	29.7	28	22.8
Social promotion does not effectively increase academic achievement among low-achieving students.	112	28.8	44	31.9	32	25.0	36	29.3
Neither social promotion nor retention effectively increase academic achievement.	117	30.1	42	30.4	38	29.7	37	30.1
Both social promotion and retention effectively increase academic achievement.	72	18.5	30	21.7	20	15.6	22	17.9

For the second knowledge multiple-choice question, 24% of all educators chose the correct answer for this question, which meant 76% of all educators did not choose the correct answer for this retention question either. The correct response was the least selected response by the primary teacher group, with only 15.9% of the primary teacher group selecting the correct answer. Only 29.7% of the elementary teacher group and 22.8% of the middle grades teacher group selected the correct answer. Table 26 shows the percentages of selected answers for knowledge question #3.

The majority of educators (60.7%) selected the correct answer for this knowledge question, but almost 40% of the educators did not select the correct answer. The correct answer was the top response by each of the three teacher groups. Interestingly, almost

one-third of the primary and elementary teacher groups believed the first-grade student would be indifferent towards news of retention.

Table 26

Knowledge Question #3

According to the current research, how will Steven, a first grader, most likely feel when he hears that he is going to be retained?								
Multiple-choice answers	All educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
He will be indifferent towards the decision.	113	29.0	43	31.2	45	35.2	25	20.3
He will feel relieved because now he can "catch up" on his basic skills.	21	5.4	11	8.0	5	3.9	5	4.1
He will feel like he is being punished.*	239	61.4	75	54.3	74	57.8	90	73.2
He will feel happy because he will be the leader in the class.	16	4.1	9	6.5	4	3.1	3	2.4

Table 27 shows the percentages of selected answers for knowledge question #4. For this knowledge question, only 13.6% of the teachers selected the correct answer. Each teacher group believed that students become more mature or experience a benefit in these extra programs. More than 50% of the teachers in each of the three teacher groups thought that an extra year would be beneficial to students.

Table 28 shows the percentages of selected answers for knowledge question #5. A majority of the educators (65.2%) surveyed selected the correct answer for this knowledge question. All teacher groups ranked this answer higher than the other selections. Therefore, all teacher groups knew that two retentions are not best for students.

Table 27

Knowledge Question #4

In general, what does the current research say about an extra year in kindergarten, pre-kindergarten programs, and/or transitional first programs?								
Multiple-choice answers	All Educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Students do not experience any benefits from these extra-year programs.*	57	14.7	18	13.0	17	13.3	22	17.9
Students become more mature as a result of these extra-year programs.	104	26.7	35	25.4	41	32.0	28	22.8
Students experience a benefit in academic achievement in these extra-year programs.	205	52.7	76	55.1	64	50.0	65	52.8
Students experience higher self-esteem from these extra-year programs.	23	5.9	9	6.5	6	4.7	8	6.5

Interestingly, only 1% of each teacher group believed that a student who was retained once in elementary school would be likely to drop out of school. This is in direct contrast to the research, which indicates that even one retention can cause a student to drop out of school.

Table 29 shows the percentages of selected answers for knowledge question #6. When examining all teacher group data, the majority of teachers did not select the correct answer for this knowledge question. It was the second-highest selected question, but 60% of the educators did not select the response that academic gains fade over time. The elementary group of teachers did select this as the highest-ranked answer, but primary and middle grades did not. The primary teacher group and middle grades teacher group selected the response that indicated academic gains increase over time.

Table 28

Knowledge Question #5

According to current research, which student is most likely to drop out of school?								
Multiple-choice answers	All educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
John, who was held back one time, in elementary school.	5	1.3	1	0.7	3	2.3	1	0.8
Brian, who has been held back once in elementary school and once in middle school. *	240	61.7	81	58.7	87	68.0	72	58.5
Matt, who has been performing below average every school year but has never been retained.	93	23.9	41	29.7	27	21.1	25	20.3
David, who was recommended for retention but was promoted to the next grade level.	51	13.1	15	10.9	11	8.6	25	20.3

Table 29

Knowledge Question #6

In general, what does the majority of the current research say about grade retention and academic gains?								
Multiple-choice answers	All educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Academic gains are not noticed until three or four years after retention.	53	13.6	14	10.1	21	16.4	18	14.6
Any academic gains made during the repeated year increase over time.	158	40.6	67	48.6	38	29.7	53	43.1
Retained students make more academic gains than those who are promoted.	49	12.6	19	13.8	19	14.8	11	8.9
Any academic gains made during the year fade over time. *	129	33.2	38	27.5	50	39.1	41	33.3

Table 30 shows the percentages of selected answers for knowledge question #7.

Table 30

Knowledge Question #7

According to the current research, which student is most likely to be retained?								
Multiple-choice answers	All educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Brad, a white male, who is young for his grade and whose family is in the low socioeconomic status (SES) group.	44	11.3	17	12.3	13	10.2	14	11.4
Jerome, an African American male, who is young for his grade, family is in the low SES group. *	296	76.1	106	76.8	100	78.1	90	73.2
Maria, a Hispanic female, whose primary language is not English, family is in the high SES group.	42	10.8	12	8.7	11	8.6	19	15.4
Lisa, a White female, the smallest and youngest in her class, family is in the high SES group.	7	1.8	3	2.2	4	3.1	0	0.00

The teacher groups all selected the correct answer definitively. There were 76.1% of educators who selected the correct answer. All teacher groups had the correct answer as their highest-ranked answer.

Table 31 shows the percentages of selected answers for knowledge question #8. The teacher groups all selected the correct answer definitively. There were 63% of all educators who selected the correct answer. All teacher groups had the correct answer as their highest-ranked response.

Table 31

Knowledge Question #8

What does the research suggest when comparing the behavior of students who have been retained or socially promoted with students who have NOT been retained or promoted?								
Multiple-choice answers	All Educators		Primary		Elementary		Middle Grades	
	n	%	*n*	%	*n*	%	*n*	%
Grade retention is not associated with children's behavior problems.	43	11.1	21	15.2	12	9.4	10	8.1
Grade retention is associated with decreased rates of behavior problems.	31	8.0	11	8.0	9	7.0	11	8.9
Grade retention is associated with increased rates of behavior problems.*	245	63.0	80	58.0	85	66.4	80	65.0
Social promotion is associated with increased rates of behavior problems.	70	18.0	26	18.8	22	17.2	22	17.9

Exploratory Factor Analysis

The researcher completed the EFA on the multiple-choice data to attempt to reduce the number of variables into smaller sets, as well as to attempt to establish connections between the variables and the constructs. The sample size was appropriate for factor analysis. Table 32 shows the results of the Kaiser-Meyer-Olkin and Bartlett's tests.

Table 32

KMO and Bartlett's Tests

Kaiser-Meyer-Olkin Measure of Sampling		.593
Bartlett's Test of Sphericity		
	Chi Square	57.85
	Df	28
	Sig	<.001

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (.56) is acceptable since the value is above .5, although .6 is preferred. With Bartlett's Test of Sphericity (p-value = <.001), a statistically significant value was found for this test.

Table 33 demonstrates the variance.

Table 33

Total Variance Explained

Belief Statement	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.471	18.382	18.382	1.393	17.406	17.406
2	1.107	13.843	32.225	1.107	13.843	32.225
3	1.052	13.152	45.377	1.052	13.152	45.377
4	.969	12.113	57.490			
5	.931	11.633	69.123			
6	.860	10.751	79.874			
7	.833	10.411	90.285			
8	.777	9.715	100.00			

For this part of the factor analysis, SPSS extracted three factors or components for the knowledge portion of the survey, using a varimax rotation. These three factors explained 45.38% of the variance. There were three factors above the eigenvalue of 1. The other five factors fell below the eigenvalue of 1, so they were not extracted. Williams et al. (2010) stated that best fits and factorial suitability should be used. The researcher must examine items and determine if items should be discarded based on what factors conceptually fit the factor structures. Ideally, the variance should be higher, but the survey is most likely not the most well-designed. This would account for the variance being lower than desired.

The scree plot shows the 3 questions which eigenvalues are above 1.

Figure 5

Scree Plot

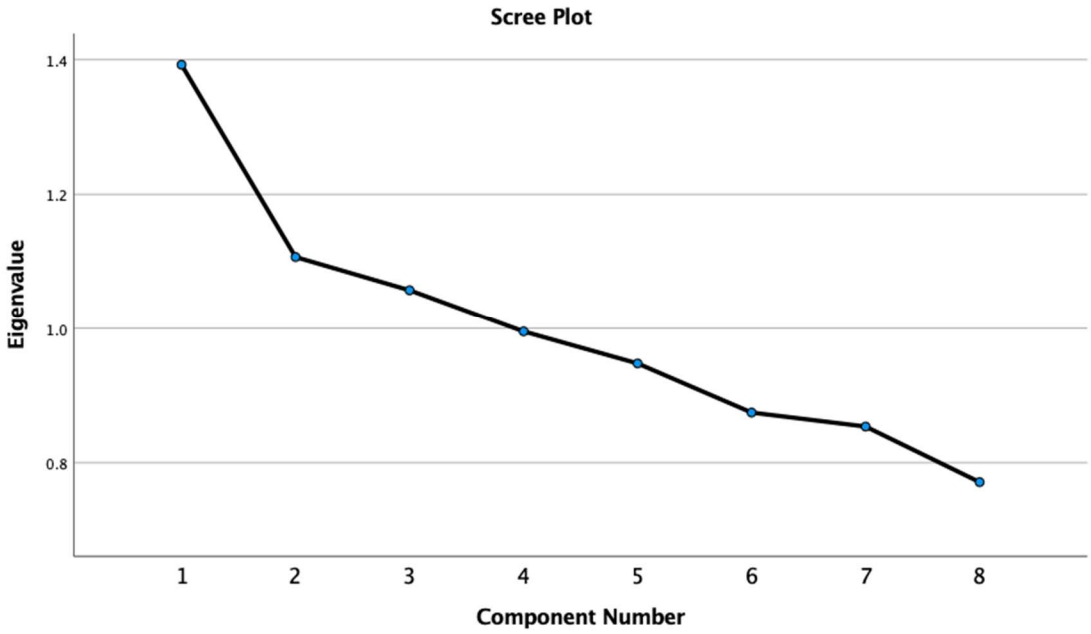


Table 34 shows the rotated component matrix. Looking at the rotated factor matrix, the researcher sorted the coefficient display format by size, as well as suppressed the factor loadings with the small coefficients under .30. There were strong factor loadings with some of the knowledge questions in this section of the survey.

For Factor 1, K2, K4, and K5 all had strong factor loadings. As for Factor 2, K1 and K8 all had strong factor loadings. Lastly, K5 and K7 had strong factor loadings.

According to Haynes (2007), four factors were identified by principal factor analysis for the knowledge portion of the survey. Using a varimax rotation, four constructs were identified by Haynes (2007): (a) component 1, negative effects of retention; (b) component 2, best practices; (c) component 3, predictors of retention; and (d) component 4, student behavior.

Table 34

Rotated Component Matrix

Knowledge Questions	Factor 1 Research Knowledge	Factor 2 Knowledge of Retention and Social Promotion	Factor 3 Knowledge of Student Behaviors of Retained Students
K6 In general, what does the majority of the current research say about grade retention and academic gains?	-.635		
K5 According to current research, which student is most likely to drop out of school?	.605		.337
K3 According to the current research, how will Steven, a first grader, most likely feel when he hears that is going to be retained.	-.527		
K2 Whether a student is promoted or retained, what does the majority of the current research say about the long-term	.501		
K8 What does the current research suggest when comparing the behavior of students who have been retained or socially promoted with students who have NOT been retained or promoted?		.654	
K1 What is the current educational position on retention and social promotion?		.617	
effects on students' academic achievement?			
K4 In general, what does the current research say about an extra year in kindergarten, pre-kindergarten, and/or transitional first programs?	.339	-.431	
K7 According to the current research, which student is most likely to be retained?			.889

Current research from this study identified three factors from EFA. Only items with an eigenvalue of greater than 1 were retained. Component 1 accounted for 18.38% of the variance, component 2 for 13.84% of the variance, and component 3 for 13.15% of the variance. Three of the factors identified in the current study were similar to those found in Haynes (2007). This research identified component 1 as knowledge on retention

research, component 2 as knowledge of retention and social promotion, and component 3 as knowledge of retained students.

Analysis of Covariance

For this part of the analysis, the researcher looked at ANCOVA data. After the knowledge factors had been identified, the researcher then calculated the subscale scores by taking an average or sum of items used for each factor in order to perform ANCOVA on the data. Before the ANCOVA could be performed, the researcher had to check for assumptions. The researcher checked for the assumptions for ANCOVA, including normality, independence of the covariate and treatment effect, homogeneity of regression of slopes, and homogeneity of variances.

Assumption of normality. The assumption of normality was not met since the Shapiro-Wilk was statistically significant on the independent variables. There was one outlier, case number 572. This means that the data may have been skewed.

The researcher rejected the null hypothesis that there was not a significantly significant difference in the responses. The researcher assumed there was a significantly significant difference in the survey responses and that the survey responses are not normally distributed. ANCOVA is considered a robust statistical test against the assumption of normality; therefore, the violation of these data can be tolerated very well. Since the sample size was greater than 20, the researcher proceeded with the other assumption tests. Looking at the histograms and plot tests, there are some outliers in the data sets. However, the data seem to look normally distributed according to an examination of the histograms and plot graphs.

Looking at the boxplots (Figures 5, 6 and 7), there was only one outlier in the data sets. The researcher analyzed the z-scores to determine if any of the outliers in the belief factors were more than -3.29 or 3.29 as absolute values, as this is the standard. When looking at the belief survey responses, only case number 572 had a lower value than 3.29, so this response items was removed from the data set.

Table 35 shows the results of tests of normality for knowledge factors.

Table 35

Tests of Normality for Knowledge Factors

	Knowledge Factor 1 Knowledge on retention research			Knowledge Factor 2 Knowledge of retention and social promotion			Knowledge Factor 3 Knowledge of retained students		
	Shapiro-Wilk								
	Statistic	Df	Sig.	Statistic	Df	Sig.	Statistic	Df	Sig.
Primary Teachers	.954	138	<.001	.907	138	<.001	.871	181	<.001
Elementary Teachers	.963	128	.002	.901	128	<.001	.795	165	<.001
Middle Grades Teachers	.966	123	.003	.919	123	<.001	.867	123	<.001

Figure 6

Boxplot for Knowledge Factor 1 – Retention Research Knowledge

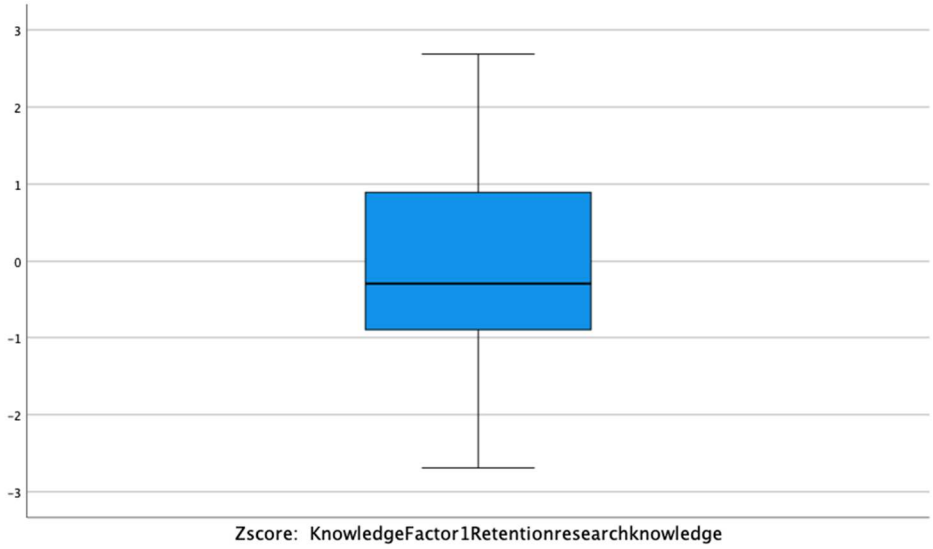


Figure 7

Boxplot for Knowledge Factor 2 – Knowledge of Retention and Social Promotion

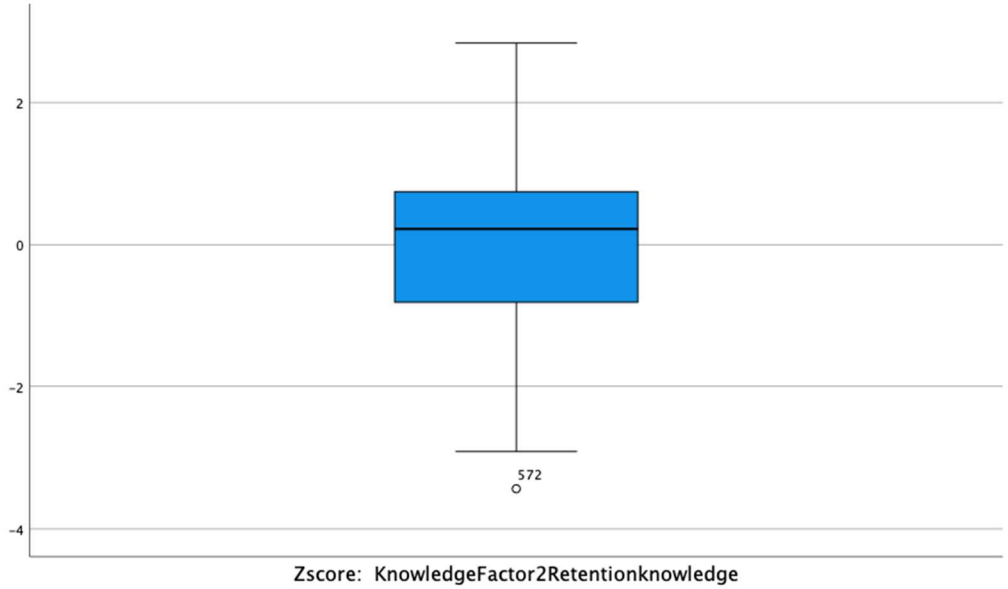
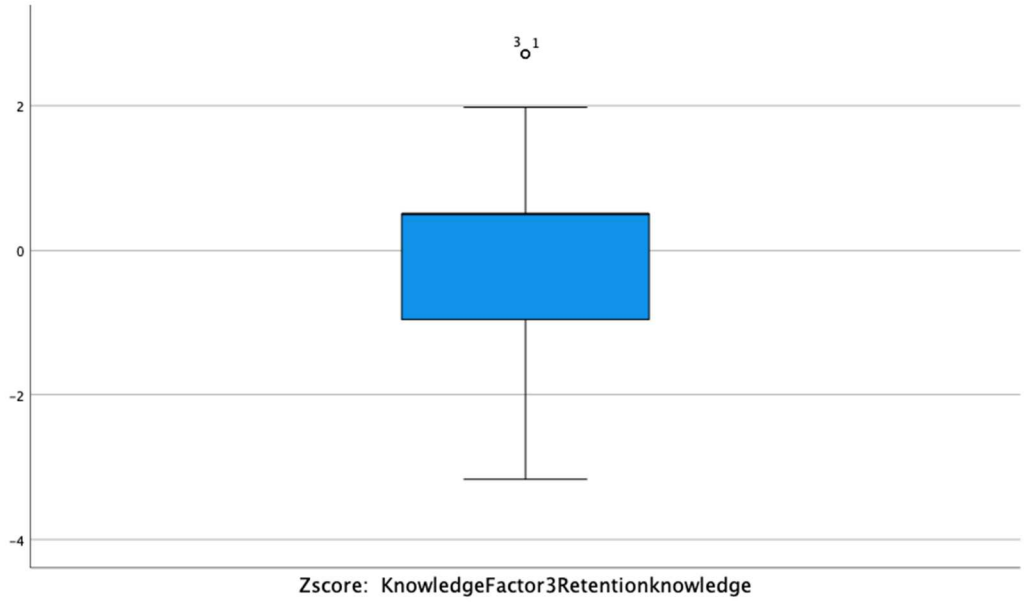


Figure 8

Boxplot for Knowledge Factor 3 – Knowledge of Retained Students



Assumption of independence of the covariate and treatment effect. The covariates were the same across of the educator groups. This assumption was met.

Assumption of homogeneity of regression of slopes. The assumption of homogeneity of regression of slopes was examined concerning the relationships between the dependent variables and each of the covariates. The slope lines were similar, which suggests the assumption of the homogeneity of regression slopes was met (Appendices M, N, and O). Additionally, checking this statistically, all of the IV and covariate combinations were not significant, with the exception of grade taught and highest degree. This suggests there may not be linearity between this IV and covariate. Table 36 shows the results of tests of between-subjects effects (see Appendix M, N, and O).

Table 36

Tests of Between-Subjects Effects

	Type III Sum of Squares	*Df*	Mean Square	*F*	Sig.
Grade Taught* Gender	.269	2	.134	.437	.647
Grade Taught *Highest Degree	2.02	2	1.01	3.33	.037
Grade Taught *Age	.108	2	.054	.176	.838
Grade Taught *Years Teaching	.166	2	.083	.269	.765

Assumption of homogeneity of variances. The Levene's Test of equality of error of variances was conducted on the three belief factors. This test was used to test the variance across the teacher groups. The analysis showed non-statistical values of primary teachers ($P = .39$), elementary teachers ($P = .81$), and middle grades teachers ($P = .09$) respectively ($P > .05$). This means that the equal variances assumption was met. Table 37 demonstrates Levene's test of equality of error variances in regard to knowledge factors.

Table 37

Levene's Test of Equality of Error Variances – Knowledge Factors

Factor 1: Research Knowledge				Factor 2: Knowledge of Retention and Social Promotion				Factor 3: Knowledge of Student Behaviors of Retained Students			
F	*df*1	*df*2	Sig.	*F*	*df*1	*df*2	Sig.	*F*	*df*1	*df*2	Sig.
.956	2	386	.385	.209	2	386	.811	2.38	2	386	.094

Descriptive Statistics of Knowledge Factors

On knowledge factor 1, the primary teachers ($M = 2.55$, $SD = .53$) had the strongest feelings on retention research knowledge followed by the middle grades'

teachers (*M* = 2.50, *SD* = .57). The elementary teachers (*M* = 2.38, *SD* = .56) had the lowest overall score for this part of the survey.

On knowledge factor 2, knowledge of retention and social promotion, the elementary teachers (*M* = 2.37, *SD* = .66) had the strongest knowledge base for retention and social promotion followed by the middle grades' teachers (*M* = 2.35, *SD* = .68). The primary teachers (*M* = 2.23, *SD* = .70) had the least amount of knowledge on retention and social promotion.

On knowledge factor 3, knowledge of student behaviors of retained students, the middle grades teachers (*M* = 2.32, *SD* = .49) had the strongest knowledge base for this question followed by the primary teachers (*M* = 2.26, *SD* = .47). The elementary teachers (*M* = 2.20 *SD* = .44) had the least amount of knowledge on student behaviors of retained students. Table 38 shows the ANCOVA descriptive statistics related to knowledge factors.

Table 38

ANCOVA Descriptive Statistics – Knowledge Factors

	Factor 1: Research Knowledge			Factor 2: Knowledge of Retention and Social Promotion			Factor 3: Knowledge of Student Behaviors of Retained Students		
	N	Mean	Std. Dev.	*N*	Mean	Std. Dev.	*N*	Mean	Std. Dev.
Primary Teachers	138	2.55	.533	138	2.23	.700	138	2.26	.473
Elementary Teachers	128	2.38	.563	128	2.37	.657	128	2.20	.441
Middle Grades Teachers	123	2.50	.567	123	2.35	.684	123	2.32	.492

A one-way ANCOVA was conducted to determine whether a statistically significant difference existed between the primary, elementary, and middle grades teachers on knowledge factors 1, 2, and 3, controlling for gender, age, years teaching, and highest degree earned. For knowledge factor 1, an ANCOVA analysis was performed using gender, age, years teaching, and highest degree earned as covariates, and grade level taught as the independent variable, while knowledge factor 1 was the dependent variable.

The ANCOVA results for knowledge factor 1 indicated the overall model was not significant at F(6, 388) = 2.84, (P =.01, $\eta^2 = .04$). Grade taught F(2, 388) = 1.12 (P = .33, $\eta^2 = .01$) was the main variable. Since the p-value was greater than .001, this means that there is no statistically significant difference between the educator groups for knowledge factor 1. This means there is no evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

Additionally, gender F(1, 388) = 1.12, (P = .33, $\eta^2 = .01$), age F(1, 388) = .081, (P = .78, $\eta^2 = .00$), and years teaching F(1, 388) = 1.05, (P = .31, $\eta^2 = .00$) were not significantly related to the dependent variable.

Highest degree earned F(1, 388) = 6.63, (P = .01, $\eta^2 = .02$) was significantly related to the knowledge factor. Therefore, it can be concluded that research knowledge is significantly influenced by the educator's highest degree, but none of any of the other covariates.

Table 39 shows the results of tests of between-subjects effects related to knowledge factor 1.

Table 39

Tests of Between-Subjects Effects – Knowledge Factor 1 – Research Knowledge

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA Squared
Corrected Model	3.37*	6	.611	2.84	.010	.043
Intercept	44.80	1	44.80	208.40	<.001	.353
Grade Taught	.481	2	.241	1.12	.328	.006
Gender	.239	1	.239	1.11	.293	.003
Age	.017	1	.017	.081	.777	.000
Years Teaching	.225	1	.225	1.05	.307	.003
Highest Degree	1.43	1	1.43	6.63	.010	.017
Error	82.11	382	.215			
Total	2072.00	389				
Corrected Total	85.78	388				

R-squared =.028 (adjusted *R* Squared = .013)

When examining the knowledge factor 1 data, there were significant differences between the knowledge of retention policies with the teacher groups: primary teacher group and elementary teacher group ($p = .03$). There were no significant differences between the elementary teacher group and middle grades teacher group ($p = 1.00$), nor the primary group and middle grades teacher group ($p = .09$).

The ANCOVA results for knowledge factor 2 indicated the overall model is significant at F(6, 388) = .67, ($P = .67$, $\eta^2 = .00$). Grade taught F(2, 388) = 1.55 ($P = .21$, $\eta^2 = .01$) is the main variable. Since the *P-value* was greater than .001, this means that there is no statistically significant difference between the educator groups for knowledge factor 1. This means there is no evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

Table 40 shows the results of pairwise comparisons for knowledge factor 1.

Table 40

Pairwise Comparisons for Knowledge Factor 1 - Research Knowledge

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	.177	.069	.031	.012	.342
	Middle grade teachers	.018	.072	1.000	-.155	.191
Elementary teachers	Primary teachers	-.177	.069	.031	-.342	-.012
	Middle grade teachers	-.159	.073	.089	-.344	.016
Middle grades teachers	Primary teachers	-.018	.072	1.000	-.191	.155
	Elementary teachers	.159	.073	.089	-.016	.334

Based on estimated marginal means
Adjustment for multiple comparisons: Bonferroni

Additionally, gender F(1, 388) = .349, (P = .56, $\eta^2 = .00$), age F(1, 388) = .189, (P = .66, $\eta^2 = .00$), years teaching F(1, 388) = .071, (P = .79, $\eta^2 = .00$), and highest degree earned F(1, 388) = .71, (P = .40, $\eta^2 = .00$) were not significantly related to the dependent variable. Therefore, it can be concluded that research knowledge is not significantly influenced by any of the covariates.

Table 41 shows the results of tests of between-subjects effects for knowledge factor 2.

Table 41

Tests of Between-Subjects Effects for Knowledge Factor 2 - Knowledge of Retention and Social Promotion

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA Squared
Corrected Model	1.884*	6	.314	.673	.672	.010
Intercept	31.92	1	31.92	68.40	<.001	.152
Grade Taught	1.45	2	.723	1.55	.214	.008
Gender	.163	1	.163	.349	.555	.001
Age	.088	1	.088	.189	.664	.000
Years Teaching	.033	1	.033	.071	.790	.000
Highest Degree	.331	1	.331	.709	.400	.002
Error	178.29	382	.467			
Total	2264.75	389				
Corrected Total	180.17	388				

*R squared = .010 (Adjusted R squared = -.005)

Table 42 shows the results of pairwise comparisons for knowledge factor 2. When examining the knowledge factor 2 data, there were no significant differences between the knowledge of predictors of retention with any of the teacher groups: primary teacher and elementary teacher groups (p = .31), the elementary teacher group and middles grades teacher group (p = 1.00), and the primary teacher group and middle grades teacher group (p = .56).

Table 42

Pairwise Comparisons for Knowledge Factor 2 – Knowledge of Retention and Social Promotion

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	-.139	.085	.305	-.342	.065
	Middle grade teachers	-.118	.089	.556	-.331	.096
Elementary teachers	Primary teachers	.139	.085	.305	-.065	.342
	Middle grade teachers	.021	.090	1.000	-.195	.237
Middle grade teachers	Primary teachers	.118	.089	.556	-.096	.331
	Elementary teachers	-.021	.090	1.000	-.237	.195

Based on estimated marginal means
b. Adjustment for multiple comparisons: Bonferroni

Table 43 shows the results of tests of between-subjects effects for knowledge factor 3. The ANCOVA results for knowledge factor 3 indicated the overall model was not significant at F(6, 388) = 2.84, (P = .01, $\eta^2 = .04$). Grade taught F(2, 388) = 1.12 (P = .33, $\eta^2 = .01$) is the main variable. Since the *P-value* was greater than .001, this means that there is no statistically significant difference between the educator groups for knowledge factor 1. This means there is no evidence that there was a statistically significant difference between the educator groups when controlling for the covariate.

Additionally, gender F(1, 388) = 1.12, (P = .33, $\eta^2 = .01$), age F(1, 388) = .08, (P = .78, $\eta^2 = .00$), and years teaching F(1, 388) = 1.05, (P = .31, $\eta^2 = .00$) were not significantly related to the dependent variable.

Table 43

Tests of Between-Subjects Effects – Knowledge Factor 3 - Knowledge of Student Behaviors of Retained Students

	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial ETA squared
Corrected Model	3.67*	6	.611	2.84	.010	.043
Intercept	44.80	1	44.80	208.40	<.001	.353
Grade Taught	.481	2	.241	1.12	.328	.006
Gender	.239	1	.239	1.11	.293	.003
Age	.017	1	.017	.081	.777	.000
Years Teaching	.225	1	.225	1.05	.307	.003
Highest Degree	1.425	1	1.425	6.63	.010	.017
Error	82.11	382	.215			
Total	2072.00	389				
Corrected Total	85.78	388				

**R* Squared = .043 (Adjusted *R* squared = .028)

Highest degree earned F(1, 388) = 6.63, (*P* = .01, $\eta^2 = .02$) was significant. Therefore, it can be concluded that research knowledge is significantly influenced by the educator's highest degree, but none of any of the other covariates.

Table 44 shows the results of pairwise comparisons for knowledge factor 3. When examining the knowledge factor 3 data, there were no significant differences between the knowledge of student behaviors of retained students with any of the teacher groups: primary teacher group and elementary teacher group (*p* = 1.00), the elementary teacher group and middle grades teacher group (*p* = .41), and the middle grades teacher group and primary teacher group (*p* = 1.00).

Table 44

Pairwise Comparisons for Knowledge Factor 3 - Knowledge of Student Behaviors of Retained Students

					95% confidence interval for difference	
Teacher Group	Comparison	Mean difference	Std. Error	Sig.	Lower bound	Upper bound
Primary teachers	Elementary teachers	.049	.057	1.000	-.089	.188
	Middle grade teachers	-.041	.060	1.000	-.186	.104
Elementary teachers	Primary teachers	-.049	.057	1.000	-.188	.089
	Middle grade teachers	-.091	.061	.413	-.237	.056
Middle grade teachers	Primary teachers	.041	.060	1.000	-.104	.186
	Elementary Teachers	.091	.061	.413	-.056	.237

Based on estimated marginal means
*The mean difference is significant at the .05 level
Adjustment for multiple comparisons: Bonferroni

Table 45 shows the estimated marginal means for the knowledge factors. The means in this table are adjusted slightly. This chart's output provides adjusted means on the dependent variable for each of the groups. The means have been adjusted since the effect of the covariate has been statistically removed.

The teacher groups rated the statements similarly. For knowledge factor 1, the primary (M = 2.54) and middle grade teachers (M = 2.52) rated the knowledge statements on retention research slightly higher than the elementary grades teacher group (M = 2.36), who rated this factor the lowest. For knowledge factor 2, the middle grades teachers (M = 2.35) and elementary grades teachers (M = 2.37) rated the knowledge statements the almost identical, while the primary teachers (M = 2.23) rated those statements the lowest.

Table 45

Estimated Marginal Means – Knowledge Factors

	Factor 1: Research Knowledge				Factor 2: Knowledge of Retention and Social Promotion				Factor 3: Knowledge of Student Behaviors of Retained Students			
		95% confidence Interval				95% confidence Interval				95% confidence Interval		
	Mean	Lower bound	Upper bound	Std. Error	Mean	Lower bound	Upper bound	Std. Error	Mean	Lower bound	Upper bound	Std. Error
Primary Teachers	2.54	2.48	2.64	.048	2.23	2.12	2.35	.059	2.26	2.18	2.34	.040
Elementary Teachers	2.36	2.27	2.46	.049	2.37	2.25	2.49	.061	2.21	2.13	2.30	.041
Middle Grades Teachers	2.52	2.42	2.63	.052	2.35	2.22	2.48	.064	2.30	2.21	2.39	.043

For knowledge factor 3, the middle grades educator group (M = 2.30) rated the knowledge statements on standards and motivation the highest. Elementary teachers rated those statements the lowest (M = 2.21) and primary teachers (M = 2.26) ranked somewhere in between the other teacher groups. `

Educators' Thoughts on Grade-Level Retention of Students

There was a final question on the survey asking the participants that if a student is retained, at what grade level this should occur. Of the respondents to this section of the survey (n = 387), the educators overwhelmingly selected kindergarten (n = 138) and first grade (n = 138) as the grade levels in which students should be retained. Sixth grade was the least selected response (n = 2), followed by seventh grade (n = 3), fourth grade (n = 4), and eighth grade (n = 5) as the grade levels a student should be retained.

When educators (n = 435) were asked how they have obtained their knowledge of retention, an overwhelming majority of educators (n = 333) chose personal experiences with retained students followed by talking with colleagues (n = 65). The teachers chose reading journals (n = 19) and recent university coursework (n = 18) as the indicators that were least likely to be contributors to their knowledge of grade retention and social promotion.

Chapter V

DISCUSSION AND IMPLICATIONS FOR FUTURE RESEARCH

Overview of the Study

In the decade of 1990-2000, it is estimated that 2.4 students were retained (Dawson, 1998). It is estimated that 10% to 25% of all students in American public schools are retained at least once during their school careers (US Department of Education, 2018). Of those students retained, economically disadvantaged and minority students are most commonly held back (Denton, 2001).

The problem of retention is worth examining because it has a huge impact on schools and students (Andrew, 2014). Retention can be a costly venture for schools (Jimerson et al., 2006). Retention can cost American school systems billions of dollars each year (Reschly & Christenson, 2013). Many researchers believe retention is not likely to accomplish the intended outcomes (Byrnes & Yamamoto, 2001). While teachers have the best intentions for students and believe retention will help students, retention does not produce long-term, lasting effects (Byrnes & Yamamoto, 2001). Despite a lack of consensus in the research, grade retention persists in schools (Gottfried, 2013).

Researchers report that educators believe retention is a beneficial practice for students (Shepard & Smith, 1990; Tomchin & Impara, 1992). Reschly and Christenson (2013) stated that educators genuinely believe in the effectiveness of retention so much

they continue to retain students despite the research. Most educators and the general public endorse the practice of retention (House, 1991).

While there is considerable research on the topic of retention, there has not been a study conducted with educators in South Georgia regarding their beliefs and knowledge of retention. The purpose of this study was to present, compare and contrast data collected from rural primary, elementary, and middle grades teachers in the South Georgia RESA districts. The researcher identified the most common areas of agreements and disagreement on the educators' beliefs and knowledge on the topic of retention. Moreover, the researcher attempted to determine if primary teachers, elementary teachers, and middle grades teachers have similar beliefs and knowledge on the topic of grade level retention.

Literature Review Summary

Retention data dates back as early at 1911 (Merrick et al., 1998). Although retention has been occurring for a long time, there is substantial evidence against the practice of retaining students. Most studies highlight the negative impacts of retention (Hartke, 1999). Retention is extremely costly for American schools (Jimerson, et al., 2006). The cost of retention equals billions of dollars for the American educational system each year (Reschly & Christenson, 2013). Most studies that examine retention show that retention does not close the achievement gaps or improve student academics (Hartke, 1999). Students who are retained in elementary schools are between two and eleven times more likely to drop out of school than those who are not retained in school (Jimerson, et al., 2006).

Even with the negative research on retention, many educators still feel strongly about retaining students (Tomchin & Impara, 1992). Teachers often feel that students should be retained under certain circumstances (Tomchin & Impara, 1992). Some teachers believe that an additional year of content can give students a better foundation for success (Lorence & Dworkin, 2006).

Educators typically give common reasons for retaining students which include maturity, academic difficulties, socioeconomic status, and mandating state-testing failure (Dombek & Connor, 2012). Even if teachers know and understand the retention research, they often struggle with the decision to send a student up to the next grade level (Range et al., 2012; Tomchin & Impara, 1992). Researchers report that educators believe retention is beneficial practice for students (Shepard & Smith, 1990; Tomchin & Impara, 1992). Meisels and Liaw (2001) suggested that grade level retention is one of the most prominent examples of noncommunication between American educators' research and practice.

Population

The study's target population was rural primary, elementary, and middle grades teachers who work in South Georgia. The sample for this study included 676 primary teachers, 570 elementary teachers, and 522 middle grades teachers. Of those who initially responded, there were a total of 197 primary teachers, 168 elementary teachers, and 170 middle grades teachers.

Stratified sampling was used to select the participants for the study. All certified primary, elementary, and middle school teachers in the rural RESA district were sent the survey.

Research Design and Methodology

This descriptive survey research study aimed to examine the retention knowledge and beliefs of primary teachers, elementary teachers, and middle school teachers in rural Georgia. The chosen design allowed the researcher to survey a large number of primary, elementary, and middle school educators from rural Georgia. Primary teachers, elementary teachers, and middle school teachers were compared and contrasted to determine how these educators were similar and different in their retention views.

The researcher used a tool initially developed by Tomchin and Impara (1992) entitled the *Teacher Retention Beliefs Questionnaire* (TRBQ). This instrument was later edited by Witmer (2004) and renamed to *Teacher Retention Beliefs and Knowledge Questionnaire* (TRBKQ) and was used to survey primary, elementary, and middle school teachers in rural Georgia. The TRBKQ survey was chosen and used to gather the beliefs and knowledge of Georgia educators on the topic of retention.

The TRBKQ is comprised of 4 sections. The first section collected demographic information about the educators who participated in the study and was added by the researcher. In the second section of the questionnaire, there are 20 Likert-scale items that gave the researcher information concerning educator beliefs on retention. The third section of the questionnaire asked participants to rank order the factors that influence their decisions about student retention. Finally, the fourth section of the questionnaire

gave multiple-choice knowledge questions that tested educator knowledge of retention. A final question in the survey asked educators to select the grade level they believed is the most appropriate for retention.

Research Questions

The following three questions guided this study.

Research Question 1: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H1_{\Theta}$: The beliefs of primary teachers, elementary teachers, and middle school teachers on the topic of grade-level retention will not differ.

Research Question 2: How do the beliefs of primary teachers, elementary teachers, and middle school teachers differ regarding factors that influence their decisions to retain students?

$H2_{\Theta}$: Primary teachers, elementary teachers, and middle school teachers will not differ in their beliefs of the factors that influence their decisions to retain students.

Research Question 3: How does the knowledge base of primary teachers, elementary teachers, and middle school teachers differ on the topic of grade-level retention?

$H3_{\Theta}$: The primary teachers', elementary teachers', and middle school teachers' knowledge base will not differ on the topic of grade-level retention.

Summary of the Findings

Research Question 1

For belief factor 1, belief on retention policies, the elementary teachers (M = 2.63, SD = .69), on average, had the highest scores. Primary teachers (M = 2.38, SD = .52) had the lowest scores on average. The middle grades teachers' responses (M = 2.50, SD = .66) were in between the elementary and primary teachers.

For belief factor 2, beliefs on behavior and self-concept, the middle grades teachers (M = 3.27, SD = .61) had the strongest feelings amongst the three educator groups. The second strongest feelings towards beliefs on behavior and self-concept came from the primary teacher group (M = 3.02, SD = .58). The elementary teacher group (M = 2.94, SD = .66) had the lowest average on belief factor 2.

For belief factor 3, beliefs on immaturity and motivation, the three educator groups answered the survey questions similarly. The elementary teachers (M = 3.26 SD = .46) reported strongest feelings towards immaturity and motivation while the middle grades teachers (M = 3.09, SD = .44) had the lowest scores.

When examining the data for belief factor 1, there was a significant difference in the beliefs of retention policies between the primary teacher group and the elementary teacher group (p = <.001). There was not a significant difference in the elementary teacher group and the middle grades teacher group (p = .92). There was also not a significant difference in the primary teacher group and the middle grades teacher group (p = .11).

When examining the belief factor 2 data, there was a significant difference in the beliefs of behavior and self-concept beliefs of the primary teacher group and the middle grades teacher group (p = <.001). There was also a significant difference in the elementary teacher group and the middle grades teacher group (p = <.001). There was not a significant difference in the primary teacher group and the elementary grades teacher group (p = .97). There are significant differences between on the thoughts of behaviors and self-concepts beliefs of the primary and middle teacher groups and the elementary and middle grades groups.

When examining the belief factor 3 data, there were no significant differences between the beliefs of immaturity and motivation of primary teachers and elementary teachers (p = 1.00) or the elementary teacher and middle grades teachers (p = .18). There were significant differences between the primary and middle grades teachers (p = .02) on the beliefs of immaturity and motivation

Research Question 2

When examining the ranking factors data, the primary teacher group data and elementary teacher group data were very similar in their responses. Primary educators (n = 167) ranked academic performance (M = 1.62, SD = 1.41), ability (M = 2.95, SD = 1.88), and social emotional maturity (M = 4.79, SD = 2.06) as the three most important retention factors. Educators ranked home environment (M = 7.95, SD = 1.80) and transient student status (M = 8.28, SD = 1.94) the least important factors in deciding to retain a student.

In the elementary educator data set (n = 155), the teachers ranked academic performance (M = 2.12, SD = 1.74), ability (M = 3.00, SD = 1.98), and social-emotional maturity (M = 4.88, SD = 2.37) as the three most important retention factors. These were the same as the primary educator group: academic performance (M = 1.63, SD = 1.41), ability (M = 2.95, SD = 1.88), and social-emotional maturity (M = 24.79, SD = 2.06). All three educator groups ranked home environment and transient student status the least important factors in deciding to retain a student.

In the middle grades educator data set (n = 154), the teachers ranked academic performance (M = 2.27, SD = 1.84), ability (M = 3.39, SD = 2.25), and effort being put forth (M = 3.68, SD = 2.18) as the three most important retention factors. The first two were the same as the primary and elementary educator group, but the third factor changed to effort instead of social-emotional maturity.

In the overall sample data set (n = 476), all teachers ranked academic performance (M = 2.01, SD = 1.69), ability (M = 3.11, SD = 2.04), and social-emotional maturity (M = 4.83, SD = 2.21) as the three most important retention factors. All educators ranked home environment (M = 7.85 SD = 1.98) and transient student status (M = 8.24, SD = 2.01) as the least important factors in deciding to retain a student

Primary teachers and elementary teachers and middles grades teachers all ranked academic performance and ability as the top two factors. The primary and elementary teacher groups both agreed that maturity is the third factor, while middle grade teachers thought effort put forth was the third most important factor. All three teacher groups

ranked home environment and transient student status as the least important factors when retaining a student.

Research Question 3

On knowledge factor 1, the primary teachers (M = 2.55, SD = .53) reported the strongest feelings on retention research knowledge followed by the middle grades' teachers (M = 2.50, SD = .57). Elementary teachers (M = 2.38, SD = .56) had the lowest overall score for this part of the survey.

On knowledge factor 2, knowledge of retention and social promotion, the elementary teachers (M = 2.37, SD = .66) had the strongest knowledge base for retention and social promotion followed by the middle grades' teachers (M = 2.35, SD = .68). The primary teachers (M = 2.23, SD = .70) showed the least amount of knowledge on retention and social promotion.

On knowledge factor 3, knowledge of student behaviors of retained students, the middle grades teachers (M = 2.32, SD = .49) had the strongest knowledge base for this question followed by the primary teachers (M = 2.26, SD = .47). Elementary teachers (M = 2.20 SD = .44) reported the least amount of knowledge on student behaviors of retained students.

When examining the knowledge factor 1 data, knowledge of retention research, there were significant differences between the knowledge of retention policies with the teacher groups: primary teacher group and elementary teacher group (p = .03). There were no significant differences between the elementary teacher group and middle grades

teacher group (p = 1.00), nor the primary group and middle grades teacher group (p = .09).

When examining the knowledge factor 2 data, knowledge of retention and social promotion, there were no significant differences between the knowledge of retention and social promotion with any of the teacher groups: the primary teacher and elementary teacher groups (p = .31), the elementary teacher and middle grades teacher groups (p = 1.00), and the primary teacher and middle grades teacher groups (p = .56). There were no significant differences between any of the teacher groups on the topic of knowledge of retention and social promotion.

When examining the knowledge factor 3 data, knowledge of retained students, there were no significant differences between the knowledge of student behaviors of retained students with any of the teacher groups: the primary teacher and elementary teacher groups (p = 1.00), the elementary teacher and middle grades teacher groups (p = .41), and the middle grades teacher and primary teacher groups (p = 1.00). There were no significant differences between any of the teacher groups on the topic of knowledge of student behaviors of retained students.

Limitations of the Study

One limitation was that this study was limited to only Georgia teachers in a rural South Georgia. Retention is a nation-wide issue, but this study only focused on educators from this small region of the United States. This study could be expanded state-wide or even nation-wide to determine the beliefs and knowledge of all teachers across the United

States. A nation-wide study would give a better understanding of retention practices across the country.

Another limitation of this study was the use of perception data. This study only involved self-reported, teacher perception data on the issue of grade-level retention. It did not analyze any academic data or student data. The data only focused on the perceptions of the teachers. It did not consider data from parents or students.

Another limitation was this study only involved data from primary teachers, elementary teachers, and middle school teachers from rural south Georgia districts. The study did not collect data from high school educators or administrators. Since this study only focused on rural Georgia teachers, this information is not generalizable to the general population.

Discussion

Summary of Findings

The findings from this research indicate that the teacher groups had similar beliefs and knowledge when it comes to the topic of retention. It depends on the belief factor or knowledge factor as to which educator groups have similar responses. There did not seem to be any patterns in the data. Educators tend to have similar responses when it comes to the factors for retention. However, when it comes to beliefs and knowledge, the teacher groups all tend to agree and disagree on a number of factors.

In the beliefs data section, teachers most strongly agreed that retention is an effective strategy for preventing students from failure in the next grade level. They tended to believe that retention was an effective means of preventing students from

facing daily failure in the next higher-grade level. They tended to believe that retention in grade 6-8 could hurt a child's self-esteem, and they believed that students should be retained if they fail two of the three major subject areas. Teachers most strongly disagreed with the statement that children should never be retained. They also disagreed with the statement that retention in K-5 permanently labels a child.

In the data set in which all teachers chose the most common factors for retention, the teachers ranked academic performance, ability, and social-emotional maturity as the three most important retention factors. All educators ranked home environment and transient student status as the least important factors in deciding to retain a student.

For the knowledge section of the survey, there were eight multiple-choice questions that tested teacher knowledge about grade level retention. On four of the eight questions, most educators did not choose the preferred answer. On the remaining four questions, between 24% and 40% of educators did not choose the preferred answer for those knowledge questions.

Comparison of Findings to Literature

The findings of this research are similar to those of other studies that have been conducted on this topic of retention. In a study conducted by Range et al. (2012), educators and administrators were surveyed on the effectiveness of retention. There were only slight, but no significant differences, on the aspects of retention. The study found that even when teachers do know the research associated with retention, they still remain strong supporters for retention (Range et al., 2012). Thomas (2018) explained that teachers were not bothered by the negative research on retention, and they still use

retention as a intervention of struggling students. In a study by Haynes (2007), teachers believed students should be retained to help them meet grade-level standards. Additionally, educators believed there are benefits to retaining students, especially at-risk students before Grade 3 (Haynes, 2007).

Patterson (1996) reviewed teacher perception data from educators in 11 states. The educators favored retention practices. The study indicated most educators believed the benefits of retention outweigh the negative effects of retention.

In yet another study by Parker (2001), results of the student reported 89% of the teachers believed retaining students was an effective practice. Most of the teachers believed students who were at the bottom of the class could rise to the top of the class after a year of retention (Parker, 2001).

In the study by Larsen and Akmal (2007), middle school educators agreed that students should be retained earlier in education, but still retained students who struggled with content. Additionally, educators believed retention was not an effective strategy, and most educators were unsure of the research concerning retention (Larsen & Akmal, 2007). These findings were consistent with the data and research for this study. Middle grades teachers tended to know more surrounding the research with retention, but they still recommended retention when student motivation and content gaps were prevalent.

When comparing this study to the 2012 study by Range et al., this study did find significant differences in the educator's beliefs and knowledge of retention. Additionally, both this study and the Range et al. (2012) study found that educators are strong supporters of retention. Both this study and the Thomas (2018) study found that

educators still use retention as an intervention for struggling students. Educators from this study and the Haynes (2007) study both agreed students should be retained to help them meet grade-level standards; they also believed there are benefits to retaining students, especially at-risk students before third grade.

Parker (2001) reported 89% of teachers believing retention as an effective practice, while this current study reported 66% of educators believing retention is an effective practice. In both studies, a majority of teachers support retention. In the study by Larsen and Akmal (2007), the majority of educators were unsure of the research concerning retention. Similarly, this study reported that the majority of educators did not choose the correct answer to the knowledge questions.

Results

For RQ1, the teachers indicated that retention was an effective way to help immature students in grades K-5 a chance to catch up. Educators believed retention was an effective means of preventing students from facing daily failure in the next grade level. Additionally, educators thought retention in grades K-5 is an effective means of giving the immature child a chance to mature. Since Piaget's and Vygotsky's theories address scaffolding and maturity, educators should be exposed to information about maturity and scaffolding for students.

For RQ2, the teachers believed academic performance, ability, and maturity are the most common factors for retaining a student. Again, these responses are consistent with the theories of Piaget and Vygotsky. These theories are foundational for educators,

and it appears these thought processes are fundamental for teachers when they consider retaining students.

For RQ3, 87% of educators responding to knowledge question #4 about keeping students an extra year in kindergarten chose the incorrect response. Further, 67% of educators chose the incorrect response about grade retention and academic gains on knowledge question #6. Most educators believed more scaffolding as well as time to mature could help a student academically. These thoughts align with the theories of Piaget and Vygotsky.

Implications

The results of this research are important because they are similar to other perception data studies. The implications of this research could have an impact on future research or decisions on educational policy. Despite the limitations mentioned earlier, there were strengths in this study. The study was comprised of strong data collected from a large sample of rural Georgia educators. The survey instrument was reliable and valid, and the data analysis procedures were robust and strong. These data can and should be used to make educational decisions on the topic of grade-level retention. The results of this study can and should be used to change retention policies in Georgia. The study could help change and influence policy makers, teachers, and teacher preparation programs, as well as early intervention programs.

Lawmakers and educational leaders should use these data to expand this study state-wide. More current studies need to be conducted on grade level retention. If retention is not helpful for students, laws need to be changed. Georgia recommends

retention for students in Grades 3, 5 and 8 when the students do not pass the end-of-grade state assessments. If research data do not validate this practice, then retention laws need to be changed. The state and national governments must stop spending millions of dollars on retention if this is not an effective practice. The monies could be diverted to other programs that can help close the gaps for our students who are not on grade level.

Since educators believe retention is a successful practice, as supported by this study and other studies, professional development opportunities about retention data should be provided to teachers. Educators need to know and understand the research regarding student retention in schools. They need to know and understand the long-term effects of retention, as well as the negative ramifications associated with retention. Teachers need to be given a toolbox of strategies, as well as support in how to best help struggling students.

Teacher preparation programs need to emphasize and teach young, upcoming teachers the research associated with retention. They need to know and understand the current literature and data associated with grade-level retention.

Instead of spending money on re-teaching, states need to focus monies on early intervention programs that could be the key to filling gaps early. Strong preschool programs, as well as early screening practices, could help identify and help early learners who may have deficits.

Conclusion

- Teachers most strongly believed that retention is an effective mean of preventing students from failure in the next grade level.

- Educators believed that retention was an effective means of preventing students from facing daily failure in the next grade level.
- Rural Georgia educators believed that retention in grade 6-8 could hurt a child's self-esteem.
- Teachers believed students should be retained if they fail two of the three major subject areas.
- Teachers most strongly disagreed with the statement that children should never be retained. They also disagreed with the statement that retention in K-5 permanently labels a child.
- The teachers ranked academic performance, ability, and social-emotional maturity as the three most important retention factors.
- All educators ranked home environment and transient student status as the least important factors in deciding to retain a student.
- When examining teacher knowledge, the majority of educators chose the wrong answer on four of the eight knowledge questions.
- On the remaining four questions, between 24% and 40% of educators chose the wrong answer for those knowledge questions.

Recommendations for Further Research

Further research is needed on the topic of grade level retention. This study should be expanded to include other RESA districts, as well as other states. A larger population would yield more data with more generalizable results. This study could be expanded nationwide to determine the beliefs and knowledge of all teachers across the United

States. A nationwide study would give a better understanding of retention practices across the county.

Another consideration for future research is to see the parents', students', and administrators' perceptions of retention for a complete look at all of the stakeholders involved in the retention process. Since education involves more than teachers and students, this study could be expanded to include all of the stakeholders. This would help give a more complete picture of the retention process.

Additionally, there needs to more studies involving academic data for students who have been retained. State and national governments recommend retention for students who are not performing at grade level, so more retention studies need to be conducted on the effectiveness of the practice of retention. Most retention studies are dated, and there needs to be more current research studies since retention is now linked to assessment results. Is the practice of retaining students who do not pass state assessments helping to fill the gap in students who are retained?

There should be alternatives offered to teachers who may believe retention is the only possibility. Teachers need additional training on instructional practices that will help fill the academic gaps of the struggling students. Professional development can be beneficial to teachers who think retention is a successful practice. Teachers need to learn effective instructional strategies that will help students who are not meeting grade level standards.

Alternatives to Retention

If retention is not the answer, what do educators need to do when students are not successful? There are some alternatives to retention. Kinlaw (2005) included some ideas for reducing the possibility of retention. These ideas include social skills interventions, programs to reduce classroom behaviors, psychological evaluations and/or interventions, and special programs to address students' specific needs.

Lynch (2013) stated, "Alternatives to social promotion and retention that have been proposed include accountability, clear standards, early interventions, extended learning times, hiring competent teachers, learning resource programs, mentoring, multiage classrooms, multiple assessment measures, parental involvement, redesigned schools and year-round schools" (p. 292). One of the problems of implementing these strategies, according to Lynch (2013), are that these strategies are not comprehensive or thought out well.

Bowman (2005) believed there need to be additional funding for struggling students who may be at risk for retention. Interventions, summer school, and parental support are needed for students who have been retained. Bowman stated if a school spends $6000 each to retain 15 students, this $90,000 could have been spent on additional staff or interventions for those students.

Denton (2001) explained targeted interventions are essential to helping struggling students. The author suggested flexible scheduling can allow students to receive extra help on a particular or subject. Denton also explained afterschool programs, Saturday

school, and summer school programs can provide advantages to students who are struggling with the content and curriculum.

Bowman (2005) asked whether districts are willing to pay for professional development to help teachers become proactive rather than reactive. Bowman pointed out there is a need for increased professional development for teachers to help prevent retention for students and to give them increased instructional methods to meet the needs of all students. Bowman (2005) indicated that teachers need more opportunities to become familiar with research associated with school retentions and to network with each other to create proactive options for students. Further, preservice teacher programs need to educate future teachers on the research associated with grade-level retention (Bowman, 2005).

Intervention programs are an important way to help struggling students (Bowman, 2005). Progress monitoring students can help teachers understand student deficiencies. Progress monitoring programs are easy to administer, and they give teacher valuable student information about student progress.

Another idea to reduce retention rates involves redesigning the school structures. Traditional school designs of grouping students by age were adopted in the mid-19th century (Wells, 2016). Cross-grade groupings could be an alternative to retaining students (Lynch, 2013). This model would rate students by skills not ages. Multiage classrooms allow students to progress and learn at individual paces (Lynch, 2013).

Other alternatives to retention are providing support services for students as well as using classroom assessments to guide the instruction of the classroom (Wells, 2016).

Instead of relying on one end-of-the-year assessment, teachers need to use classroom assessments throughout the year to guide instruction and help close achievement gaps for students (Lynch, 2013). Early interventions and extended learning time for students can help close achievement gaps early so that retentions are not necessary.

Darling-Hammond (1998) also outlined interventions to alleviate the need for retentions in schools. Darling-Hammond supported the use of skillful teaching, redesigned school, targeted services, and useful assessments to help improve instruction for students. Highly skilled teachers who have evidence-based instructional strategies can help students overcome educational deficits. Additionally, schools need to be redesigned so that teachers have students for longer periods of times by having longer class periods, teaching students more subjects, or teaching students for two or more years (Darling-Hammond, 1998). Darling-Hammond also suggested classrooms that are comprised of different ages and different grades can be more successful than traditional classrooms. Teachers need to know and recognize the individual needs of students to provide targeted services for effective instruction. Finally, Darling-Hammond stated that ongoing, effective assessments need to guide teachers' instructional practices.

Jimerson et al. (2006) included a list of interventions which may deter retention. These interventions include pre-school programs, comprehensive school-wide programs, summer school and afterschool programs, looping and multiage classrooms, school-based mental health programs, parental involvement, early reading programs, effective instructional strategies and assessment practices, and behavior and cognitive behavior modification programs.

Summary

When students are involved in strong school programs, retention can and may be prevented (Jimerson et al., 2006). A preschool intervention program can promote academic success for at-risk students. School programs that enhance students' academic, social, and emotional learning can be effective to deter retention. Students who are not successful in the normal curriculum may benefit from summer school and after-school support. Looping and multi-age classrooms can allow teachers more flexibility to meet the needs of students, as well as more time to learn and understand about student's needs. Mental health issues can cause students to struggle academically, so schools that work to correct mental health concerns can help prevent retention as well. Strong parental involvement outreach programs and strong early reading intervention programs can be strong deters to early retention. Jimerson et al. (2006) noted strong teacher techniques and instructional practices are another key to helping to prevent retention. Finally, programs that help reduce negative behavior and increase positive classroom behaviors can help prevent grade level retention.

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Appendix A:

Witmer's (2004) TRBKQ Survey

Teacher Retention Beliefs and Knowledge Questionnaire

Appendix A

Witmer's 2004 TRBKQ

Teacher Retention Beliefs and Knowledge Questionnaire

Part I - Demographics

Gender
a) Male
b) Female
c) Prefer not to answer

Age
a) 18-25 years
b) 26-34 years
c) 35-44 years
d) 44-53 years
e) 53-60 years
f) Above 60 years

Number of years in education
a) 0-5 years
b) 6-10 years
c) 11-15 years
d) 16-20 years
e) 21-25 years
f) 26-30 years
g) 30 years or more

What is the highest degree you have earned?
a) Bachelor's degree
b) Master's degree
c) Specialist's degree
d) Doctoral degree

What age group do you currently teach?
a) Pre-K
b) Kindergarten
c) First Grade
d) Second Grade
e) Third Grade
f) Fourth Grade
g) Fifth Grade

h) Sixth Grade
i) Seventh Grade
j) Eighth Grade
k) Resource
l) Administrator
m) Special Education Teacher

Please check any experiences you have had with grade retention. Check all that apply.

a) I was retained.
b) As a child, I worried about the possibility of being retained.
c) I have a family member who was retained.
d) I have a friend who was retained.
e) I knew someone other than a family member who was retained.
f) I have worked with a student who was retained.
g) I have had no experiences with grade retention.
h) Other: _____

Part II - Teacher Beliefs

1. Retention is an effective means of preventing students from facing daily failure in the next higher-grade level.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

2. Retention is necessary for maintaining grade-level standards.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

3. Retaining a child in grades K-5 harms a child's self-concept.

Strongly Agree
Agree
Neutral
Disagree

Strongly Disagree

4. Retention prevents classrooms from having wide ranges in student achievement.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

5. Students who do not apply themselves should be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

6. Knowing that retention is a possibility does motivate students to work harder.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

7. Retaining a child in grades 6-8 harm's a child's self-concept.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

8. Retention is an effective means of providing support in school for the child who does not get support at home.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

9. Students who do not make passing grades in 2 of the 3 major subject areas (reading, ELA, and math) should be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

10. Students who make passing grades, but are working below grade level, should be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

11. Retention in grades K-5 is an effective means of giving the immature child a chance to catch up.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

12. Retention in grades 6-8 is an effective means of giving the immature child a chance to catch up.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

13. Students receiving services from a learning support teacher should not be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

14. If students are to be retained, they should be retained no later than third grade.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

15. In grades K-5, over-age children (more than a year older than their classmates) cause more behavior problems than other children.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

16. In grades 6-8, over-age children (more than a year older than their classmates cause more behavior problems than other children.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

17. Retention in grades K-5 permanently labels a child.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

18. Retention in grades 6-8 permanently labels a child.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

19. Children who have passing grades, but excessive absences, should be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

20. Children should never be retained.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree

Part III - Factors that Influence Retention
Rank Order

Please rank the following factors that influence retention decisions.

Parental input _____
Learning disability _____
Academic performance _____
Social/Emotional maturity _____
Transient student _____
Age in relation to others _____
Home environment _____
Effort being put forth _____
Child's self esteem _____
Ability _____

Part IV - Teacher Knowledge

24. What is the current educational position on retention and social promotion?
a. Schools should keep both social promotion and grade retention.
b. Schools should end both social promotion and grade retention.(*)
c. Schools should end social promotion and keep grade retention.
d. Schools should keep social promotion and end grade retention.

25. Whether a student is promoted or retained, what does the majority of the current research say about the long-term effects on students' academic achievement?
a. Retention does not effectively increase academic achievement among low-achieving students.(*)

b. Social promotion does not effectively increase academic achievement among low-achieving students.
c. Neither social promotion nor retention effectively increase academic achievement.
d. Both social promotion and retention effectively increase academic achievement.

26. According to the current research, how will Steven, a first grader, most likely feel when he hears that he is going to be retained?
a. He will be indifferent towards the decision.
b. He will feel relieved because now he can "catch up" on his basic skills.
c. He will feel like he is being punished.(*)
d. He will feel happy because he will be the leader in the class.

27. In general, what does the current research say about an extra year in kinder-garten, pre-kindergarten programs and/or transitional first programs?
a. Students do not experience any benefits from these extra-year programs.(*)
b. Students become more mature as a result of these extra-year programs.
c. Students experience a benefit in academic achievement in these extra-year programs.
d. Students experience higher self-esteem from these extra-year programs.

28. According to current research, which student is most likely to drop out of school?
a. John who was held back one time in elementary school.
b. Brian who has been held back once in elementary school and once in middle school.(*)
c. Matt who has been performing below average every school year but has never been retained.
d. David who was recommended for retention but was promoted to the next grade level.

29. In general, what does the majority of the current research say about grade retention and academic gains?
a. Academic gains are not noticed until three or four years after the retention.
b. Any academic gains made during the repeated year increase over time.
c. Retained students make more academic gains than those who are promoted.
d. Any academic gains made during the repeated year fade over time.(*)

30. According to current research, which student is most likely to be retained?
a. Brad, a White male, who is young for his grade and whose family is in the low socioeconomic status (SES) group.
b. Jerome, an African American male, who is young for his grade, family is in the low SES group.(*)
c. Maria, a Hispanic female, whose primarily language is not English, family is in the high SES group.
d. Lisa, a White female, the smallest and youngest in her class, family is in the high SES group.

31. What does the current research suggest when comparing the behavior of students who have been retained or socially promoted with students who have NOT been retained or promoted?
a. Grade retention is not associated with children's behavior problems.
b. Grade retention is associated with decreased rates of behavior problems.
c. Grade retention is associated with increased rates of behavior problems.(*)
d. Social promotion is associated with increased rates of behavior problems.

32. Please check the one that most contributes to how you have obtained your knowledge about grade retention and social promotion.
a. reading journals and attending workshops
b. personal experiences with retained students
c. talking to colleagues
d. recent university coursework
e. other (please explain)

33. At which grade level do you believe students should be retained?

a) Kindergarten
b) First Grade
c) Second Grade
d) Third Grade
e) Fourth Grade
f) Fifth Grade
g) Sixth Grade
h) Seventh Grade
i) Eighth Grade

Appendix B:

Witmer Permission Letter

Appendix B:

Witmer Permission Letter

Brandi Todd
Valdosta State University Doctoral Student
5100 Trudie Road
Blackshear, GA 31516
912-281-4655

October 29, 2020

Ms. Stacie Witmer
School Psychology
Carlisle Area School District
623 West Penn Street
Carlisle, PA 17013

RE: Permission to survey
Dear Ms. Witmer:

I am currently working on my dissertation, and it is entitled Retention Beliefs and Knowledge of Primary, Elementary, and Middle School Teachers. My plan is to use the survey instrument, Teacher Retention Beliefs and Knowledge Questionnaire (TRBKQ) developed by Tomchin and Impara (1998) and revised by you, Stacie Witmer (2004). The survey would be administered electronically. I intend to survey all primary teachers, elementary teachers, and middle school teachers in the Okefenokee RESA district.

I am writing to you to obtain permission to use the survey. It will be cited as follows:

Witmer, S. M., Hoffman, L. M., & Nottis, K. E. (2004). Elementary teachers' belief and knowledge about grade retention: How do we know what they know? Education, 125(2), 173-193.

My doctoral chairperson is Leon Pate, Valdosta State University.

Thank you for your consideration in this matter. You can reach me by emailing me at bstodd@valdosta.edu or by using the contact information listed above.

Sincerely,

Brandi D. Todd

Please sign below indicating permission to conduct this study in the Okefenokee RESA district.

Stacie Witmer
Your Signature

10/29/20
Date

Appendix C:

IRB Approval Letter

Appendix C

IRB Approval Letter

Institutional Review Board (IRB)
For the Protection of Human Research Participants

PROTOCOL EXEMPTION REPORT

Protocol Number: 04103-2020 **Responsible Researcher:** Brandi Todd

Supervising Faculty: Dr. James L. Pate

Project Title: *Retention Beliefs and Knowledge of Primary, Elementary, and Middle School Teachers.*

INSTITUTIONAL REVIEW BOARD DETERMINATION:

This research protocol is Exempt from Institutional Review Board (IRB) oversight under Exemption Category 2. Your research study may begin immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator (irb@valdosta.edu) before continuing your research.

ADDITIONAL COMMENTS:

- *Upon completion of this research study all collected data must be securely maintained (locked file cabinet, password protected computer, etc.) and accessible only by the researcher for a minimum of 3 years.*

☒ ***If this box is checked, please submit any documents you revise to the IRB Administrator at irb@valdosta.edu to ensure an updated record of your exemption.***

Elizabeth Ann Olphie *11.03.2020*
Elizabeth Ann Olphie, IRB Administrator

Thank you for submitting an IRB application.
Please direct questions to irb@valdosta.edu or 229-253-2947.

Revised: 06.02.16

Appendix D:

Okefenokee RESA Approval Letter

Appendix D

Okefenokee RESA Approval Letter

Brandi Todd
Valdosta State University Doctoral Student
5100 Truple Road
Blackshear, GA 31516
912-281-4665

October 29, 2020

Dr. Greg Jacobs
Okefenokee RESA
1450 N Augusta Avenue
Waycross, GA 31503
912-285-6151

RE: Permission to survey teachers
Dear Dr. Jacobs:

I am currently working on my dissertation, and it is entitled Retention Beliefs and Knowledge of Primary, Elementary, and Middle School Teachers. My plan is to use the survey instrument, Teacher Retention Beliefs and Knowledge Questionnaire (TRBKQ) developed by Tomchin and Impara (1998) and revised by Stacie Winner (2004). The survey would be administered electronically. I intend to survey all primary teachers, elementary teachers, and middle school teachers in the Okefenokee RESA district.

I am writing to you to obtain permission to survey teachers in the Okefenokee RESA school district. I will not be collecting any personal information. I will only be collecting demographic information including age, number of years in education, grade level taught, gender, and highest degree earned. The survey should only take 10-15 for a teacher to complete.

My doctoral advisor is Dr. Leon Pace with Valdosta State University.

Thank you for your consideration in this matter. You can reach me by emailing me at: bdtodd@valdosta.edu or by using the contact information listed above.

Sincerely,

Brandi D. Todd

Please sign below indicating permission to conduct this study in the Okefenokee RESA district.

Your Signature

11/3/2020
Date

Appendix E:

Okefenokee RESA Superintendent Letter

Appendix E

Okefenokee RESA Superintendent Letter

Brandi Todd
5100 Trudie Road
Blackshear, GA 31516
912-281-4665
bdtodd@valdosta.edu

November 18, 2020

Dear Okefenokee RESA Superintendents:

My name is Brandi Todd, and I am the Assistant Principal of Midway Elementary School in Blackshear, GA (Pierce County). I am also a doctoral student at Valdosta State University. I am currently ABD, and I have just defended my dissertation proposal. My research study is Retention Beliefs and Knowledge of Primary, Elementary, and Middle Grades teachers.

I have completed my IRB application, and I have been approved to use Witmer's (2004) Teacher Retention Beliefs and Knowledge Questionnaire (TRBKQ) to complete my study. I am asking to complete my study in the Okefenokee RESA district.

I will be contacting you soon to obtain permission to survey your teachers. The only thing I would need from you is permission to survey the teachers in your school district as well as a contact person for me to obtain email addresses for your primary, elementary, and middle schools teachers. This may be on your district websites if you list this information. I can gladly obtain from there if listed. If not, I would need access to those email addresses if you approve.

I will follow-up with an email to you, but if you prefer a phone call to further discuss, I will gladly call you. I know your time is valuable, so I do not want to bother you.

I will be reaching out to you soon! Thank you for your consideration in this request.

Thank you,

Brandi Todd

*Questions regarding the purpose or procedures of the research should be directed to **Brandi Todd** at **bdtodd@valdosta.edu** This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.*

Appendix F:

Letter to Principals

Appendix F

Letter to Principals

Brandi Todd
5100 Trudie Road
Blackshear, GA 31516
912-281-4665
bdtodd@valdosta.edu

January 1, 2021

Dear Principal:

My name is Brandi Todd, and I am the Assistant Principal of Midway Elementary School in Blackshear, GA (Pierce County). I am also a doctoral student at Valdosta State University. I am currently ABD, and I have just defended my dissertation proposal. My research study is Retention Beliefs and Knowledge of Primary, Elementary, and Middle Grades teachers.

I have completed my IRB application, and I have been approved to use Witmer's (2004) Teacher Retention Beliefs and Knowledge Questionnaire (TRBKQ) to complete my study. I have received approval from your superintendent to conduct my research in your school district.

I will be sending out the survey to your teachers in Qualtrics. I am asking that you encourage your teachers to participate in this survey. I have included a letter that you can hand out to your teachers to encourage them to participate in this survey. The survey should take no longer than 10 minutes to complete. If you could please place these letters in your teacher's school mailboxes, I would appreciate it very much!

If you have any questions, please feel free to contact me using the information listed in the header of this letter. I appreciate your time and help in this research study.

Thank you,

Brandi Todd

*Questions regarding the purpose or procedures of the research should be directed to **Brandi Todd** at **bdtodd@valdosta.edu** This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.*

Appendix G:

Letter to Teachers

Appendix G

Letter to Teachers

Brandi Todd
5100 Trudie Road
Blackshear, GA 31516
912-281-4665
bdtodd@valdosta.edu

January 1, 2021

Dear Okefenokee RESA Teacher:

My name is Brandi Todd, and I am the Assistant Principal of Midway Elementary School in Blackshear, GA (Pierce County). I am also a doctoral student at Valdosta State University. I am currently ABD, and I have just defended my dissertation proposal. My research study is Retention Beliefs and Knowledge of Primary, Elementary, and Middle Grades teachers.

I have completed my IRB application, and I have been approved to use Witmer's (2004) Teacher Retention Beliefs and Knowledge Questionnaire (TRBKQ) to complete my study. I have received approval from your superintendent to conduct my research in your school district.

I will be sending out the survey to you using the Qualtrics platform on Monday, January 11. The email for the survey should go directly to your work email. I am asking for you to participate in this study, so that I can gather information for my research study. The survey should take no longer than 10 minutes to complete.

If you have any questions, please feel free to contact me using the information listed in the header/footer of this letter. I appreciate your time and help in this research study.

Thank you,

Brandi Todd

*Questions regarding the purpose or procedures of the research should be directed to **Brandi Todd** at **bdtodd@valdosta.edu** This study has been approved by the Valdosta State University Institutional Review Board (IRB) for the Protection of Human Research Participants. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or irb@valdosta.edu.*

Appendix H:

Missing Beliefs Values

Appendix H

Missing Beliefs Values

Univariate Statistics

	N	Mean	Std. Deviation	Missing Count	Missing Percent	No. of Extremes[a,b] Low	No. of Extremes[a,b] High
Gender	867	1.91	.305	0	.0	.	.
Belief1	798	2.30	.918	69	8.0	0	15
Belief2	798	2.61	.957	69	8.0	0	17
Belief3	796	3.35	.929	71	8.2	24	0
Belief4	797	3.59	.903	70	8.1	16	0
Belief5	795	3.27	1.002	72	8.3	33	0
Belief6	797	2.66	.916	70	8.1	0	17
Belief7	797	2.53	.988	70	8.1	0	21
Belief8	797	3.14	.997	70	8.1	0	0
Belief9	798	2.33	.874	69	8.0	0	9
Belief10	798	3.60	.798	69	8.0	4	0
Belief11	796	2.36	.907	71	8.2	0	22
Belief12	796	3.21	.965	71	8.2	0	0
Belief13	798	3.37	.837	69	8.0	15	0
Belief14	798	2.91	1.066	69	8.0	0	0
Belief15	798	3.01	.918	69	8.0	0	0
Belief16	796	2.65	.893	71	8.2	0	15
Belief17	799	3.75	.861	68	7.8	14	0
Belief18	797	3.15	1.034	70	8.1	0	0
Belief19	798	3.66	.872	69	8.0	11	1
Belief20	799	4.18	.772	68	7.8	18	0

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

b. . indicates that the inter-quartile range (IQR) is zero.

Appendix I:

Missing Knowledge Data

Appendix I:

Missing Knowledge Data

Univariate Statistics

	N	Mean	Std. Deviation	Missing Count	Missing Percent	No. of Extremes[a,b] Low	No. of Extremes[a,b] High
Gender	867	1.91	.305	0	.0	.	.
Knowledge1	688	1.73	1.040	179	20.6	0	0
Knowledge2	658	2.44	1.038	209	24.1	0	0
Knowledge3	672	2.40	.961	195	22.5	0	0
Knowledge4	662	2.51	.810	205	23.6	0	0
knowledge5	667	2.44	.702	200	23.1	0	0
Knowledge6	640	2.66	1.086	227	26.2	0	0
Knowledge7	640	2.00	.542	227	26.2	.	.
Knowledge8	640	2.90	.832	227	26.2	.	.

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

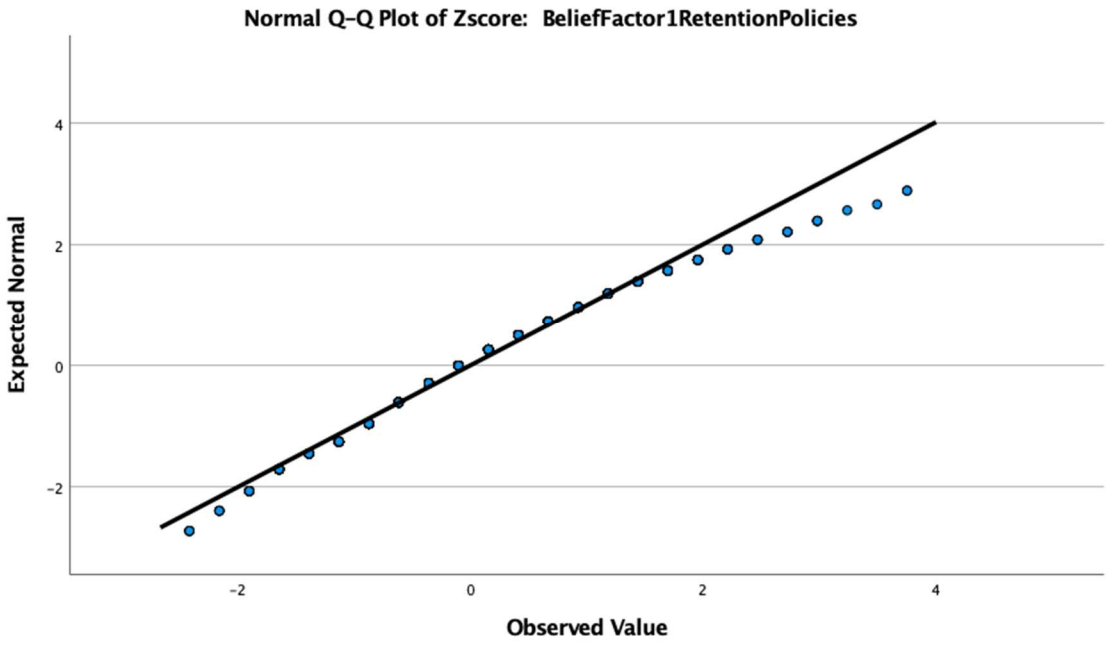
b. . indicates that the inter-quartile range (IQR) is zero.

Appendix J:

Belief Factor 1 Regression Chart

Appendix J

Belief Factor 1 Regression Chart

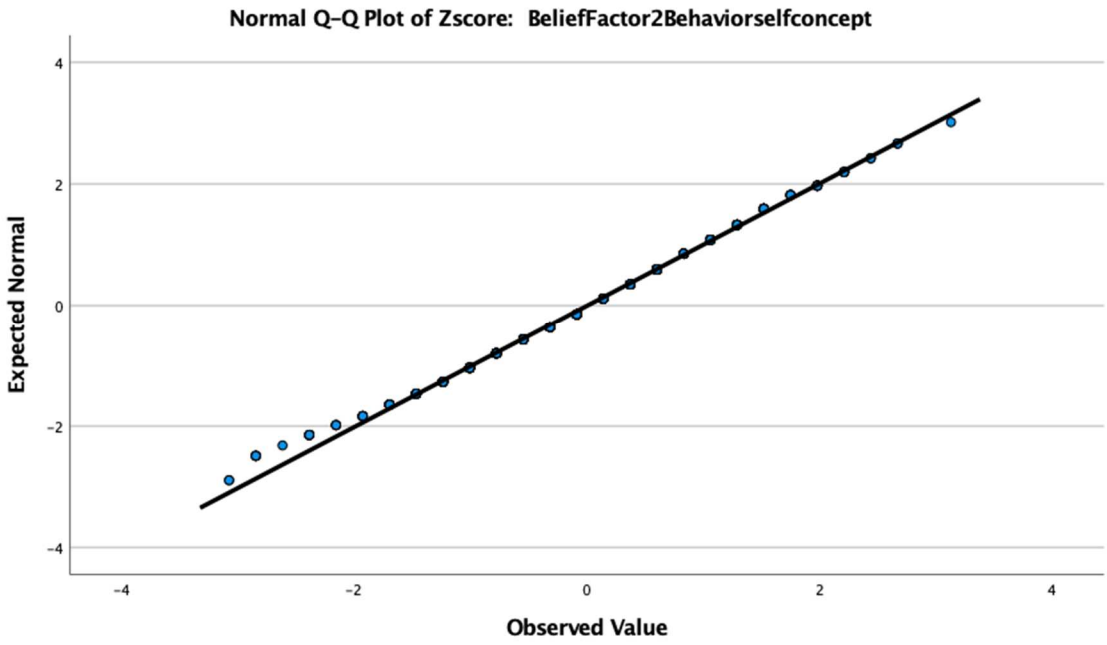


Appendix K:

Belief Factor 2 Regression Chart

Appendix K

Belief Factor 2 Regression Chart

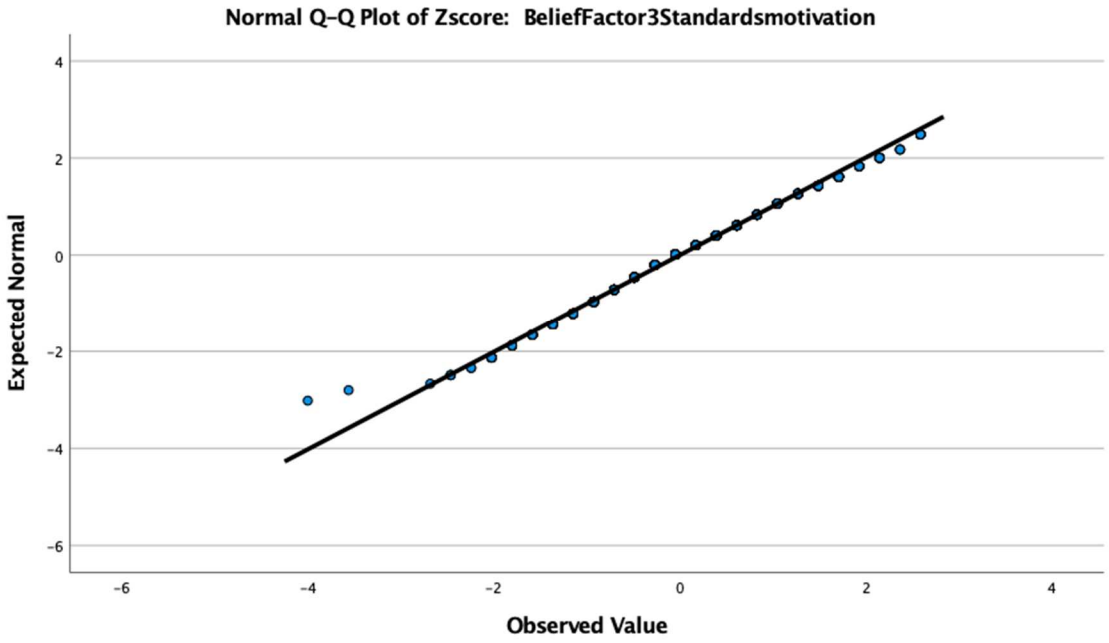


Appendix L:

Belief Factor 3 Regression Chart

Appendix L

Belief Factor 3 Regression Chart

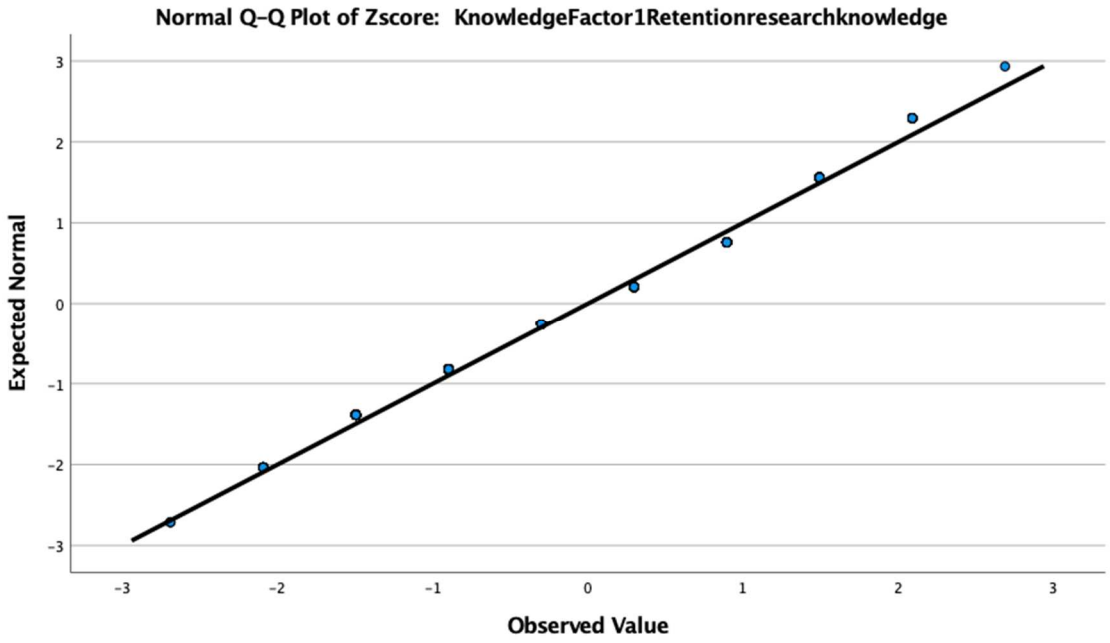


Appendix M:

Knowledge Factor 1 Regression Chart

Appendix M

Knowledge Factor 1 Regression Chart

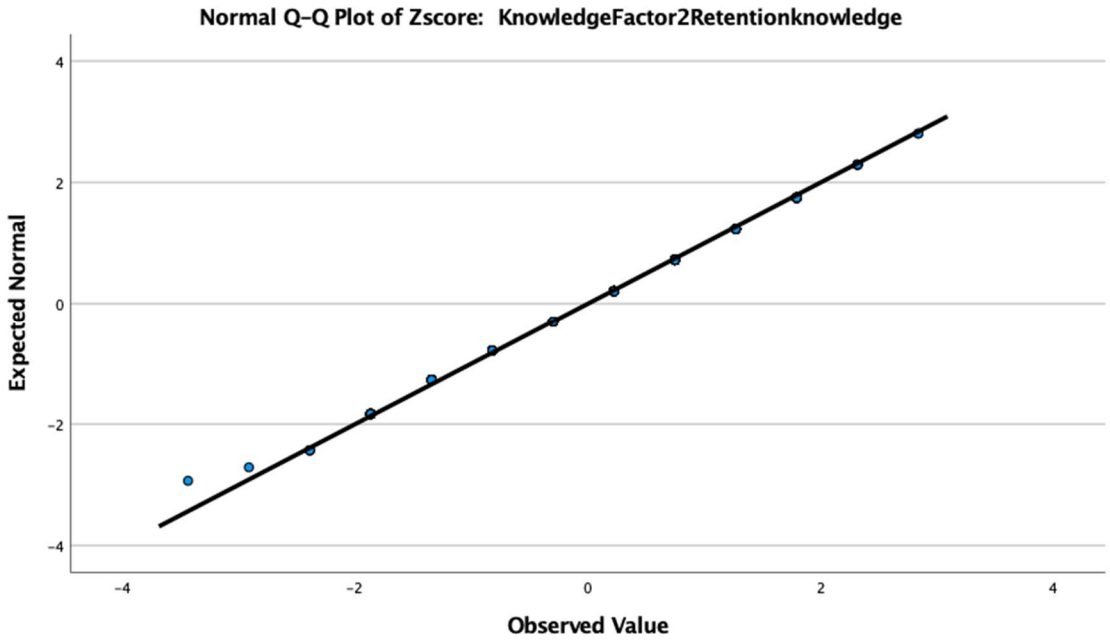


Appendix N:

Knowledge Factor 2 Regression Chart

Appendix N:

Knowledge Factor 2 Regression Chart



Appendix O:

Knowledge Factor 3 Regression Chart

Appendix O

Knowledge Factor 3 Regression Chart