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TEACHER GUILT: HOW CAN IT INFORM INSTRUCTION IN FOUNDATIONAL
SKILLS IN READING

A dissertation submitted in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF EDUCATION SPECIALTIES

of

THE SCHOOL OF EDUCATION

at

ST. JOHN'S UNIVERSITY

New York

by

Terrie Noland

Date Submitted 3/12/2021

Date Approved 5/19/2021

Terrie Noland

Dr. Olivia Stewart

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ABSTRACT

TEACHER GUILT: HOW CAN IT INFORM INSTRUCTION IN FOUNDATIONAL SKILLS IN READING

Terrie Noland

The purpose of this study was to understand if K-2 novice educators with three or fewer years of experience have the requisite knowledge and self-efficacy to teach foundational skills in reading and how experienced educators have guilt related to what they wish they would have known about teaching the foundational skills of reading in their beginning years as an educator. The comparison of novice educators with experienced educators could impact future pre-service preparation for novice educators. This study was framed within social cognitive theory related to teacher self-efficacy (Bandura, 1977) and feelings associated with guilt (Hargreaves, 1991). This study used a convergent mixed methods design, including a survey with an open-ended question section for K-2 novice teachers and an open-ended interview process for educators with four or more years of experience. Thirty-eight K-2 teachers with three or fewer years of experience participated in the online survey that combined profile data, the Teacher Knowledge Assessment: Structured Literacy (Mather et al., 2001), the Teacher Sense of Efficacy Literacy Scale (Moran et al., 2011), and open-ended questions. Eight educators with four or more years of experience participated in the qualitative interview process. Results indicated a strong belief by the novice educators in their ability to teach reading; however, there was a lack of knowledge in orthographic mapping and phonological awareness. The interview process of this study indicated that among the eight

experienced educators interviewed; there was a link to only depressive guilt for one and both depressive and persecutory guilt for six of the individuals. The feelings of anger, frustration, disgust, sadness, anxiousness, and fear about reflections on being equipped in their novice years to teach reading were the evidence needed to link to persecutory or depressive guilt. The outcomes of this study indicate that there is evidence to show teacher emotions relate to guilt about their requisite knowledge and feelings about teaching the foundational skills of reading in their novice years, and K-2 novice educators with three or fewer years of experience had a firm belief in their ability to teach reading yet had knowledge gaps in orthographic mapping and phonemic awareness.

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The dissertation journey was made possible by the “5:07 x 2” strategy. When friends and colleagues ask me how I managed to work on a dissertation while working a full-time job and being committed to other interests and activities, I always respond by saying that it took the “5:07 x 2” strategy. The “5:07 x 2” strategy was my two-pronged approach to persevering and working through the process. The first part of the strategy is all about personal commitment and dedication. The second part of the strategy signifies the enduring commitment from my family, program faculty and staff, colleagues, and others to cheer me on and guide me to complete this portion of my work.

Dr. A.K. Pradeep says that our brains are wired to look for things that are delicious (Pradeep, 2010). To that end, I set my alarm for 5:07 a.m. each morning. The random alarm at 5:07 is a deliciously unique time that allows me to get up, get dressed and leave my house at 5:41 to arrive for my 6:00 a.m. boot camp every day Monday through Friday. I kept this same pattern for Saturdays and Sundays, getting up in the quiet and darkness of the day and work on my dissertation. The quiet and undisturbed time allowed me to focus on reading, writing, and processing information. I knew that the regular workweek wouldn’t allow for undisturbed lengths of time to commit to a high level of brainpower. My personal commitment and blocking out of time and space allowed me to fit this work in with my job and other meaningful pursuits.

The personal commitment would mean nothing if it weren’t for the individuals that surrounded me on this journey, and this is where the “x 2” comes into play. Every Saturday morning, after working for about four or five hours, my husband would make me a two-egg omelette and deliver it to my office. The homemade and delivered omelette sounds like a delicious treat on the surface, but underneath, it was more about the people

around me that lifted me up while I was working. I want to thank my husband, Tracy Noland, for always encouraging me to get my Ph.D. I want to thank my children, Zack, Makenzie, and Cy, for being my cheerleaders. I hope my commitment and dedication will be an example for them to pursue their passions.

In addition to my family, I would like to thank Dr. Olivia G. Stewart for her kind words, honest guidance, and belief in my ability to accomplish this task. I would also like to thank Dr. Brett Elizabeth Blake for her role on my committee as a guiding voice to test my thoughts and stretch my thinking. Dr. Evan Ortlieb was another mentor who helped to make this journey smooth and possible.

In the area of support and encouragement, I would like to thank Jeff Ho and Hoachen Peng for their guidance and assistance in uncovering the data necessary to conduct my survey. I want to thank Learning Ally, the organization where I work, which helped make all outreach possible.

Without the commitment of time from the survey and interview participants, I would not have completed this study. I truly value every single person, whether I knew them by name or not. The extension of yourself to help someone else is an admirable gift, and each participant gave that extension of themselves.

When my journey began with a vision and focus on being a change agent in education, I met two incredible people who gave me inspiration, knowledge, and a first-hand look at why reading was a fundamental right. Therese and Stephanie Llorente, a dynamic mom advocate and student, gave me insight into the world of reading struggles. They opened my eyes to what it means to be challenged while in the hands of a system

that doesn't know how to address the needs of a struggling reader. I thank both of them for the inspiration.

DEDICATION

This dissertation is dedicated to my husband, Tracy, my daughter Makenzie and my two sons, Zack and Cy. They are the ultimate “x 2” in this equation. I spent many long hours in front of a computer writing, editing, reading, and studying while giving up time to spend with them. They listened to me brag about my progress. They tolerated me pitching philosophical ideas and theories at them. They did their laundry and went to the grocery store themselves. This dissertation may have been researched and written by me, but it was powered by my family and the two-egg omelette.

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CHAPTER 1: INTRODUCTION

Background

Reading is how individuals open a window to the world of knowledge. Reading gives us insight into new ideas and concepts and allows individuals to comprehend complex and rigorous texts that give way to opportunities. However, reading proficiency has been a concern in the United States because the national reading assessment first took place in 1992. According to the National Association of Educational Progress, the Nation's Report Card, the history of poor reading performance in the United States is evident. In 2019, fourth and eighth-grade students had lower average reading scores compared to 2017 scores. Twelfth graders had lower average scores in 2019 compared to 2015. Data from 2019 indicate 65% of fourth-grade students read below proficiency levels, and that number increases to 81% when considering students who are more at risk of reading failure (NCES, 2019). At-risk refers to students of color, low income, English Language Learners, and students with neurodiversity. (NCES, 2019).

Reading failure leads to getting poor grades in school, and many students start acting out to cover up the poor grades. According to Heather Fels at the University of California San Francisco School of Medicine (2014), the inability to read leads to poor grades, which leads to repeating grade levels and ultimately to school dropout. Fels (2014) stated that 35% of students with learning disabilities drop out of high school, which is twice the rate of their non-disabled peers. There is hope that this great chasm can be closed because it is estimated that about 95% of students can be taught to read (Hasbrouck et al., 2006) when given proper and scientifically based instruction by a well-trained and knowledgeable teacher (Moats, 1994). However, there is another looming

problem, and that is in the area of well-trained and knowledgeable teachers. Binks-Cantrell et al. (2012) state that “Poor instruction due to poor teacher knowledge due to poor teacher preparation has been suggested as one of the major causes of reading failure” (p. 527).

According to an EdWeek research report, only 11% of elementary educators feel entirely prepared to teach reading after their pre-service program (Kurtz et al., 2019). The same report indicated that 12% of elementary school teachers felt completely unprepared to teach reading, 23% felt somewhat unprepared, and 54% felt somewhat prepared (Kurtz et al., 2019). Lack of preparation felt by elementary school teachers, coupled with the reading crisis, is an issue that needs to be tackled. The juxtaposition of these two looming problems is the basis for conducting this study about the requisite knowledge and self-efficacy of novice K-2 educators to teach the foundational skills of reading and if we can learn from the feelings of experienced educators to address the lack of pre-service preparation, ultimately impacting outcomes for students that are at risk of reading failure.

To intervene and prevent further damage to the foundations of reading for students, I studied whether teachers with four or more years of experience had feelings of guilt as they reflected on their first years in teaching foundational reading skills to see if their growth and understanding in evidence-based practices, as they became more experienced and educated, could inform current practice. Additionally, the concept of teacher guilt leads me to explore teacher self-efficacy because it is a grounded behavioral construct in social cognitive theory (Bandura, 1977). When experienced in modest proportions, it can be a great motivator for innovation and change (Hargreaves, 1991).

Statement of the Problem

Discussions have been increasing on social media, and a recent education report was published (Hanford, 2018) seeking answers to the problem of low achievement in reading (NCES, 2019). The Reading League released a video (2018) that shares several teachers' lived experiences that expose the truth about their feelings of guilt regarding how they had been trained to teach reading. In this roundtable discussion which occurred on April 7, 2018, educators reflected on their past experiences. One educator who had been teaching for 22 years reflected on his feelings of wondering whether he had done enough for his students before he taught with a systematic reading instruction approach (The Reading League, 2018).

The issue around reading instruction is whether students should be taught using an evidence-based multi-sensory structured approach to reading that focuses on explicit instruction in foundational skills such as phonemic awareness and phonics, or should students be taught using a whole language approach. Whole language is a teaching method that focuses on reading by recognizing words as whole pieces of language in context (Dixon et al., 1996). To confuse the issue further, balanced literacy, which was intended to marry the two concepts together, has been thrown into the whole language camp because of the lack of intentionality and focus on phonological awareness (Lorimor-Easley et al., 2019).

To further define what is meant by an evidenced-based systematic approach to teaching reading, we turn to the multi-disciplinary research in dyslexia. Structured Literacy was coined by the International Dyslexia Association (IDA) in 2016 and follows the IDA's Knowledge and Practice Standards. The Structured Literacy approach to

reading instruction is essential for students with dyslexia and could be beneficial for all students for building the foundational skills needed for reading (Moats, 2020; Spear-Swerling, 2019). The Structured Literacy approach builds off of the work of the National Reading Panel (2000), which reported that there are five components to effective reading instruction: phonemic awareness, phonics, fluency, vocabulary, comprehension.

Conversely, balanced literacy is a philosophical construct that reading is learned through instruction in multiple approaches, including word study, vocabulary instruction, and shared and guided reading. Another tenet of balanced literacy uses the cueing system, which has the student rely on picture cues instead of understanding the phonetic components of decoding (Lorimor-Easley et al., 2019). Gough and Tunmer, theorists that developed the Simple View of Reading, argue that this dependence creates a weak foundation of decoding and compromises comprehension (1986).

Paris (2005) states, “The theories regarding skills (of reading) as components to be acquired and assembled, and the main controversies in the so-called “reading wars” have been arguments about the developmental order and importance of decoding versus comprehension skills.” What has mainly been left out of this on-going discussion is the need to focus on the “when” of the appropriate approach. We need to apply our understanding of theory and practice to the finite developmental competencies of students. Jeanne Chall (1983) developed the stages of reading development that align children’s developmental capacity to instructional strategies that work for that particular age. In the ensuing resurgence of the reading wars, enthusiasts tend to apply the principles of reading instruction at large to all students, no matter their developmental age.

This study focuses on K-2 novice educator knowledge of foundational skills in reading instruction, which will help identify the instructional practices that align with students' developmental age in these grades and their self-efficacy for teaching reading. Through this research of what novice teachers know about teaching reading in the early years and their self-efficacy to do so as compared to the feelings of guilt that experienced teachers could experience will help to identify the requisite skills that align to what is defined as the “settled science” (Moats, 1994) of teaching reading.

Theoretical Framework

The emotional feeling of guilt has been largely excluded from research regarding education (Hargreaves, 1998; Van Veen et al., 2005). While there is a large body of evidence to support student self-concepts, there is a significant gap in understanding teacher's emotions related to teaching (Lohbeck et al., 2018). Research on teachers' emotions has primarily been about personal concerns and not educational concerns (Hargreaves, 1998). Emotions are constructed through our beliefs and perceptions about the world and are linked to our cognitive, social, and linguistic interactions, and are very fluid (Madrid et al., 2010). Teacher emotion influences teaching behavior, self-efficacy, and, ultimately, student learning (Lohbeck et al., 2018). Because we cannot separate emotion from the learning environment, choosing not to consider all stakeholders' emotions disregards the social dynamic that influences our education system.

While there is a lack of research on taking teacher emotions into account, there is also a lack of understanding of how guilt plays a factor in the education process. There is a very social nature of guilt. Guilt not only happens within someone, but Baumeister et al. (1994) argue that most instances of guilt happen between individuals and are highly

linked to interpersonal processes. While social learning theory agrees with behaviorist theory in the context of conditioning, both operant and classical, Bandura added two tenants that said that processes between stimuli are reciprocal and that behavior is learned within the environment through observation (McLeod, 2016). The environment and emotion speak to the reciprocal nature of guilt, which is a very interpersonal aspect that Baumeister et al. (1994) posits and is evident in the daily practices of teacher-student interaction.

Social learning theory, which was grounded in several primary constructs, was developed into social cognitive theory in the 1980's by Bandura (LaMorte, 2019). Bandura's evolution of social cognitive theory stood because learning happens in a very social context with a shared exchange of interactions between people, their environment, and the behaviors they exhibit. This research study will be situated in social cognitive theory because it asserts that a level of social influence occurs with an emphasis on internal and external reinforcements (LaMorte, 2019). Through self-reflection, which is both evaluative and goal-oriented, an individual can self-regulate, which is a "key internal motivational process in social cognitive theory" (Schunk et al., 2020, pg. 2).

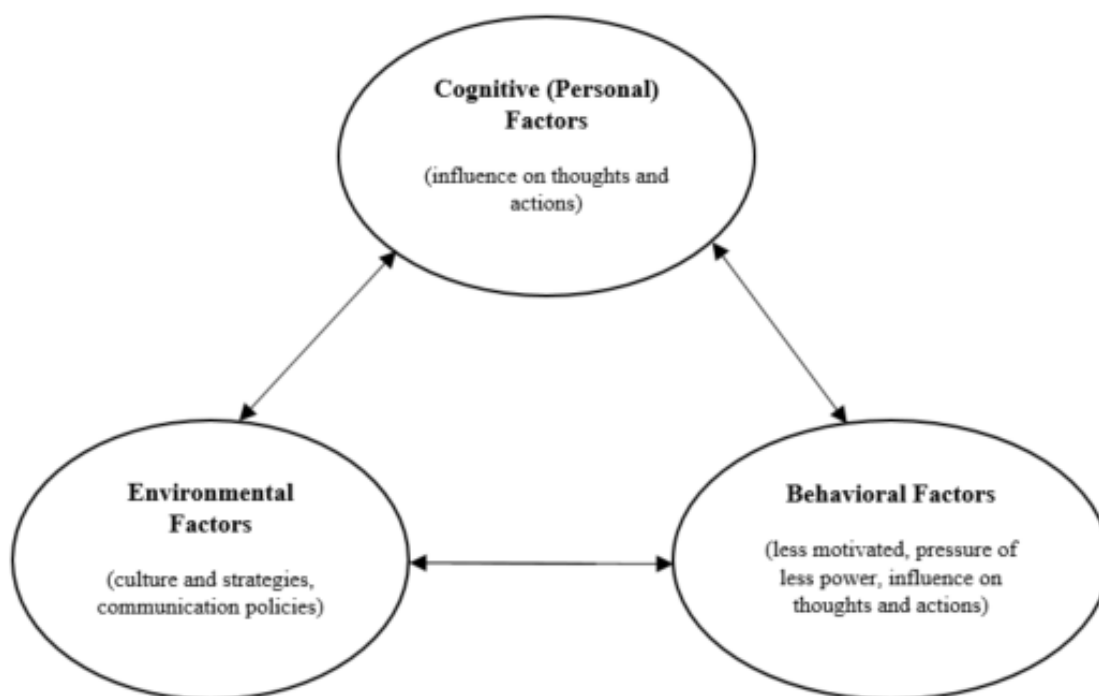
Triadic Reciprocal Determinism

A central tenant of social cognitive theory is the dynamic and reciprocal nature of the individual's cognitive or personal factors, the environment in which the social interaction is taking place, and the behaviors that an individual takes on in response to learned experiences (LaMorte, 2019). Bandura states that these three factors "all operate as interacting determinants that influence each other bi-directionally" (Bandura, 1989).

The figure below is a simple representation of how these three factors interplay with one another.

Figure 1

Bandura's Triadic Reciprocal Determinism



Bandura (1989) notes several aspects to consider when it comes to this reciprocity. The central construct is that this reciprocity does not mean equal strength or directionality between the factors. Some factors may be more reliable than others, and the interchange does not co-occur between the factors. Time is needed for a particular causal factor to exert its influence over another one of the factors (Bandura, 1989). The personal element in this model says that the way an individual thinks, believes, and feels will, in turn, affect how they behave (Bandura, 1986). The personal reciprocity in the

environment could relate to understanding guilt and how it could motivate behavioral changes regarding how an educator addresses reading instruction. Once an educator has been influenced by environmental factors of learning about the science of reading and evidence-based approaches to reading instruction, guilt could motivate a change in their behavior to affect their environment differently and speaks to the understanding that Baumeister et al. (1994) and Hargreaves et al. (1991) have about guilt being a great motivator towards improvement and change.

Behavioral Capability

Behavioral capability is an individual's ability to execute a behavior through the essential knowledge and skills that they have gained in the environment (LaMorte, 2019). To execute a behavior, an individual must know what to do and how to do it. In the context of knowing what to do and how to do it, individuals learn from the consequences they experience as a result of their behavior. It is here that we see reciprocity taking shape. In applying this construct to the research at hand, there can be an application between an educator's requisite knowledge to teach reading and their ability to execute on the teaching of reading in the classroom environment.

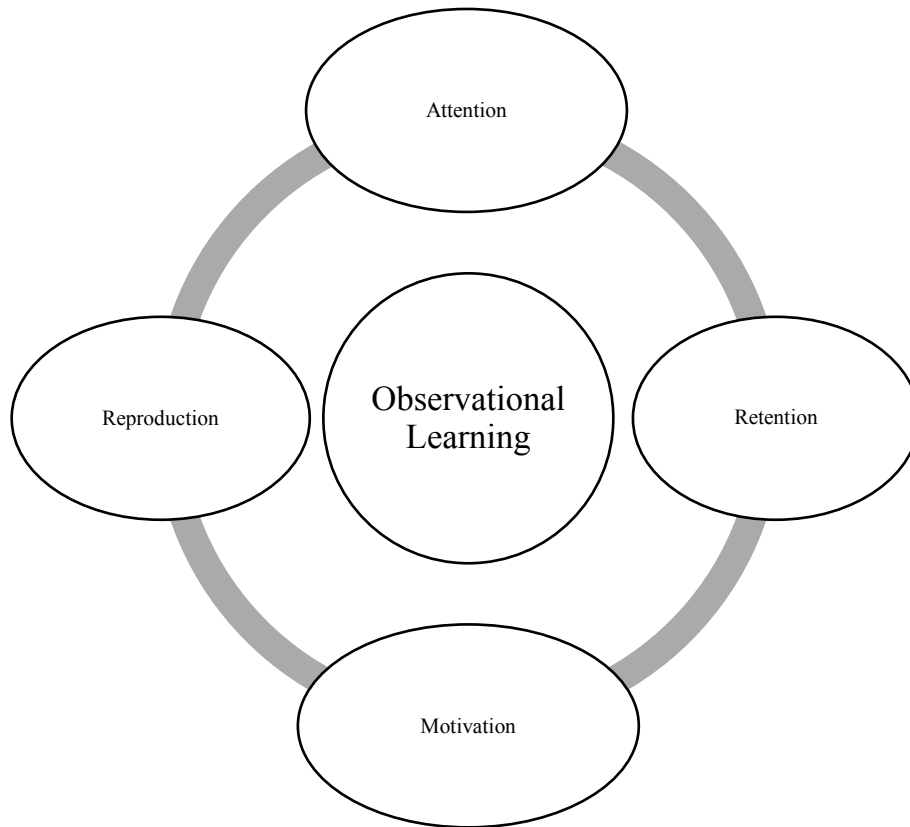
The breakdown in our current system of teaching reading is unifying on and building the requisite knowledge that an educator needs to teach foundational skills in reading that have positive student outcomes. The requisite knowledge currently in disunity across pre-service programs is delivering knowledge and understanding that delivery does not affect the outcome of student achievement necessary for developing proficiency in reading among our students (Drake et al., 2013; Maloch, 2013).

Observational Learning

The observational learning construct takes on four central tenants: attention, retention, motivation, and reproduction, as depicted in the figure below. Bandura (1989) states that individuals cannot be influenced by the events they observe if they cannot attend to the event, retain the observed information, and become motivated to replicate that particular event or behavior.

Figure 2

Pictorial Depiction of Bandura's Observational Learning Construct



When modeling observed behavior, individuals are much more likely to become motivated either directly, vicariously, or through self-motivation if they know that the

behavior will improve outcomes (Bandura, 1989; Schunk et al., 2020). The modeling of behavior could directly link to improved outcomes for students in reading if pre-service education of an evidence-based reading program's components were taught and built upon through an in-service learning environment. A body of knowledge shows that ongoing professional learning opportunities need to be embedded and modeled for teachers to ensure the effective execution of an evidence-based reading program (Joyce, 2002; Moats, 1994; Zepeda, 2015). Teachers' requisite knowledge and the ability to transfer that knowledge through observational events and opportunities are critical elements in impacting student reading outcomes (Wasserman, 2009).

The concept of motivation in this construct applies to this study because of the motivational factor guilt can provide (Baumeister et al., 1994; Hargreaves et al., 1991). Outcomes are tied to the motivation factor because of the weight of the impact the individual believes their behaviors will affect an outcome (Schunk et al., 2020). The more an individual believes that there will be a significant outcome, the more likely they will perform the behavior or action (Bandura, 1989). "In the social cognitive view, people function as active agents in their motivation. Self-motivation through cognitive comparison requires distinguishing between standards of what one knows and what one desires to know. It is the latter standards, together with perceived self-efficacy, that exert selective influence over which of many activities will be actively pursued." (Bandura, 1989, p. 50). Guilt can be the impetus of the "active agent" behind the motivating factor to create a great outcome in student reading performance based on what a teacher currently knows and what they have desired to know.

Self-Efficacy

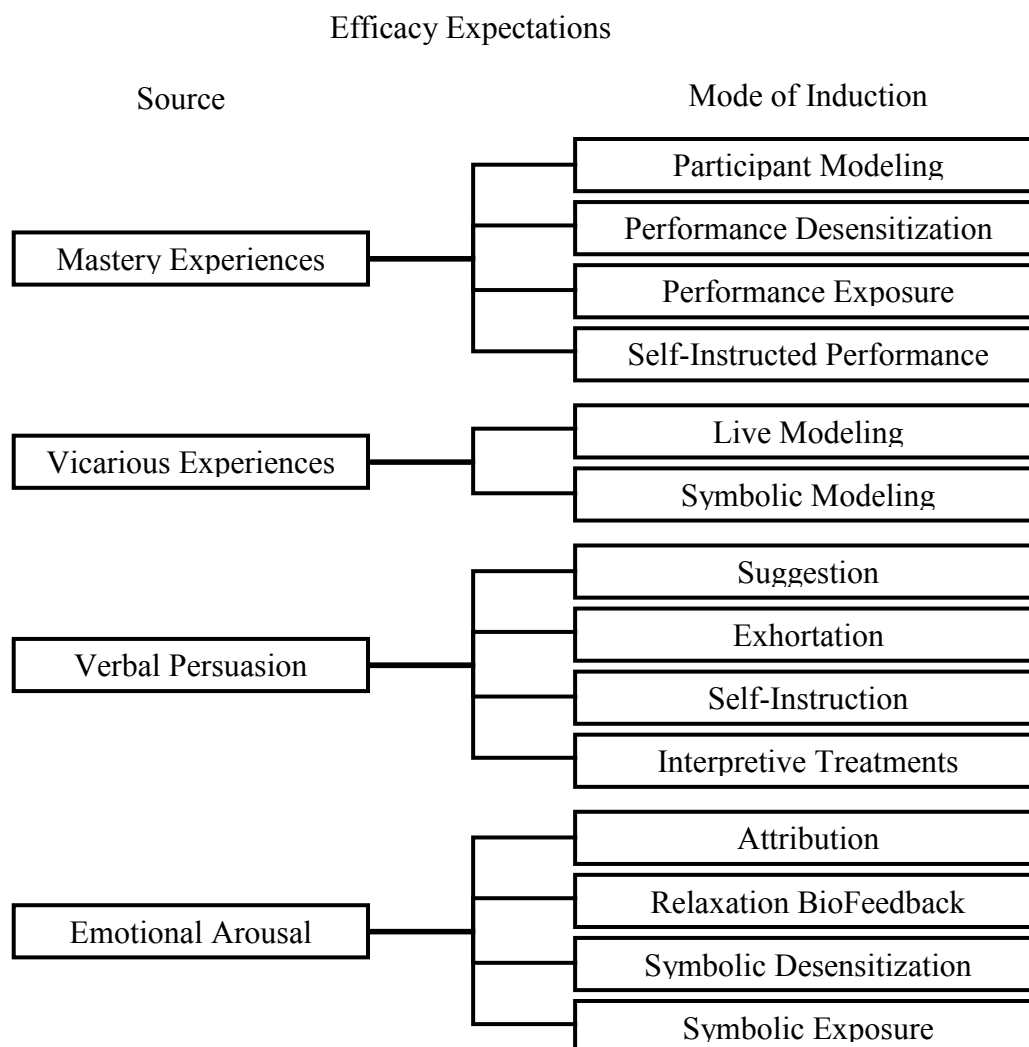
The construct of self-efficacy was added to the theoretical framework of social learning theory in 1986 when Bandura revised his theory (LaMorte, 2019). Self-efficacy refers to the level of an individual's confidence and belief in themselves to perform a task and affect the outcome of oneself or others (Tschannen-Moran et al., 2007). Bandura describes self-efficacy as: "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments." (Bandura, 1997, p. 3). According to social cognitive theory, teachers who do not believe in themselves and their ability to influence outcomes on a particular topic or group of students will put forth much less effort than if they have a high level of belief (Tschannen-Moran et al., 2007).

According to Bandura, there are four sources of self-efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal (Bandura, 1977; Tschannen-Moran et al., 2007). The four efficacy expectations with the corresponding mode of induction are pictured in figure three below (Bandura, 1978). Mastery experiences are when an individual successfully masters a task, which, in turn, bolsters the individual's belief in themselves (Bandura, 1977). The mastery source of self-efficacy is crucial to this research study because it is the understanding of experienced teachers' guilt when motivated to understand the evidence-based practices that should be taught when it comes to reading. Research has shown that mastery experiences are among the most significant sources predictive of teachers' belief in themselves (Tschannen-Moran et al., 2007). In learning a new approach, the mastery

experiences of learning a new skill can bolster a teacher's confidence and begin to alleviate some of the guilt-related feelings.

Figure 3

Bandura's Depiction of the Major Sources of Efficacy Information and the Principal Sources Through Which Different Modes of Treatment Operate



Vicarious experiences are when an individual sees someone else succeed in something. Self-efficacy is essential to the beliefs in oneself based upon the source in which an individual gains a belief in their ability (Bandura, 1977). In this context, vicarious experiences support the notion of providing pre-service learning opportunities

for novice teachers in which they are paired with and mentored by an experienced teacher. When a teacher sees someone else effectively instruct students in reading, they, in turn, become motivated to try the same strategy or lesson with their students. Ehri et al. (2007) found that this level of mentorship directly impacted student gains in a longitudinal study.

Verbal persuasion is when individuals are told they can master a particular task (Bandura, 1977). Bandura (1989) noted that individuals evoke different reactions to their environment through verbal persuasions. Verbal persuasion can take on many forms. In a study by Tschannen-Moran et al. (2007), there was an examination of verbal persuasion in the form of support from administrators, colleagues, parents, and the community concerning educators' performance. Results showed that among novice teachers, verbal persuasion was not a significant indicator of increased teacher self-efficacy. There was a very low correlation between verbal persuasion and teacher self-efficacy for experienced teachers. The low correlation ties into the earlier note that mastery experiences tend to be a more significant indicator of teacher self-efficacy (Tschannen-Moran et al., 2007).

Emotional arousal is a final source of teacher self-efficacy, as outlined by Bandura (1977). The emotional arousal source relates to the stressful and taxing situations individuals are exposed to in their environment. Depending upon the level of burden, stress, or anxiety an individual experiences, they will respond based on their competency to handle the situation (Bandura, 1977). Bandura (1978) states that the emotional arousal source of stress and anxiety can be alleviated when mastery experiences occur because of participant modeling. In the context of this research, the mastery experiences could apply to the feelings of stress and anxiety or guilt that might

be felt by a teacher when they come to realize that they may not have been providing students with an evidence-based approach to reading instruction. Peer modeling and mastery of effective practices can control these threats, and the teacher can use the guilt as a motivator to precipitate changes in their instructional practices.

Application of Social Cognitive Theory to this Study

Social cognitive theory will guide the theoretical framework of this study for several reasons. First, the construct of reciprocal determinism speaks to the fact that there is a constant push and pull between one's environment, cognitive or personal factors, and behavioral factors (Bandura, 1989; Schunk et al., 2020). Both novice and experienced educators are affected by their thoughts and actions, have motivational factors related to their teaching of reading, and are influenced by the environmental factors of strategies, policies, and curriculum regarding teaching reading.

Also, the behavioral capacity of social cognitive theory indicates that one must have the requisite knowledge and skills to affect their environment in this very reciprocal interaction (LaMorte, 2019). The necessary knowledge of an evidence-based Structured Literacy program will be investigated to determine if this will affect the motivation to change behaviors within the environment. Finally, self-efficacy will be explored to determine novice educators' belief in themselves to transform educational outcomes for students.

Conclusion

The notion and understanding of teacher feelings lead me to explore teacher self-efficacy because it is a well-researched and established behavioral construct that is grounded in social cognitive theory (Bandura, 1997) and investigated with rigor by the

RAND corporation wherein self-efficacy was associated with significant variables that had a positive impact on student outcomes (Hoy, 2000). Although much work has been done in the area of self-efficacy when it comes to teaching in multiple subject areas: math, science, and language (Tschannen-Moran, M, et al., 2011; Wheatley, 2002 & Zee et al., 2016), there is little work that connects teacher guilt of what they wish they would have known about teaching foundational skills in reading as they become more experienced and aware of evidenced-based ways to teach reading. The study of self-efficacy relates to the here and now of teachers' perceptions regarding how they will impact student achievement (Coladarci, 1992). In contrast, in this study, I aim to understand the feelings associated once teachers reflect on their initial practices as a novice teacher based on what they were taught and how they were prepared to teach foundational skills in reading. Teachers in pre-service programs are getting mixed messages about the theoretical underpinnings of how to teach reading (Will, 2020).

Significance of the Study

In this study, I will seek to understand if experienced teachers that taught reading in their novice years have feelings of guilt as they reflect on their knowledge and skillset of reading instruction. Research has shown links between teacher self-efficacy that can predict student achievement and has been positively related to reform in education (Corkett et al., 2011; Maloch, 2003; Wheatley et al., 2002). Additionally, is evidence that anxiety and guilt, which are examples of negative teacher feelings, are problematic in education (Wheatley, 2002). Students are underperforming in reading at alarming rates. The experiences of informed and experienced teachers could help address the crisis and create educational reform that will positively impact student achievement in reading.

Suppose for experienced educators there is a change in belief or better training and knowledge about how to teach foundational reading skills over time, and feelings of guilt arise. In that case, there could be a chance to intervene with improved foundational reading instruction practices for beginning teachers. The understanding of guilt that experienced teachers might feel could better inform practices of the theoretical and methodological approaches grounded in evidence for teaching foundational skills in reading. Learning from teachers' reflective experiences could have a monumental impact on what they wish they would have known from the onset of their teaching careers.

Purpose of the Study

The purpose of this convergent mixed-methods study will be to interpret quantitative and qualitative data to better understand the requisite knowledge that K-2 novice teachers have concerning their self-efficacy and the guilt that experienced educators have about teaching reading in their first years as a teacher. Further interpretation of the data will seek to understand the impact that beginning teachers' pre-service education has and whether education reform should change that education.

Research Questions

1. To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?
2. To what extent do novice teachers have a sense of self-efficacy when teaching the foundational skills of reading?
3. To what extent do experienced teachers feel guilt about their knowledge and ability to teach the foundational reading skills in their first years as a teacher?

4. Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?

Definition of Terms

Teacher self-efficacy. Teachers' beliefs in their ability to affect student outcomes (Wheatley et al., 2002).

Persecutory guilt. Feeling forced to do something or failing to do what is expected of you (Hargreaves et al., 1991).

Depressive guilt. When you realize that you may be harming or neglecting others (Hargreaves et al., 1991).

Pre-service. Instruction that an educator receives before becoming a teacher.

K-2 novice educator. An educator with three or fewer years of experience teaching.

Experienced educator. An educator with four or more years of experience teaching.

Foundational skills in reading. Phonemic awareness, syllable types, phonological awareness, orthographic mapping, phonics (Mather, 2001).

Peter effect. You cannot teach what you do not have (Binks-Cantrell et al., 2012; Farrell, 2012; Washburn et al., 2016).

Limitations

Due to surveying teachers with varying levels of experience, there could be a limitation in dividing which teachers are experienced versus novice. For this research, the dividing line will be that teachers with four or more years of experience teaching reading

will be considered experienced. Teachers that have three or fewer years of teaching will be considered novice teachers. The dividing line of years was used in a study by Tschannen-Moran (2007) and used as a guide for this particular study. I defined novice teachers as having three or fewer years' experience and career teachers with four or more years of experience (Tschannen-Moran, 2007).

Summary

This chapter discusses teacher guilt related to their knowledge of reading instruction in their first years and whether they have a change in beliefs as they learned more. Suppose there is a change in belief and the feelings of guilt that happen consistently for experienced teachers. In that case, there could be a chance to intervene with better foundational reading instruction practices for beginning teachers. Understanding guilt that experienced teachers might feel could better inform practices and reform current pre-service programs towards theoretical and methodological approaches grounded in evidence for teaching foundational skills in reading.

CHAPTER 2: LITERATURE REVIEW

Introduction

This literature review comprehensively examines teachers' requisite knowledge and self-efficacy in teaching the foundational skills in reading as a novice teacher and the guilt that experienced teachers feel when reflecting on their self-efficacy in their formative years as a teacher. It will further explore if these feelings of self-efficacy and guilt can impact educational reform in teaching reading instruction. There will also be a connection made to support the need for educational reform based on the current research and the need for future research regarding pre-service education for preparing teachers in evidence-based literacy practices and the need for on-going learning.

Organization of the Literature

This literature review aims to understand the previous work that has been done on the guilt that teachers experience when it comes to teaching the foundational skills needed for effective word reading. Additionally, there will be an exploration into how their knowledge or lack thereof in their preparation programs could have differed or been enhanced with research-based practices. The review will begin by providing a foundation for understanding the science of reading and what research has shown to be "settled science" (Moats, 1994). The review will also provide insight into teacher knowledge and education of teaching reading fundamentals during pre-service programs. The idea of the Peter Effect will be explored, which states that you cannot teach what you do not know (Binks-Cantrell et al., 2012). If our pre-service programs are not educating teachers on what has been shown as evidence-based, then teachers cannot be expected to teach what they have not been taught themselves.

The chapter two literature review will dive deep into understanding the self-efficacy, or the belief in oneself to affect outcomes (Wheatley, 2002), of novice teachers. To fully understand if there could be a tie to educational reform in teaching foundational skills in reading, the feelings of guilt will be explored to determine if guilt might be a strong predictor of educational reform. Guilt is defined in two ways: persecutory guilt, when you feel the pressure of an external force, and depressive guilt, which is when you realize you may be harming or neglecting others. Also, guilt is discussed as a motivator that can lead to innovation and change. In the context of motivation, guilt can be “a mechanism for alleviating imbalances or inequities in emotional distress” (Baumeister et al., 1994, p. 243) and viewed as an excellent motivator for creating positive change to handle the inequities found in student outcomes in reading. Finally, the review will look at how teacher self-efficacy and guilt should be used as critical indicators to inform educational reform regarding teaching foundational skills in reading.

The “Settled Science” of Reading Instruction

Reading is a multi-faceted phenomenon. Reading can refer to the explicit skill-building needed to access print and the act of comprehension that comes from accurate word decoding (Forman et al., 2011). While the act of reading is multi-faceted, the science of reading, or the body of multi-disciplinary science, research, and knowledge, that comes together to understand the reading process has some very definitive outcomes when it comes to instructing students in how to read accurately (Shanahan, 2020). A significant conclusion that can be drawn from the extensive research that has been conducted about the foundational skills needed for learning to read is that an early, systematic approach that includes phonological awareness and letter-sound

correspondences improve reading and spelling skills and ultimately ameliorates the problems that a student might experience later on in their education (Mather et al., 2001). Louisa Moats (1994) refers to this extensive knowledge that has been gained through research and proven time and time again as “settled science”.

Jean Chall (1983) built a framework for the stages of reading development that aligned appropriate tasks according to age and grade level. The work on reading development made a parallel connection between how reading tasks were acquired and how that related to reading and listening. The reading development work frames decoding, which encompasses phonemic and phonological awareness, as one of the foundational skills needed for students in Kindergarten through 2nd grade (Chall, 1983). Even staunch believers in a balanced literacy approach, such as Lucy Calkins, have admitted that the foundational skills needed for reading are “settled science” (2019).

Despite the agreement that foundational skills should be taught, there is still a vast disconnect between what is known and what is being studied, learned, and implemented in the classroom (NCTQ, 2020). For example, one of the foundational skills needed for reading is to understand phonological awareness, which includes identifying and manipulating units of oral language. Reading Rockets (2019) is an organization that collaborates with the Center for Effective Reading Instruction and the International Dyslexia Association; their website defines phonological awareness as having the ability to understand word parts, syllables, and onset and rime in a word. Students’ understanding of phonological awareness would be seen in their ability to manipulate sounds, rhyme words, understand and execute on alliteration, and identify syllables in a word quickly.

One of the reasons that the “settled science” (Moats, 1994) of reading instruction is not widely implemented is because of the lack of teacher knowledge on the subject. The concept of phonological awareness has been extensively researched in literature; however, teachers still do not understand how to teach this particular concept (McCutchen et al., 2002). An experimental study looked at kindergarten and first-grade teachers in a summer institute and throughout the year as they taught 779 students. The summer institute taught the importance of explicit instruction in phonological and orthographic awareness to the experimental group, and the control group did not receive the same instruction. As the teachers were followed throughout the year, it was found that the experimental group had a more in-depth knowledge of phonological awareness and, more importantly, that knowledge transferred to the classroom practices of instruction, which ultimately improved learning for the students (McCutchen et al., 2002).

Structured Literacy

To further build upon what science has shown in foundational reading instruction, there are exact methodologies to help understand the framework that should be followed. The systematic bottom-up approach to reading instruction is referred to as Structured Literacy, an umbrella term coined by the International Dyslexia Association (IDA) and aligns with the IDA Knowledge and Practice Standards (Lorimor-Easley, 2019; Washburn et al., 2016). While Structured Literacy is an approach that was designed to address the needs of students with dyslexia, all students can benefit from the explicit nature of this instruction, which is grounded in basic language constructs (Washburn et al., 2016). Structured Literacy requires a high degree of teacher interaction, which calls for teachers to provide an explicit instruction methodology.

Morphology and orthography are other critical components of a Structured Literacy approach (Moats, 2020). Morphology refers to the meaning of words and the understanding that morphemes, or the smallest unit of meaning in a word, combine to create meaning. Spelling rules are very consistent in morphemes and can create a repeatable pattern for students to decode words once they understand prefixes, roots, base words, and suffixes (Moats, 2020). Orthography is the print system in our language, and the consistency of spelling rules carries through for a student to the printed word. When a student understands that every syllable must have a vowel sound, this understanding can support their transfer of speech to print (Moats, 2020).

Structured Literacy also calls for instruction to be systematic and cumulative, which means that when a student learns the explicit nature of phonemic and phonological awareness, this knowledge compounds and builds upon each other (Joshi et al., 2019; Spear-Swerling, 2018). A structured, evidence-based approach is beneficial because it does not make assumptions about what students already know or what they should learn naturally (Lorimor-Easley, 2019). Spear-Swerling (2018) states that “If implemented in Tier 1 instruction and tiered interventions, Structured Literacy practices may also prevent or ameliorate a wide range of other reading difficulties.”

The Difference Between Structured Literacy and Typical Literacy Practices

Structured Literacy differs from typical literacy practices in that with typical literacy practices, phonemic awareness and phonics are generally not emphasized in Kindergarten or 1st grade. “The texts used in typical literacy practices do not lend themselves to the application of learned phonics rules; they rely more on guessing words based on context and picture clues” (Spear-Swerling, 2018). Examples of typical literacy

practices include Reader's Workshop by Lucy Calkins, guided reading practices, balanced literacy, or Leveled Literacy Instruction by Fountas & Pinnell. Balanced literacy is an approach and a philosophical orientation in which reading is developed through different instructional practices and approaches that differ by teacher support. Students are encouraged to use pictures or contexts to identify words. Using pictures or contexts to identify words has historically been referred to as the three-cueing system. The system has a widely held belief of effectiveness though there is no significant research to back up these beliefs (Hempenstall, 2003). Hempenstall (2003) warns that the three-cueing system is likely to mislead teachers in their own beliefs about teaching reading and ultimately hinder students' progress.

Several different instructional methods and approaches are used in a balanced literacy approach. Shared reading is where the teacher reads and asks questions; guided reading is where students are grouped in homogenous groups of ability and read leveled texts to discuss with their teacher; finally, independent reading is where students self-select texts (Lorimor-Easley, 2019). While these literacy practices do work for some students outside of foundational skill-building, they are a poor fit for many students, especially those with learning disabilities (Spear-Swerling, 2018).

A school district using balanced literacy was compared with a school district using Structured Literacy practices in a three-year longitudinal study. Results showed that the students who received the Structured Literacy practices outperformed their peers. There is also evidence to support that class-wide implementation of a Structured Literacy approach can produce results similar to the costly one-on-interventions seen in a tiered system of support or special education (Lorimor-Easley, 2019). Moats (1994) pointed out

that very few students catch up if they fall behind in reading unless they receive explicit, intensive, individualized instruction, often a very scarce and costly commodity in our schools. Reading research tells us that if you start with a foundation of learning to read that includes a systematic, evidence-based approach, the problems of needing to catch up will begin to close (Mather et al., 2001).

Kilpatrick (2019) emphasizes that phonics skills are critical to learning an alphabetic language such as English. Research has proven that phonics is the most evidence-based approach to teach a student to decode. However, despite the research that proves this method to be effective (Kilpatrick, 2019; Lorimor-Easley, 2019; Moats, 1994; Spear-Swerling, 2018), the most consistent method currently being taught in our schools focuses on gaining meaning from reading; this is commonly referred to as whole language. Whole language is a method of teaching reading that has shown the weakest results (Kilpatrick, 2019).

The disconnect between what is known about reading instruction and what is taught to our teachers, which is, in turn, taught to students, seems to be the gap we face in education today. The National Center for Teacher Quality completed a review of teacher preparation programs in 2020, finding that only 51% of those programs were preparing teachers to teach phonemic awareness skills. Only 68% were preparing teachers to teach phonics. Additionally, 53% were preparing teachers to teach fluency, only 66% were preparing teachers to teach vocabulary, and 77% were preparing teachers to teach comprehension (Drake et al., 2020). These numbers reflect a stark dichotomy between what we know, which is based on science and has a high correlation to student outcomes, and what is, or rather, is not being taught in our schools. There is a disconnect between

what science tells us and what is currently practiced in our schools and classrooms is especially concerning. Lower-level processing skills of phonemic awareness are a predictor of later reading success; because few teachers are prepared to teach this critical skill, our country's stagnant reading scores will only persist (Washburn et al., 2015).

Current Trends

In 2019, Emily Hanford, an educational reporter for American Public Media, produced a series of audio documentaries that exposed the reading crisis in a way that had never been done before. The audio documentary, "Hard Words: Why Aren't Kids Being Taught to Read," highlighted the research behind the "settled science" of phonics instruction to teach reading and the fact that it hasn't reached the classrooms (Hanford, 2019). Teachers, administrators, and parents were interviewed about reading instruction for students. What emerged for educators was a sense of guilt that they felt after learning about the evidence-based approach to reading instruction that included phonemic awareness and phonics.

In Pennsylvania, the Bethlehem School District had previously been using a balanced literacy approach and then began to educate their teachers in a Structured Literacy approach. Once the instruction began, teachers shared how they wished they would have known the science earlier to achieve higher student outcomes (Hanford, 2019). Because of the audio docuseries by Hanford (2019), other prominent researchers and education and reading advocates began to produce blogs, podcasts, and Facebook communities related to the science of reading. It's the lack of knowledge among our educators that is so pervasive, not the lack of will. To clarify, the lack of knowledge is no

fault of the teacher; the pre-service programs are not teaching the “settled science” of teaching reading.

Teacher Knowledge of Foundational Literacy Skills

The world view of teachers has transformed over time. As public education began in the United States, many teachers worked for free as a form of service, knowing that they would have a return spiritually or emotionally. Many of these same thoughts have carried over into the 21st century for today’s teachers. There tends to be a perception that teaching at an emotional or spiritual level is all about love and care rather than teaching students how to read at a crucial stage (Madrid, 2010). There is also historical context to blame teachers for the failures of education regarding teaching reading. By turning to research, we can shift the blame away from individual teachers and focus instead on the programs that prepare our teachers (Maloch et al., 2003).

The National Commission on Excellence in Elementary Teacher Education for Reading Instruction conducted a survey, finding was that “descriptions of course textbooks and course topics suggested that a comprehensive and ‘balanced’ approach to reading was represented in most programs” (Maloch, 2013, p. 442). The National Center on Teacher Quality (NCTQ) reviews textbooks used in pre-service programs to educate teachers on teaching foundational reading skills; among the 725 textbooks considered and evaluated, 40% were found to be inadequate for instructing teachers in the science of reading. The book used most widely across 235 different courses was rated as “not acceptable” by the NCTQ (Drake et al., 2020). “Textbooks for teachers must attain a much higher standard of accuracy, currency, depth, clarity, and relevance if teachers are to be well prepared to teach reading” (Drake et al., 2020, p. 18). Once again, the

disconnect between what is known about teaching reading and what is taught continues to emerge.

The lack of education of teachers on how to teach reading can be attributed to the fact that there are weak pre-service programs that teach misconceptions (Moats, 1994). The gap in knowledge about how to teach reading should not fall squarely on the shoulders of teachers; the knowledge gap is more about the fact that you cannot teach what you do not have and is a phenomenon referred to as the Peter Effect (Binks-Cantrell et al., 2012; Farrell, 2012; Washburn et al., 2016). The Peter Effect was built on the Applegate & Applegate application of teachers' enjoyment of reading by hypothesizing that teachers cannot teach necessary language components that are considered essential for student capacity in reading if they do not know those concepts themselves (Binks-Cantrell et al., 2012).

In an Informal Survey of Linguistic Knowledge conducted by Louisa Moats, there was a poor performance by teachers in their knowledge of conceptual skills of how to teach reading (Washburn et al., 2016). One 12-week study of teachers that provided explicit instruction in phonics after having received professional development showed that students performed better than the control group in which teachers did not attend the professional development workshops. The study described gives credence to the idea of the Peter Effect (Joshi et al., 2019). Previous studies on teacher knowledge have shown that even highly motivated teachers were unable to have a positive effect on student outcomes if they had a poor understanding of teaching reading or were lacking in their conceptual skills to teach a systematic, evidence-based reading program (Bos et al., 2001; Cunningham et al., 2004; Fielding-Barnsley et al., 2005; Moats, 2003).

According to Louisa Moats (1994), reading instruction must be taught by an expert, and the level of expertise needed cannot be achieved with a few college courses and a few professional learning days dispersed throughout the year. There must be high-quality research-based preparation programs coupled with high-quality on-going professional learning to help close the chasm between students who struggle to read and grade-level expectations. A study that looked at general teacher preparation programs, preparation programs with reading specializations, and preparation programs with embedded reading instruction showed that teachers that were a part of the reading specialization programs and the programs with reading embedded instruction were more autonomous in their decisions to make instructional design changes despite the mandates from the school curriculums because the teachers understood what was best to meet the needs of their students (Maloch et al., 2003). The same study revealed that the teachers that graduated from the general teacher preparation programs felt bound by the district-mandated curriculums and would only teach within these boundaries (Maloch et al., 2003).

To further connect the idea of teacher knowledge and self-efficacy to teach reading, a study revealed that teachers that did not receive evidence-based reading instruction in their pre-service program did not feel equipped to teach a science-based approach to reading, and there was a high correlation between self-efficacy and content knowledge (Leader-Janssen, 2006). Conversely, teachers that had completed education on evidence-based reading constructs had higher self-efficacy than those that did not (Joshi et al., 2019).

Despite the failure that we have seen in education to date between what is known in science, what is taught in pre-service programs, and what is ultimately provided as instruction to students, there is promise in affecting student outcomes in reading when teachers have been instructed on the foundational skills needed to teach reading. Research has revealed that when there is an increase in teacher knowledge about the constructs of teaching reading, there is a correlation to higher student outcomes (Washburn et al., 2016). Pre-service programs that have reading instruction as a specialty or embedded should be coupled with on-going professional learning opportunities that expand beyond the single-day sessions throughout the year to ensure a continuation and growing body of knowledge on the part of the teacher (Moats, 1994). These two components together will ensure an impact on student outcomes. Considering the limited amount of time that a pre-service teacher spends in preparation, these on-going opportunities should focus on explicit instruction in phonemic awareness, phonological awareness, phonics, orthography, and comprehension to increase student outcomes (Piasta et al., 2009).

An application of how in-service opportunities could look is in the implementation of coaching and mentoring. Moats (1994) expresses the need for novice teachers to collaborate with a mentor to support their development of knowledge and to help them manage the reading levels and instructional challenges that a new teacher will face in the classroom (Moats, 1994). While the notion of a continuum of learning from pre-service to in-service education on the part of the teacher is noble, there is still a gap between pre-service teacher education and on-going in-service development to further knowledge and fine-tune skills (Coladarci, 1992). There is also a gap in a teachers' ability

to take what they know or have been taught and transfer that learning to the classroom. Students who had teachers that not only had knowledge but applied that to more time spent on explicit instruction in decoding saw significantly higher outcomes in word reading (Binks-Cantrell et al., 2012). Teachers are often unsure how to transfer their knowledge into practice in the classroom if they have not received instruction in foundational reading practices. Knowledge transfer is a critical element of impacting students reading progress and gains (Wasserman, 2009). Teachers that were a part of pre-service programs that developed their foundational understanding of an explicit evidence-based program were more likely to seek out others in their schools, districts, and communities to build an on-going network of educators to grow their learning (Maloch et al., 2003).

Many pre-service programs are still using materials based on practices that science tells us are not effective in producing positive reading outcomes for students (Drake et al., 2020). Research shows a connection between teachers' self-efficacy and outcomes on student performance when teaching reading (Maloch et al., 2003; Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Johnson, 2011). Additionally, teacher learning cannot solely be accomplished in a pre-service program; there needs to be a continuum of practice that bridges effective pre-service programs to the methods of learning that should be happening for students in the classroom. The concepts of teacher self-efficacy and on-going teacher learning will be explored further in the review to follow.

Teacher Self-Efficacy and Ties to Student Outcomes

Self-efficacy refers to the belief in oneself that they can affect outcomes (Wheatley, 2002). In the 1970s, extensive studies were done by the RAND corporation when it comes to teacher self-efficacy ((Ashton, 1984; Tschannen-Moran & Johnson, 2011). These studies were centered around Albert Bandura's social cognitive theory that says that teachers that do not expect that they would be successful with individual students will not put forth the effort to prepare and deliver instruction that would yield positive outcomes, and is described as being a self-fulfilling prophecy. The students taught by teachers that had a higher self-efficacy concerning being able to impact outcomes had higher achievement than students whose teachers believed they were bound by the restrictions placed on them by their environment. (Tschannen-Moran & Hoy, 2007) When teachers have beliefs contrary to the curriculum bound to them, guilt can arise. The feeling of wanting to do what is right by your job requirements, but knowing it might not be the best for students, is referred to as persecutory guilt (Hargreaves et al., 1991). I will further explore the concept of guilt later in this review.

To further define self-efficacy, two different theories have emerged.

Table 1

Self-Efficacy Theories (Wheatley, 2002)

Self-Efficacy Theories	
Expectancy Theory	Outcome Theory
A teachers' belief about their ability to carry out specific actions of teaching.	A teachers' belief about the outcomes that their specific teaching actions would have on students.

Through these two strands of self-efficacy, one can understand how pre-service teacher education addressing the need to have foundational reading skills can play into what will eventually happen when that teacher is in the classroom. Teacher preparation programs should be developing educators with a sense of self-efficacy. No other teacher component has had such a direct relationship on student outcomes (Ashton, 1984).

There is a need to ensure that teachers are being taught with evidence-based practices when teaching reading. Research has shown that once teacher self-efficacy is established, it would take something disruptive to change those beliefs for the better (Tschannen-Moran et al., 2007). Also, there is evidence to suggest that teachers who had a higher level of teacher self-efficacy while in college had a decline in their feelings of self-efficacy during their student teaching phase when that self-efficacy was not cultivated and nurtured with on-going learning opportunities (Woolfolk et al., 2000).

Most notably, teacher self-efficacy has been positively related to student outcomes and is a crucial variable in influencing those outcomes (Corkett et al., 2011; Jordan et al., 2019; Martinussen et al., 2015; Piasta, 2009; Schaich, 2016; Woolfolk et al., 2000; Zee et al., 2016). Self-efficacy is also tied to motivation and the desire to expend additional energy and persist to complete a task or lesson (Coladarci, 1992; Wheatley, 2002).

Since the time of the RAND studies in the 1970s, which served as the launching pad for studies on self-efficacy, there have been many studies conducted showing that higher self-efficacy is linked to higher levels of functioning in the classroom, especially when it comes to dealing with challenging students (Bostock et al., 2012). There continues to be extensive research into the area of teacher self-efficacy when it comes to

subjects such as math or science (Zee et al., 2016); however, while several studies have been addressed here, there is little research that has been conducted in the area of literacy and even less so, reading instruction when it comes to teacher self-efficacy (Bostock et al., 2012; Guo et al., 2012; Jordan et al., 2019; Maloch et al., 2003; Schaich, 2016; Tschannen-Moran et al., 2011). There is a conspicuous gap in the literature connecting evidence-based reading instruction and self-efficacy to teach foundational skills in reading in classroom settings.

Understanding teacher self-efficacy is a critical component of being thoughtful and moving forward with educational reform. Reforms that do not include work on teacher self-efficacy are doomed because it is when uncertainty and doubt arise in teachers' thoughts about their ability to teach reading that they begin to either avoid teaching certain content or cave to the pressure of teaching what they know to be against evidence-based practices (Wheatley et al., 2002). In the spaces of doubt and uncertainty, there comes time to reflect on prior practices, and this reflection allows a teacher the ability to "entertain certainty" (Clarke, 1995, p. 259). As teachers begin to reflect on their practices and the prescribed curriculum they are using, uncertainties will emerge (Wheatley et al., 2002). It is in these uncertainties that feelings of guilt begin to arise. Wheatley et al. (2002) cite work that expounds on the notion that guilt can be an excellent motivator for change when experienced in modest proportions.

Teacher Guilt in Teaching Reading

Further investigation into teacher self-efficacy and its tie to guilt reveals that negative feelings of self-efficacy are associated with guilt (Wheatley et al., 2002). The tie between guilt and self-efficacy leads me to explore how guilt can be a predictive factor in

understanding how to transform education by ensuring that teachers are prepared, equipped, and trained and continue to learn about the most effective research and evidence-based practices when it comes to teaching foundational skills in reading.

There are many definitions of guilt. However, for this study, I will not look at guilt with a legal or theoretical definition (Baumeister et al., 1994). I will look at the two explanations of guilt that derive from the feelings associated with teacher self-efficacy. Persecutory guilt is when you fail to do what is expected of you, and depressive guilt is when you realize that you may be harming or neglecting others (Hargreaves, 1998). Equity theory related to guilt states that someone may begin to feel guilt when they think that individuals are not treated fairly (Baumeister et al., 1994). The equity imbalance described can be felt in either persecutory or depressive guilt.

Table 2

Explanations of Guilt Related to Teacher Self-Efficacy (Hargreaves, 1998)

Explanations of Guilt Related to Teacher Self-Efficacy (Hargreaves, 1998)		
Types of Guilt	Persecutory Guilt	Depressive Guilt
Definition	Failing to do what is expected of you.	Realizing that you may be harming or neglecting others.
Examples	Feeling forced to teach something	After continued learning, a teacher realizes they may have harmed a students' ability to learn
Considerations	Equity theory related to guilt states that someone may begin to feel guilt when they think that individuals are not treated fairly (Baumeister et al., 1994). This equity imbalance can be felt in either persecutory or depressive guilt.	

Persecutory guilt is when an individual feels persecuted by circumstances beyond their control. In education, the feeling of persecutory guilt could be when teachers feel like they are forced to teach something imposed on them and are against their beliefs

(Hargreaves, 1998). Persecutory guilt can be emotionally devastating for a teacher. Examples could include if a teacher has been instructed in one of the pre-service programs with an embedded and reading-designed curriculum. They get a job in a school or district that takes a whole language or balanced literacy approach and are expected to teach what has been adopted in the district. Many novice teachers cave to the school or district's culture and the current practices dictated (Maloch et al., 2003). The feeling of persecution could be further exacerbated when the teacher teaches according to a curriculum that they know is not meeting the student's needs. The students are not meeting expectations, then move to the next year where the teacher in the grade above will look at the teacher in the grade below and determine them incompetent (Madrid et al., 2010).

Depressive guilt is when you realize you may be harming or neglecting others (Hargreaves et al., 1991). Depressive guilt could be seen when a teacher has been teaching for an extended period. After continued learning, education, or interactions with peers, a teacher may realize that the program they were teaching is not reflective of scientific evidence-based practices. The more that a teacher cares and care is strong among elementary school teachers, the greater the intensity of the depressive guilt and the more susceptible they are to experience these emotions (Hargreaves & Tucker, 1991).

When it comes to linking teacher self-efficacy and guilt, there needs to be a case for looking at guilt because you cannot separate emotions from cognitive thinking (Van Veen et al., 2005). The collective emotions of teachers should be of national concern considering the stagnant and failing reading scores we have seen in education over the last several years (National Center for Education Statistics, 2019). When teachers feel a

sense of accomplishment because student outcomes are high, they are more likely to feel joy, excitement, and satisfaction (Nias, 1991).

Motivation to Change

Doubts about one's self-efficacy can be beneficial when it creates an imbalance that sets the teacher on a pathway to change. The imbalance needs to be disruptive enough to spur a need for change (Tschannen-Moran et al., 2011). When uncertainty emerges because there has been increased knowledge about a particular topic, evidence suggests the uncertainty can lead to change if teachers see the uncertainty as a chance to change and grow (Hargreaves et al., 1991). Doubt can give life to motivation. It is in doubt that motivation gets its breath, and there can evolve a need and urge to learn and grow (Wheatley, 2002). It is in doubt that thinking can occur; in the expanse of doubt, motivation gives way to the desire to learn and understand how best to change practices that significantly impact outcomes. Dudley-Marling made the benefits of uncertainty clear, "I have also come to value uncertainty as an occasion for growth and renewal" (Wheatley, 2002, p. 257).

Uncertainty and doubt can lead to guilt, and guilt can spur motivation, ultimately leading to change. While immense amounts of guilt can be damaging, guilt can be an excellent emotion because it can be the impetus towards improved change (Hargreaves et al., 1991). Guilt serves as a motivator to enhance patterns of behavior (Baumeister et al., 1994). When guilt is experienced in modest proportions, Hargreaves et al. (1991) states that guilt "can be a great spur to motivation, innovation, and improvement."

Understanding the depressive guilt of experienced teachers after gaining additional knowledge about how to teach reading can indicate what should be happening in pre-

service programs, including the curriculum choices taking place in this crucial stage of reading development, and this linkage is a call for educational reform.

Impact of Teacher Self-Efficacy on Education Reform

With stalling literacy proficiency rates in the United States (National Center for Education Statistics, 2019), there is a need for reform regarding reading outcomes for students. The catalyst for initiating such a change could be found in the research that links teacher self-efficacy and guilt. Doubting oneself when it comes to reading instruction based on the current state of the nation could be the construct that dislodges conventional practices. In the lengthy discussions that have taken place about educational reform, teacher self-efficacy has been viewed as an appropriate goal (Wheatley, 2002) and could be “A potentially powerful paradigm for teacher education... developed on the basis of the construct of teacher efficacy” (Ashton, 1984, p. 28).

Teacher self-efficacy has been positively related to reform in education (Wheatley, 2002). Teachers who have high self-efficacy in reform will process the new reform adequately; however, teachers with low teacher self-efficacy in reform might perceive it as a threat (Tschannen-Moran et al., 2011). The notion of a threat in reform could very well be why our education system has not unified on the approach to the way reading should be taught even though Louisa Moats (1994) calls the foundations of reading instruction “settled science.” Methodologies such as the Structured Literacy approach can be daunting for educators. Educators may feel threatened by their lack of knowledge in a particular evidence-based methodology if they did not receive the proper instruction in their pre-service program.

Despite a potential threat, there is still a case to move forward because a vast number of students are marginalized by the current educational practices of reading instruction. There is a need to study the role of doubt and uncertainty that leads to guilt and the role of self-efficacy in the process (Wheatley 2002). Research suggests that education reforms that do not include formative and summative assessments on teacher self-efficacy are doomed to fail (Wheatley, 2005). Although there has been much more research in the area of teacher self-efficacy, guilt concerning reading instruction is almost non-existent. The lack of research is surprising when, in fact, guilt can be the catalyst that helps teachers find the motivation they need to make changes (Wheatley, 2002).

One area of teacher reform could be in the field of pre-service programs. In a meta-analysis review of six different studies, the results showed that there needs to be increased investment in teacher education programs because there is a consistent link to positive outcomes on student learning (Maloch et al., 2003). Another area in which education reforms can occur is in the on-going development and continued learning for teachers. The two should be coupled together to create a continuum of learning that spans from pre-service to in-service. Ehri et al. (2007) conducted a study in which a mentoring program provided continuous learning and on-going instruction for teachers to understand better how to teach phonics to beginning readers. The study was based on the premise that there are specialized skills, as discussed, that are needed to teach phonics. The results showed significant gains in students reading and spelling scores over the year-long study, and the outcomes far exceeded the expected effect sizes. Additional findings revealed that teachers need better preparation programs in learning how to teach reading. The foundation of pre-service must be coupled with an on-going in-service

professional learning program to increase students' achievement in reading (Ehri et al., 2007).

The literature clearly outlines a need for change when it comes to how teachers are teaching reading. Current student proficiency in reading is suffering at the hands of teachers who may not know better (Joshi et al., 2019). Teacher emotions related to self-efficacy and guilt can be constructs to frame our thoughts on creating an educational reform that has a monumental impact on student achievement in reading.

Call for Change

There is a wide gap that exists in research when it comes to an understanding of how best to ensure that the “settled science” (Moats, 1994) of providing evidence-based instruction in reading that has the foundational components of phonemic awareness, phonological awareness, phonics, morphology, vocabulary, and comprehension embedded as the foundational constructs in which students need to know to be capable readers (Piasta et al., 2009). Despite the knowledge that we have about teaching foundational skills in reading, there remains a disconnect between what is taught in pre-service programs, what on-going embedded learning opportunities are in place to cultivate continued learning, and the growth a teacher needs to have a positive impact on student outcomes.

The resolution to the disconnect could be in understanding teachers' perceptions of themselves as a novice teacher based on how they were prepared to teach and the guilt that experienced teachers might feel when they gained knowledge about what the science says about reading instruction. In the sociology and psychology worlds, little work has been done on the feelings of guilt (Baumeister et al., 1994). Nias et al. (1994) say that

little attention has been paid to understanding teachers' emotions and their relation to academic and professional considerations. The gap in research of connecting reading instruction to the feelings of self-efficacy and guilt could be a way to bridge the chasm between what is happening in pre-service programs to prepare teachers, what is being provided as on-going embedded professional learning, and what is currently being offered and prescribed.

The need to dig deeper into the research around teacher knowledge in teaching reading should be seen as an opportunity to learn and provide suggestions and recommendations for educational reform and not as a criticism to teachers (Moats, 1994). As mentioned earlier, teachers cannot teach what they do not know (Binks-Cantrell et al., 2012). Pre-service and in-service programs should be well established to meet the growing need to equip teachers to teach foundational skills in reading.

Teacher emotions are essential in maintaining teacher quality and providing an on-going commitment to improving the quality of reading education in our classrooms. The significance of understanding teacher emotion has mostly been ignored by research (Hargreaves, 1998). The time is now for education reform to take the feelings and emotions of teachers into account to help shape an educational transformation that is needed to move the needle on student performance in reading achievement.

CHAPTER 3: RESEARCH DESIGN

Research Approach

This study used a convergent mixed-methods approach. The mixed-method approach was chosen because of the expanse of literature that is available when it comes to the understanding of self-efficacy (Ashton, 1984; Tschannen-Moran et al., 2011) and conversely, the lack of research that is available when it comes to the understanding of how teacher guilt can play a role in education reform (Baumeister et al., 1994; Nias et al., 1994). The convergent mixed methods design allowed for a quantitative and qualitative approach that emphasizes both results. The mixing of the data will happen in the interpretation phase (Terrell, 2016).

The quantitative portion of the design was executed by using a combination of surveys that have proven to be valid to understand the self-efficacy of novice teachers when it comes to teaching reading in their first years in the classroom. The qualitative approach was executed using recorded interviews of experienced teachers to understand guilt associated with their knowledge of teaching reading in the present versus when they began teaching reading. Interviews were analyzed using a synthesis matrix to create themes and structures used to understand the guilt that tenured teachers may experience.

Methodology

Four research questions guided this study.

1. To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?
2. To what extent do novice teachers have a sense of self-efficacy when teaching reading?

3. To what extent do experienced teachers feel guilt about their knowledge and ability to teach the foundational reading skills in their first years as a teacher?
4. Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?

Research Site

For this study, I relied on a database of educator names available to me through my work at Learning Ally. Learning Ally is a national non-profit education technology organization that delivers solutions to struggling readers in public, private, and charter schools in elementary, middle, and high schools. Email and social media outlets, including Twitter and LinkedIn, were used to distribute the quantitative survey for a broader reach.

Participants

In this study, I sorted the Learning Ally educator data to deliver a quantitative survey to approximately 897 teachers with three or fewer years of experience. Emails were sent (see Appendix H), and posts (see Appendix I) about the survey and eligibility criteria were made to my personal Twitter and LinkedIn accounts. The goal was to have approximately 100 teachers participate in the survey. Forty-seven individuals responded to the survey before it was closed. After data cleaning took place, the total participant count amounted to thirty-eight usable surveys. The decision was made to move forward with the analysis of the survey results despite not achieving the n desired. Several factors could have been at play with the low survey response. Survey analytics showed that the survey had 462 unique views, 181 starts, and a 61% drop-off rate on the introduction

page that described the study and consent to participate. A contributing factor to drop-off rates throughout the survey could have been that the average time to complete the full introduction and four-part survey took 50 minutes and 14 seconds.

The survey consisted of an introduction page and four parts. The introduction page was where the participant was presented with details about the study. The first section included profile data (see Appendix B), the second portion was on teacher knowledge using The Teacher Knowledge Assessment (Mather et al., 2001) (see Appendix E), the third portion was on self-efficacy using the Teacher Self-Efficacy for Literacy Instruction survey (Tschannen-Moran, 2011) (see Appendix D), and the fourth part included a series of open-ended questions to accomplish triangulation of the data (See Appendix C). The survey was deployed virtually using an online survey tool, Typeform.

For the qualitative portion of the study, I sorted the educator database to find K-12 educator names with four or more years of experience in reading to execute that strand of the study. The interviews were conducted virtually and recorded using Zoom as a conferencing and recording tool. The recorded interviews were transcribed, and the original files of both the video recording and transcription were stored on an external drive for privacy.

The qualitative interview used a random sampling approach. The Learning Ally educator data was sorted to produce results of all educators that met the criteria of being a reading specialist or general educator in the K-12 setting with four or more years of experience. An inquiry email was deployed to the cohort asking educators if they would like to participate in an interview if they met additional criteria for being an educator for

four or more years (Tschannen-Moran et al., 2007). For those that responded, a random sample was used to determine participants because it is unbiased, and there is an assurance that the sampling happened across the distributed population (Niles, n.d.). The aim was to have enough interviews that provided the point of saturation or that the interviews were no longer yielding any new information (Fusch et al., 2015). The point of saturation was accomplished with eight interviews.

Procedures

After the Learning Ally data sciences team approved the study, the mining of data began. In parallel to the data mining, the quantitative survey was developed in Typeform, an online survey tool. The survey included a combination of the Teacher Knowledge Assessment (Mather et al., 2001) and the Teacher Sense of Efficacy for Literacy Instruction (TSELI) developed by Tschannen-Moran (2011). The Teacher Knowledge Assessment was chosen because it asks questions related to knowledge around foundational skills, which includes: phonemic awareness, syllable types, phonological awareness, orthographic mapping, and phonics. The TSELI was developed in response to psychometric problems found in the Reading Teaching Efficacy Instrument (RTEI) development by Szabo and Mokhtari (2004). A demographic section was included to gain information about grades taught, highest degree attained, number of academic courses taken before beginning classroom instruction, and the number of professional development opportunities provided after being in the classroom. An open-ended question was included to allow the participant to write in any additional information about their pre-service education in reading and accomplished the objective of triangulating data.

Data Collection

Identifying the individuals solicited via email for the quantitative survey, which included demographic data, the Teacher Knowledge Assessment, the TSELI, and open-ended questions, did not yield the results expected. I posted the survey on my social media accounts with IRB approval. The survey was open for three months. For the email method, an initial email was sent out requesting participation in the survey, and two additional reminders were sent, one each subsequent week. Individuals that took the survey were dropped from the on-going reminders. An additional round of emails deployed again after a low response rate on the initial request.

Identifying the cohort of individuals included for the random sampling for the qualitative interviews took three weeks. The initial email asking for self-selection to be considered for an interview deployed and was followed up by emails when the first round did not yield the anticipated results. Individuals that opted-in to the random selection was dropped from subsequent email reminders. Once the cohort of educators who opted to be considered for an interview was secured, an online randomizer was used to determine which educators would be selected for an interview. Interviews were semi-structured and were conducted through Zoom. The interviews were recorded.

The semi-structured interviews followed an interview protocol to provide consistency between each participant. Open-ended questions were carefully crafted to align with the study to draw out each participant's emotions and feelings related to their first years teaching reading (see Appendix F). I intentionally did not use the word "guilt" in asking about emotions initially and only explicitly asked about any guilty feelings at the end of the interview in questions seven and eight. The interview protocol included

necessary information about the interview, introduction, opening questions, content questions, using probes, and closing instructions (Creswell, 2018). At the end of each interview, I thanked each participant for their time.

Data Analysis

The survey data that was collected using Typeform was converted to Excel spreadsheets for each question. These data sets were entered into SPSS software. Descriptive statistics were used to determine if there is a significant difference between educator demographic data and their response to the TSELI and TKA: SL survey. The open-ended questions were copied into an Excel synthesis matrix where they were tagged and classified for themes. The methodology was used to look for patterns (Saldaña, 2016).

The recorded interviews were conducted through Zoom and transcribed using SpeechPad. The narratives were compared against handwritten notes. The narratives were added to an Excel synthesis matrix where tagging and classifying of data took place. The coding process included the recommendations given by Creswell (2018): Step 1: Organize and prepare the data, Step 2: Read and look at all of the entries, Step 3: Begin coding all of the data, Step 4: Generate descriptions and identify themes and Step 5: Provide a representation of the descriptions and themes. The generation of descriptions and themes was done by reading each entry and breaking down each entry into meaningful segments, and assigning codes into various categories (Creswell, 2018). Identifying themes and coding the themes allowed for patterns and trends to emerge in the data. Because this is a convergent mixed methods design, the mixing of the data occurred in the interpretation phase of the study (Terrell, 2016).

Table 3*Data Collection and Data Analysis*

Research Question	Data Collection	Data Analysis
RQ1: To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?	The Teacher Knowledge Assessment: Structure of Language TKA: SL (QUAN)	Descriptive statistics were used to define the population sample. SPSS software was used to interpret the descriptive statistics on the level of knowledge of novice teachers.
RQ2: To what extent do novice teachers have a sense of self-efficacy when teaching reading?	Teacher Self Efficacy for Literacy Instruction: TSELI (QUAN)	Descriptive statistics were used to define the population sample. SPSS software was used to interpret the descriptive statistics on the understanding of self-efficacy.
RQ3: To what extent do experienced teachers feel guilt about their knowledge and ability to teach foundational reading skills in their first years as a teacher?	Recorded semi-structured interviews (QUAL)	An Excel synthesis matrix was used to transcribe, tag, and classify the open-ended responses. Descriptive and in vivo codes were used to look for patterns.
RQ4: Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?	Recorded semi-structured interviews (QUAL) Open-Ended questions on the survey (qual)	An Excel synthesis matrix was used to transcribe, tag, and classify the open-ended responses. Descriptive and in vivo codes were used to look for patterns.

Presentation of Findings

I presented the quantitative data findings with descriptive statistics through charts to show the survey data results. Also, I presented the qualitative data, along with charts, through a narrative approach that highlighted themes, consistencies, and inconsistencies that occurred through the tagging of data in the Excel synthesis matrix. In the interpretation of the data phase, a narrative style uncovered and explained the learnings gleaned from the research.

Ethical Considerations/ Research Bias

The premise of this research study has significant ties to my own journey from being a preschool teacher to a Certified Academic Language Practitioner and leading at a national level with initiatives with Learning Ally. I was aware that my own bias could come into play, particularly during the one-to-one interview phase. During the interview phase of the research, I consciously restrained my tone, inflection, and personal demeanor to not be influential in the interviews.

Objectivity and truthfulness are critical elements during a qualitative component of any study (Creswell, 2018). I was mindful to adhere to high standards in both of these areas regarding the recorded interviews and the study's interpretation phase.

Another ethical concern was bringing up feelings that the individual didn't know they had or had never voiced before being interviewed about their feelings toward their profession. These concerns were raised in the IRB process. To mitigate these concerns, at the end of each interview, I directly asked the interviewees if the interview process uncovered any feelings they might not have realized they had. Each participant was okay with their responses and the emotions attached to those responses.

Internal Validity and Reliability

The major threat to interval validity could have been selecting the individuals who took part in the survey. The survey was deployed to an extensive list of educators that met specific criteria who self-selected by opting-in to take the survey or responded to be randomly selected for an interview. The list of educators obtained from Learning Ally posed a threat because of the nature of educators that may want to take part in the survey but did not necessarily meet the criteria outlined. The threat described was evident in the quantitative survey, with many inquiries from individuals saying they started the survey but abandoned it upon reading the criteria. The quantitative survey was designed for novice teachers. While every effort was made to be explicit and clear about the intended audience for the survey, there were some names in the Learning Ally data that did not meet the criteria. Several educators responded to me via email and asked if they could take the survey despite not meeting the criteria. I had to say no to each of them respectfully.

The same threat held true for those opting-in to be considered for an interview. The Learning Ally database houses educators from 2012. Educators who may have once met the criteria for being an experienced special education or reading specialist with four or more years of experience may no longer meet that criteria. For example, they may have moved on to another field or moved into another position, and it has been several years because they have had to think about their feelings associated with teaching reading. I carried through with one interview knowing full well it would need to be discarded because the interviewee had been in K-12 education but was currently in higher education.

External Validity and Limitations

The population that was surveyed spanned teachers from across the country for the quantitative survey phase. The population that could opt-in for the qualitative interview phase was selected from K-12 educators. The potential threat is that while Learning Ally is a national non-profit organization serving schools and districts all over the country, there is a high concentration of educators from Texas, New Jersey, and California in the database. The concentration of educators from a select group of states could pose a bias if these states have legislation or guidelines about educators' foundational reading practices as they enter the classroom. Similarly, Learning Ally serves educators who meet the needs of struggling readers through professional development opportunities and create awareness of how best to teach reading at all grade levels. Bias towards a particular population of educators that may have the mindset towards a specific ideology of instruction could have impacted the study results.

Summary

The research study was executed by using the convergent mixed methods design (Terrell, 2018). The convergent mixed-methods design is appropriate for this study because there is an extensive body of knowledge when it comes to teachers' self-efficacy (Ashton, 1984; Tschannen-Moran et al., 2011) and; a lack of research on the self-efficacy related to reading (Bostock et al., 2012; Guo et al., 2012; Jordan et al., 2019; Maloch et al., 2003; Schaich, 2016; Tschannen-Moran et al., 2011). Likewise, there is an even more significant gap in the research regarding the guilt that educators might experience after having additional professional learning opportunities for teaching reading (Baumeister et al., 1994; Nias et al., 1994).

The convergent mixed methods design employed a quantitative survey for teachers that included demographic data, the Informal Survey of Linguistic Knowledge developed by Louisa Moats (1994) to determine knowledge base, and the Teacher Sense of Efficacy for Literacy Instruction (TSELI) developed by Tschannen-Moran (2011). Qualitative open-ended questions will be included in the survey to support the triangulation of the data. Concurrently, interviews were conducted of K-12 experienced reading specialists and special education teachers to determine if they experience either persecutory or depressive guilt based on what they now know about teaching foundational skills in reading.

The data from the quantitative survey and qualitative interviews were interpreted at the data analysis stage to determine if any themes exist between what novice teachers believe about their abilities to teach reading and their knowledge to do so, and the guilt that experienced K-12 reading specialists or special education teachers might experience. Understanding the requisite knowledge and self-efficacy of a novice teacher and the emotions felt by experienced teachers could impact education reforms. Wheatley et al. (2002) state that education reforms that do not include understanding teachers' thoughts about their ability to teach reading could be doomed.

CHAPTER 4: RESULTS

Quantitative Survey Results: Data Cleaning

The forty-seven responses on the survey, which included profile questions, the TSELI survey, the TKA: SL, and the four open-ended questions, were extracted from Typeform via an Excel spreadsheet. I reviewed the data for profile responses to ensure that the participants met the criteria of having one to three years of experience. Three participants left this response blank on the survey, resulting in their survey responses being deleted. Additionally, the profile data revealed that three participants were outside of the United States and were likewise deleted from the results. While the limitations of being in the United States were not an explicit requirement, I decided to delete these responses to ensure applicability to K-12 education in the United States. One survey response was deleted because of a missing answer on the TKA: SL and two survey responses were deleted because of missing answers on the TSELI. After the data cleaning took place, the survey response data to be analyzed was thirty-eight.

The next step in the data cleaning process included assigning values to the data in the surveys. The coding of degree obtained, job title, accreditations, and type of school took place on the profile data. The degree obtained was coded as 1 = Bachelor's degree; 2 = Master's degree; and 3 = Doctoral degree. The job title was coded as 0 = Not specified; 1 = Generalist; 2 = Specialist; and 3 = Other. Accreditations were coded as 0 = None; 1 = Some Training; 2 = Accredited; and 3 = Not Specified. Type of school was coded as 0 = Not specified; 1 = Public school; 2 = Private School; and 3 = Charter School. The TSELI survey did not require any data coding to take place because all values were alphanumeric. The TSELI was measured on a 9 point Likert scale. Scale: 1 = None at all;

3= Very likely; 5= Some degree; 7 = Quite a bit; 9 = A great deal. Coding of the TKA:

SL took place with assigning values to correct and incorrect answers: 0 = Incorrect; and 1

= Correct.

Descriptive Statistics

Descriptive statistics were run on three parts of the survey: profile data, the TKA, and the TSELI. Descriptive statistics on the profile data were run to include frequency, percentages, mean and standard deviation as appropriate for each variable.

Table 4

Descriptive Statistics for the Sample

Variable Name	Frequency	%	Mean	SD
Type of School	----	----	----	----
Public	31	81.6	----	----
Private	4	10.5	----	----
Charter	1	2.6	----	----
Not Specified	2	5.3	----	----
Years of Experience	----	----	2.42	.793
One Year	7	18.4	----	----
Two Years	8	21.1	----	----
Three Years	23	60.5	----	----
Highest Level of Education Completed	----	----	----	----
Bachelor's Degree	22	57.9	----	----
Master's Degree	14	36.8	----	----
Doctoral Degree	2	5.3	----	----
Accreditations in Teaching Reading	----	----	----	----
None	16	42.1	----	----
Some Training	11	28.9	----	----
Accredited	9	23.7	----	----
Not Specified	2	5.3	----	----
Job Title	----	----	----	----
Generalist	12	31.6	----	----
Specialist	22	57.9	----	----
Other	3	7.9	----	----
Not Specified	1	2.6	----	----

N= 38

Other profile data that was collected included the state that the participant was from; which included: Arkansas (1); California (3); Colorado (2); Connecticut (1); Florida (4); Georgia (2); Idaho (1); Illinois (3); Kansas (1); Massachusetts (1); Maine (1); New Jersey (1); North Carolina (1); Oregon (1); Texas (9); Washington (5); and Not Specified (1). While the most considerable response rate was from individuals in Texas, there was a fair distribution of individuals from across the United States and negated any concerns that I had about too large of a cohort from any particular state and an unfair persuasion toward any one particular reading pedagogy or methodology.

The frequency of the type of school that survey participants were from included 31 from a public school, four from a private school, one from a charter school, and two not specified. The majority, or 23, of the educators taking part in the survey, had three years of experience in a school, while eight individuals had two years of experience, and 7 had one year of experience ($M=2.42$, $SD=.793$). The highest level of education completed by the survey participants included 22 with a Bachelor's degree, 14 with a Master's degree, and 2 with a Doctoral degree. Of the survey participants with accreditations in teaching reading, 16 responded that they had no accreditation, 11 responded with some training, nine were accredited, and two did not specify. Twelve general education teachers responded to the survey, 22 were specialists or special educators, 3 indicated "other," and one individual did not specify their job title.

Descriptive statistics were run on the TKA: SL, which included mean, standard deviation, skewness, and kurtosis.

Table 5*Descriptive Statistics for the Teacher Knowledge Assessment (Mather et al., 2001)*

Variable Name	Mean	SD	Skewness
17 What is the rule for using a ck in spelling?	.16	.370	1.954
11 How many speech sounds are in the word box?	.24	.431	1.289
15 Mark the statement that is false:	.45	.504	.221
8 A voiced consonant digraph is in the word:	.47	.506	.110
7 A diphthong is found in the word:	.50	.507	.000
6 A schwa sound is found in the word	.61	.495	-.449
12 How many speech sounds are in the word grass?	.63	.489	-.568
21 If you say the word and then reverse the order of the sounds, enough would be:	.63	.489	-.568
20 If you say the word and then reverse the order of the sounds, ice would be:	.68	.471	-.826
14 What type of task would this be?	.74	.446	-1.120
5 A combination of two or three consonants pronounced so that each letter keeps its own identity is called a:	.74	.446	-1.120
3 A pronounceable group of letters containing a vowel sound is a:	.76	.431	-1.289
16 A reading method that focuses on teaching the application of speech sounds to letters is called:	.79	.413	-1.479
9 Two combined letters that represent one single speech sound are:	.84	.370	-1.954
1 Which words contains a short vowel sound	.87	.343	-2.270
19 Count the number of syllables for the word pies:	.87	.343	-2.270
13 Why do many students confuse the sounds /b/ and /p/ and /f/ and /v/?	.89	.311	-2.679
10 How many speech sounds are in the word eight?	.89	.311	-2.679
4 If tife were a word, the letter i would probably sound like i in:	.92	.273	-3.253
18 Count the number of syllables for the word unbelievable:	.97	.162	-6.164
2 A phoneme refers to:	.97	.162	-6.164

N=38, arranged in ascending order according to the mean

The mean among the questions ranged from M=.16 at the low end of answering correctly and M=.97 at the high end of answering correctly, and the overall standard deviation for the survey was SD=3.830. Highly negative values of skewness were

indicated for 14 of the questions, including questions 1, 2, 3, 4, 5, 9, 10, 11, 13, 14, 16, 17, 18, and 19 and a moderately negative value of skewness was indicated on 3 of the questions, including 12, 20 and 21. Four questions, including 6, 7, 8 and 15, were symmetrical for skewness. The kurtosis on the TKA: SL questions were within the normal range except for questions 2, 4 and 18 (Meyers et al., 2017). Reliability analysis was carried out on the results of the TKA: SL, which comprised 21 items, to measure for internal consistency. A Cronbach's alpha analysis showed the assessment survey to reach good reliability at $\alpha=.801$.

Descriptive statistics were run on the TSELI, which included the mean, standard deviation, agreement percentages for each of the nine scale responses, and skewness.

Table 6

Descriptive Statistics for the Teacher Sense of Efficacy for Literacy Instruction Scale (Moran et al., 2011)

Variable Name *	Mean	SD	Agreement Percentages									Skew
			1	2	3	4	5	6	7	8	9	
1	7.16	1.53	0	0	2.6	0	13.2	15.8	26.3	15.8	26.3	-.517
2	7.63	1.42	0	0	2.6	0	2.6	18.4	13.2	28.9	34.2	-1.14
3	7.61	1.26	0	0	0	0	5.3	18.4	18.4	26.3	31.6	-.462
4	7.47	1.35	0	0	0	0	7.9	21.1	18.4	21.1	31.6	-.323
5	7.26	1.22	0	0	0	0	7.9	18.4	34.2	18.4	21.1	-.069
6	6.13	1.75	2.6	0	2.6	10.5	18.4	21.1	26.3	7.9	10.5	-.495
7	7.0	1.37	0	0	0	2.6	13.2	21.1	23.7	23.7	15.8	-.197
8	6.37	1.80	0	2.6	2.6	10.5	18.4	13.2	23.7	15.8	13.2	-.355
9	6.21	1.63	0	0	7.9	7.9	15.8	18.4	31.6	10.5	7.9	-.319
10	7.82	1.29	0	0	0	0	7.9	7.9	21.1	21.1	42.1	-.830
11	7.58	1.15	0	0	0	0	5.3	10.5	31.6	26.3	26.3	-.426
12	7.55	1.38	0	0	2.6	0	2.6	15.8	23.7	23.7	31.6	-1.04
13	6.61	1.96	0	2.6	5.3	7.9	15.8	7.9	23.7	15.8	21.1	-.537
14	6.87	2.12	0	5.3	5.3	2.6	10.5	13.2	21.1	7.9	34.2	-.806
15	6.58	1.85	2.6	0	2.6	5.3	13.2	26.3	15.8	15.8	18.4	-.708
16	6.76	1.80	2.6	0	0	5.3	13.2	26.3	13.2	18.4	21.1	-.786

Agreement Percentages												
17	7.13	1.69	0	0	2.6	7.9	7.9	13.2	15.8	28.9	23.7	-.779
18	6.68	1.74	0	0	0	15.8	13.2	13.2	23.7	13.2	21.1	-.165
19	6.84	1.83	2.6	0	0	5.3	18.4	7.9	28.9	13.2	23.7	-.884
20	6.42	1.78	0	2.6	5.3	5.3	13.2	21.1	28.9	7.9	15.8	-.470
21	6.47	1.70	0	0	5.3	7.9	13.2	26.3	18.4	13.2	15.8	-.177
22	7.11	1.88	0	2.6	5.3	5.3	2.6	7.9	31.6	15.8	28.9	-1.13

Note: N = 38. TSELI measured on a 9 point Likert scale. Scale: 1 = None at all, 3= Very likely, 5= Some degree, 7 = Quite a bit, 9 = A great deal.

Variable Name	Descriptions (Questions on Survey)*
1.	To what extent can you use a student's oral reading mistakes as an opportunity to teach effective reading strategies?
2.	To what extent can you use a variety of informal and formal reading assessment strategies?
3.	To what extent can you adjust reading strategies based on on-going informal assessments of your students?
4.	To what extent can you provide specific, targeted feedback to students during oral reading?
5.	How much can you do to meet the needs of struggling readers?
6.	To what extent can you adjust writing strategies based on on-going informal assessments of your students?
7.	To what extent can you provide your students with opportunities to apply their prior knowledge to reading tasks?
8.	To what extent can you help your students monitor their use of reading strategies?
9.	To what extent can you get students to read fluently during oral reading?
10.	To what extent can you model effective reading strategies?
11.	To what extent can you implement effective reading strategies in your classroom?
12.	To what extent can you help your students figure out unknown words when they are reading?
13.	To what extent can you get children to talk with each other in class about books they are reading?
14.	To what extent can you recommend a variety of quality children's literature to your students?
15.	To what extent can you model effective writing strategies?
16.	To what extent can you integrate the components of language arts?
17.	To what extent can you use flexible grouping to meet individual student needs for reading instruction?
18.	To what extent can you implement word study strategies to teach spelling?
19.	To what extent can you provide children with writing opportunities in response to reading?
20.	To what extent can you use students' writing to teach grammar and spelling strategies?

21. How much can you motivate students who show low interest in reading?
 22. How much can you do to adjust your reading materials to the proper level for individual students?
-

Highly negative skewness values were indicated for 3 of the variables, including questions 2, 12 and 22, and a moderately negative value of skewness was indicated on 8 of the questions, including 1, 10, 13, 14, 15, 16, 17 and 19. Eleven questions, including 3, 4, 5, 6, 7, 8, 9, 11, 18, 20 and 21 were symmetrical for skewness. The kurtosis for the TSELI was within the normal range for all questions (Meyers et al., 2017). Reliability analysis was carried out on the results of the TSELI, comprising 22 items, to measure for internal consistency. Cronbach's alpha showed the scaled survey to reach excellent reliability at $\alpha=.939$.

Because inferential statistics were not conducted on either the TKA: SL or the TSELI, the decision was made to continue with the statistical analysis despite the highly negatively skewed data on 14 of the 21 questions on the TKA: SL and the moderately negatively skewed data on 14 of the 22 questions on the TSELI.

Analysis of Quantitative Survey Results

While four research questions guided this study, two questions were used to answer the quantitative survey results. The TKA: SL data was used to answer research question 1, which pertains to the requisite knowledge that a teacher needs to know to teach the foundational skills of reading, and the TSELI was used to answer research question 2, which pertained to understanding if novice teachers have a sense of self-efficacy when it comes to teaching reading.

Research Question 1

To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?

The questions on the TKA: SL included content knowledge in the areas of phonemic awareness, syllables, phonological awareness, orthographic mapping, and phonics. Questions 1, 2, 4, 6, 7, 8, 9, 10, 11, 12 and 13 addressed knowledge of phonemic awareness. Questions 2, 18 and 19 addressed knowledge of syllables. Questions 5, 14, 15, 20 and 21 addressed phonological awareness, and question 17 addressed knowledge of orthographic mapping.

Of the 38 participant surveys analyzed, no individual got all of the questions correct. Question number 2 asking about the definition of a phoneme, and question number 18, asking about syllables, had equally the highest means ($M=.97$, $SD=.162$). Questions 17, 11, 15 and 8 had the lowest correct responses ($M=.50$, $SD=.507$), indicating that 4 of the 21 questions had less than half of the participants respond incorrectly. The range of the means resulted in .816, showing an equal distribution across the questions for correct and incorrect answers among the questions asked.

Orthographic Mapping. Question number 17, which assessed knowledge of orthographic mapping of the /k/ sound, had the lowest number of participants responding correctly ($M=.16$, $SD=.370$), indicating a significant gap in knowledge on this particular question among the survey participants.

Phonological Awareness. Questions dealing explicitly with manipulating sounds under the category of phonological awareness were at the lower end of the mean distribution with a more significant number of incorrect answers. The highest mean for a

question relating to phonological awareness was question 14 ($M=14.74$, $SD=.446$).

Knowledge of phonological awareness among the survey participants received the most significant number of incorrect answers.

Phonemic Awareness. Twelve questions assessed phonemic awareness knowledge. These questions ranged throughout the distribution, indicating that the number of correct responses was varied in the phonemic awareness category across the participants.

Syllables. Knowledge of syllables on questions 3, 19 and 18 received a high number of correct answers. Question three ($M=.76$, $SD=.446$), question 19 ($M=.87$, $SD=.343$) and question 18 ($M=.97$, $SD=.162$).

To answer research question one about the requisite knowledge that K-2 novice educators have about foundational skills in reading, it is evident from the survey results that there are gaps in knowledge. The most significant gap is in knowledge in orthographic mapping, the ability to map sounds to letters or letter clusters (Kilpatrick, 2019), and the significant number of wrong answers in phonological awareness, the ability to manipulate sounds (Kilpatrick, 2019) are indicators that K-2 novice educators do not consistently have the foundational knowledge needed to teach the explicit skill of phonological awareness and orthographic mapping. This finding is consistent with another study conducted by Pittman et al. (2019) that found that 150 urban elementary school teachers' literacy knowledge was not adequate to meet the standards needed to teach reading. The teachers possessed a higher ability to teach syllables; however, they lacked requisite knowledge in morphology (Pittman et al., 2019). Additionally, the variance across the survey group of knowledge in phonemic awareness is another

indicator that educators do not consistently have the knowledge needed to teach the requisite knowledge of phonemic awareness. Syllable knowledge was the only category that showed the most consistency of understanding among the survey participants. With the consistent gaps in knowledge in two of the requisite components to teach foundational skills in reading and inconsistent understanding of phonemic awareness across the survey respondents, there is evidence to show that K-2 educators with less than three years of experience are not equipped to instruct students in requisite skills needed to be accurate word decoders.

The gaps in knowledge of the requisite skills in orthographic and phonological awareness and varied understanding of phonemic awareness on the part of the teacher can significantly impact student reading outcomes in later years. A recent study linked foundational reading skills learned to 3rd-grade reading achievement and found the importance of orthographic knowledge and fluent reading development, which begins with phonological and phonemic awareness in kindergarten, to increased proficiency levels state-administered tests (D.D. Paige et al., 2019). The outcomes of this study are further evidence that building the foundations of accurate word decoding are critical skills that a student needs to achieve proficiency levels later in their academic career. The transference of knowledge to the student for these requisite skills must start with the teacher and speak to the Peter Effect point that you cannot teach what you do not know yourself (Binks-Cantrell et al. Educators entering classrooms less than prepared to teach foundational skills are setting students up for academic failure.

Research Question 2

To what extent do novice teachers have a sense of self-efficacy when teaching reading?

The TSELI was used to answer the research question about self-efficacy of teaching reading. The TSELI survey assessed self-efficacy in the areas of feedback, modeling, applying reading strategies, fluency, assessments, student motivation, selection of classroom materials, and writing. The scale mean for the survey was $M=6.96$ indicating that overall there was a greater than average (median of 4.5 on a 9-point Likert scale) feeling of self-efficacy to teach reading across the 22 items. According to mean ($M=6.13$, $SD=1.75$), the lowest ranking question was question 6, which dealt with writing. According to mean ($M=7.82$, $SD=1.29$), the highest-ranking question dealt with the modeling of effective reading strategies.

Self-efficacy to teach writing assessed on questions 6,15, 19, and 20 was the consistently low category. Question six ($M=6.13$, $SD=1.75$) had a range of eight. Question 15 ($M=6.58$, $SD=1.85$) had a range of 8. Question 19 ($M=6.84$, $SD=1.83$) had a range of eight. Question 20 ($M= 6.42$, $SD=1.78$) had a range of seven. While these questions about self-efficacy to teach writing were consistently the lowest ranking categories according to the mean, they were consistently above the median agreement of 4.5, and close to the summary mean ($M=6.967$), which indicates that while teachers had less confidence in their ability to teach writing over any other category, they still had a greater than average belief in that ability.

The 38 survey participants agreed most about their self-efficacy to teach reading on questions 3, 4, 5, 10 and 11. The range of each of the agreement percentages equaled

5, which was the smallest range of the 22 items, and indicated a more significant cluster of agreement towards the higher end of the Likert scale. Question 3 pertained to the ability to adjust reading strategies based on formal and informal assessments ($M=7.61$, $SD=1.26$). Question 4 pertained to offering feedback during an oral reading ($M=7.47$, $SD=1.35$). Question 5 pertained to meeting the needs of struggling readers ($M=7.26$, $SD=1.22$). Question 10 pertained to the ability to model reading strategies ($M=7.82$, $SD=1.29$). Question 11 pertained to the ability to implement effective reading strategies ($M=7.58$ and $SD=1.15$). The results of these questions indicate that participants had the highest rate of agreement in their abilities to adjust reading strategies based on informal and formal assessments, can provide targeted feedback to students during oral reading, can meet the needs of struggling readers, model effective reading strategies and implement effective reading strategies in their classrooms.

The high rates of agreement on 5 of the 22 questions and the means above the median in the area of writing indicate that K-2 novice educators have a greater than average belief in their ability to affect student outcomes. The implications of the data suggest that K-2 novice educators have a strong belief in their ability to teach reading and address the needs of students. A dichotomy is forming with the results of the data on the TKA and the TSELI. K-2 novice educators express a strong sense of self-efficacy to teach reading; however, they show consistent knowledge gaps in two core areas and inconsistency of knowledge across the cohort in phonemic awareness. The dichotomy between a strong belief in their ability and a gap in knowledge shows that a problem is evident in the pre-service preparation for teachers.

Also, there could be a link to teacher retention. If a teacher has a greater than average belief in their ability to teach reading and is not seeing outcomes expected in student performance, there could be a link to staying in the profession. Huber et al. (2016) identified that teacher retention is highly linked to teacher self-efficacy and the ability to impact positive student outcomes. A scenario that would produce the most significant outcomes on student performance in reading would be to have a strong knowledge of teaching foundational skills in reading and a high sense of self-efficacy to teach those skills. In this combination, student performance would be impacted, and teacher retention would increase (Huber et al., 2016). The results of this study indicate a gap in knowledge and a high sense of self-efficacy, a combination that would not produce the highest outcomes for student proficiency in reading.

Analysis of Qualitative Interview Results

The semi-structured interviews included open-ended questions asking teachers to share their feelings about their efficacy and understanding of teaching foundational reading skills in their novice years. The interviews directly address research questions three and four. Nine individuals were selected randomly from those who responded to wanting to participate; however, I decided to exclude one of them. After getting into the interview process, she indicated that she was a college professor, and I wanted to keep the data collection confined to K-12. The following table indicates the demographic information for each of the randomly selected interview participants.

Table 7

Demographic Information of Interview Participants (pseudonyms are used)

Participant ID	Job Title	Years in Education	Accreditations or Certifications in Reading	School Type	State
1 Jolene	Reading Specialist	17	CALT-QI *	Charter	New Mexico
2 Nan	Reading Specialist	35	Ed.D. in Reading	Public	Delaware
3 Andy	ESE Teacher	30	None	Private	Florida
4 Debra	Title 1 Reading Specialist	33	None	Public	Missouri
5 Kirsten	K-3 Intervention Specialist	18	Masters in Reading	Public	Ohio
6 Marci	Dyslexia Interventionist	18	None	Public	Texas
7 Gayla	Reading Intervention Specialist	21	Masters in Curriculum & Instruction with a Reading Endorsement	Public	Wyoming
8 Keely	Dyslexia Interventionist	15	None	Public	Texas

* CALT-QI = Certified Academic Language Therapist – Qualified Instructor

Research Question 3

To what extent do experienced teachers feel guilt about their knowledge and ability to teach foundational reading skills in their first years as a teacher?

To answer research question three, I analyzed the transcribed interviews using an Excel synthesis matrix and created categories and themes based on classifications of themes. Direct quotes and summaries of interviewee thoughts were labeled and assigned to themes according to in vivo codes (Saldaña, 2016). The first step of the process was to analyze each recorded interview and review written notes. I studied the individual responses, made comparisons across the group and then collectively as a whole. During

the coding process, negative emotional words became a consistent theme among the interviewees. These emotional words and direct quotes were then linked to explanations of guilt related to teacher self-efficacy (refer to Table 2). Persecutory guilt is when one feels they are being forced to do something or failing to do what is expected of you, and depressive guilt is when you realize that you may be harming others (Hargreaves, 1998). These definitions of persecutory and depressive guilt were then attached to the emotional words and direct quotes to determine what statements could be classified as a particular type of guilt. It is important to note that I did not define the word guilt for the interview participants and only asked them directly about guilt if they didn't mention it themselves. The definition of guilt for some of the participants could have been through the legal and theoretical lens, and this study did not address those definitions of guilt.

Table 8

Experienced Teachers' Perceptions About Emotions Related to Teaching Reading and the Evidence to Link to Types of Guilt

Educator Profile	Pre-Service Education on Reading Instruction	Words Used to Describe Emotions	Examples of Evidence	Depressive or Persecutory
1 Jolene Reading Specialist 17 years in education Charter School New Mexico	"No explicit training prior to being hired to teach 1 st grade." She never intended on being a teacher. Went through alternative certification	Anxious Scared Fearful Helpful No way to feel relief <i>Didn't use the word guilt but agreed when I asked about it.</i>	She was asked to review materials by the district and saw what was missing in the instruction	Persecutory
			She had feelings of regret when she looked back on her initial years in teaching, "I didn't have a clue what I was doing." "Man, I need a do-over. Can I just do a do-over	Depressive

			for these kids because I screwed this up badly?” “Oh, these poor kids, how I added to their burden. You know I’m the expert. I should know what to do for these kids, and I have no clue.”	
2 Nan Reading Specialist 35 years in education Public School Delaware	Remembers learning something and thinking, “This is just the beginning.”	Did not say any explicit emotional words	“I certainly did not feel I had enough knowledge.” “When I graduated, I felt I can’t do anything.”	Depressive
			“What are we doing? Why don’t we just teach them a bad habit on top of a bad habit”?	Persecutory
3 Andy ESE Teacher Private School 30 Years in Education Florida	She learned how to teach reading under an Ursuline Nun. She spent more time in classrooms than in college classes.	Frustration Worry <i>Didn’t use the word guilt but agreed when I asked about it.</i>	She felt like she couldn’t implement things she knew worked. “You know what I learned in college; I’m not really applying here because this is what they (<i>administration</i>) gave me to teach.”	Persecutory
			“Why am I not reaching that child? Oh my gosh, it’s my fault. I gotta be doing something different.”	Depressive
4 Debra Title 1 Reading Specialist 33 Years in Education Public School Missouri	She was taught to teach reading with skill, drill, apply. Remembers going through a	Guilt “Well, I had the guilt, which made me revamp my whole program.”	“Oh, those poor kids, what did I do to them.” “What did I do to those babies? Oh my goodness, did I brand them, or you know, scar them in later life when this stuff comes full circle, and	Depressive

	dyslexia simulation		<p>they can't do that (<i>read</i>)?"</p> <p>"There is guilt involved when you can't find a way to meet their needs. Yeah, there's guilt."</p>	
			<p>The district is pushing down guidelines and mandates that she doesn't necessarily agree with.</p> <p>However, she does feel freedom within her role not to follow the curriculum.</p>	Persecutory
5 Kirsten K-3 Intervention Specialist 18 Years in Education Public School Ohio	Received a two-week course on reading after Christmas break.	Remorse Sadness	<p>"I really feel that I did not get the best reading instruction possible."</p> <p>"I did not feel at all equipped to teach reading."</p> <p>'Man, I know I did those kids a disservice because of my own lack of instruction that I had.'</p> <p>She said that it wasn't her fault for not having proper instruction in teaching foundational skills in reading.</p>	Depressive
			<p>"Here's the mass curriculum that the administration picked out. And they have said this is what you're</p>	Persecutory

			learning this year. This is what you're going to teach, and oh, by the way, it has phonics built into it, so don't worry about Foundations."	
6 Marci Dyslexia Interventionist 18 Years in Education Public School Texas	She took one class in college on struggling readers and received no phonics instruction. She learned about reading instruction in her dyslexia training.	Frustration Overwhelm (only when she couldn't reach students)	Her feelings were tied to working with struggling students and not being sure what the student needs. These feelings could not be tied to guilt in her first years of teaching reading.	No Correlation
7 Gayla K-3 Reading Interventionist 21 Years in Education Public School Wyoming	"You know, I think we had a day on that...and it was whole language at the time."	Remorse Anger Frustration Disgust Sadness	"They (<i>pre-service program</i>) did not teach us how to teach kids how to read." "Man, I was clueless; I had no idea what I was doing. I had such a wide variety (<i>of students</i>), and I had not one clue what I was teaching." "I would say anger would be a better word, angry at the university, angry at educators, angry at professors for not teaching me what I needed to be equipped with to help my students be successful."	Depressive

			<p>“I had to buy into a system that I didn’t believe in.”</p> <p>“For six years, I felt like a failure.”</p>	Persecutory
<p>8 Keely Dyslexia Interventionist 15 Years in Education Public School Texas</p>	<p>Did not describe pre-service education</p>	<p>Bad feelings</p> <p><i>Didn’t use the word guilt but agreed when I asked about it directly.</i></p>	<p>“I feel like I did my students a disservice.”</p> <p>“I would go back and probably do a lot more focused work on phonemic awareness and phonics.”</p> <p>“I want to go back and apologize for whole language.”</p> <p>“I just feel bad that I didn’t get a hold of that sooner to give that to those struggling readers because I just want to cry when I think about it.”</p>	Depressive

The scary feelings that Jolene described link to depressive guilt because she knew she didn’t have the requisite knowledge needed to instruct students in foundational reading skills. Jolene repeatedly said that she wanted a “do-over.” Jolene described feelings of being anxious and scared and feeling like a failure. She recalls saying to herself, “You know, I’m the expert. I should know what to do for these kids, and I have no clue.” When explicitly asked about feeling guilt, Jolene stated, “There’s a huge feeling of guilt.”

Jolene also had persecutory guilt. She recalls being at a curriculum and instruction meeting where materials were being reviewed for adoption. Jolene pointed out, “This is okay, but you know what? There is nothing in here that is gonna help our students that struggle. It is the same old, same old”. She went on to say that the district purchased the curriculum anyway.

Jolene recalls a time that she was asked to move to special education. Jolene said she made it very clear with the administration that she would do what she knew was best for students. She stated, “What is it that you’re asking me to do? Because if you’re asking me to move in there and do what everybody else had done, I’m not moving. But if you’re asking me to go in and do what I know is best for kids and provide the support they need, then absolutely”. Because of Jolene’s record of being a teacher that gets results, she felt empowered to make a bold statement. Another aspect of persecution came for Jolene when her parents started to talk to one another. While she had good outcomes with students, she said she fell out of favor with the district when parents wanted their child to be in Jolene’s class. The parents’ overwhelming demands are when Jolene felt pressure to leave the district because she had exposed the community to how students should be taught. The district wasn’t prepared to change its approach based on budgetary reasons.

Nan did not use any specific emotional words; however, she did make statements and related experiences that could tie to depressive guilt. When asked directly about guilt, she answered, “No,” even though her statements and descriptions depicted otherwise. I linked her statements to depressive guilt because she described her feelings of teaching in her novice years and described that she felt like she couldn’t do anything when teaching reading.

When Nan first began working in a school, she recalls the school administration prescribing a program in reading that included one-on-one mentoring, activities, and stations. She recalls asking herself, “What are we doing? Why don’t we just teach them a bad habit on top of a bad habit”? The experience Nan described was tied to feelings of persecutory guilt. She remembers that the administrators would tell her that the students would improve, just to wait and see. Once she was moved to the role of a reading specialist, administrators told her to do whatever it takes. At the point of the transition, Nan began teaching students the knowledge she had gained in her training outside of her undergraduate and Master’s programs. She said it changed 100%.

Andy stated that 50 years ago, children were taught to read through phonological awareness, and students were better readers than they are today. She believes in starting with the phonemes of language rather than graphemes. Andy described frustration in the shift she saw in teaching reading over the years. She related to the word guilt when it was mentioned to her, yet she didn’t say it explicitly on her own. She’s frustrated that there are scientific studies, and 50 years ago, it was working, yet now education is in a place where teaching reading is not working.

Andy’s frustration and feelings related to guilt are rooted in the fact that she feels inadequate in her knowledge when she can’t reach a child. Andy also noted that she gets frustrated with herself because she asks herself, “Why am I not getting it? Why am I not reaching them”? She even stated feelings of regret for taking an extra 10 minutes to get a cup of coffee when she felt like she should have been spending that time finding materials that would help reach a child. When explicitly asked about guilt, Andy said,

“Yeah, of course.” She described having those moments, those days, those months where she says to herself, “Why? Why didn’t I look further? Why didn’t I look harder?”

Andy’s statements linked to persecutory guilt were that she felt like she couldn’t implement what she learned in college. She was handed a book of lesson plans and expected to implement those lessons. She was excited at first because her lessons were completed for her; however, that excitement dwindled when she began to question, “Are the kids really learning?” At one point in the interview, Andy lowered her voice and looked from side to side, and commented about making sure that no one was around to hear her when speaking about the fact that she had to follow a prescribed curriculum that she didn’t feel was working for students. Andy believes that a program that teaches students the foundational skills of reading should have a phonological approach. She described the current curriculum from Pearson being used as “horrible.” She used the word “frustration” in describing the example and went on to say that it was “frustrating guilt.”

Debra stated that she continues to be a learner by attending webinars and reading books. After going through these programs, Debra recalls thinking, “Oh these poor kids, what did I do to them?” which is an indicator of depressive guilt because of the feeling that you are harming someone.

Throughout her 33-year career, Debra described butting heads with the administration about differing philosophies. The administration has adopted the Fountas and Pinnell curriculum and wants to use that as the foundation curriculum in kindergarten. She is starting to see students shut down with the leveling of texts. The explanation Debra gave about a district mandate of a particular curriculum which was in

opposition to what she believed, was describing persecutory guilt, even though she does feel confident in not following the curriculum within her current role.

When asked directly about feelings of guilt, Kirsten said that she felt remorseful and sad rather than guilty. She said she didn't feel guilty because, in her mind, guilt is when you have a skillset and choose not to use it, and remorse is when you are not equipped and are sad because you did not give students what they need. I decided to classify the remorse she expressed as depressive guilt because depressive guilt is when you realize you may be harming others (Hargreaves, 1998). The type of guilt being looked at in this study is not one of a legal or theoretical lens. The feelings of guilt for this study associate with teacher self-efficacy, which relates to equity theory in which there are feelings that someone is not being treated fairly (Baumeister et al., 1994).

Kirsten realized that even though it was not her fault that she didn't have the requisite knowledge and skills, she was harming students, and students were not being treated fairly. Her statement, "Man, I know I did those kids a disservice because of my own lack of instruction that I had," is evidence to link to depressive feelings. After the experience described of not receiving the best instruction, Kirsten was motivated to get her Master's degree in reading. Kirsten's statements align with the Peter Effect of not being able to teach what you do not know yourself (Binks-Cantrell et al., 2012; Farrell, 2012; Washburn et al., 2016).

Even with a Master's degree in reading, Kirsten still did not have a pedagogical stance or solid knowledge base regarding foundational reading instruction. It wasn't until Kirsten went through the Wilson Foundations program offered by her current school district at the time, that she felt like she finally understood how to teach reading for the

first time. She recalls, “Wow, I’m learning right along with my students.” It was through the Foundations program that Kirsten began to understand why reading needed to be taught with an evidence-based, multi-sensory, phonics-based approach. The training received through the program made her feel confident in her ability to group students and provide interventions based on gaps in student reading skills. She felt confident in providing different doses of reading instruction.

Kirsten continued to advance her learning with more education in the area of teaching foundational reading skills. She recalls that not everyone in her school accepted the additional professional learning offered by the district. She said some teachers did not take to the pedagogy that was being offered. Kirsten recalled that after taking Foundations and the other professional learning offered by that school, she thought, “Oh my gosh, If I had had this in my undergrad, you know, the differences I could have made.”

Marci was the only experienced educator that did not have feelings tied to guilt because the explicit training she received before entering the classroom equipped her to teach students. Marci’s only emotion was frustration and overwhelm when some students do not progress as quickly as other students. Marci’s specific training enabled her to teach reading after having full knowledge and awareness of the explicit skills needed for foundational skills, and she knew how to teach those skills.

Marci’s path of having explicit instruction before entering the classroom to teach foundational reading skills and lack of guilty feelings further justify that educators should be equipped with the requisite knowledge needed to teach foundational skills in reading.

Out of the eight interviewees, Gayla had the most passionate and intense tone when addressing feelings related to teaching students the foundational skills needed to

read. Before she began the Master's program and had explicit training, Gayla recalls feelings of frustration and feeling like a failure. Her tone and body language in these statements were strong. The only thing she knew was to teach through units. She recalls spending hours and hours finding leveled materials to address students' varying skill levels in her classroom. Gayla confirmed the notion of the Peter effect because she said she didn't know what she didn't know (Binks-Cantrell et al., 2012; Farrell, 2012; Washburn et al., 2016). She stated that she feels bad that she didn't know and feeling bad for her kids in those initial years. These negative emotions of feeling bad and remorseful were how I tied to depressive guilt.

Gayla also expressed strong feelings that linked to persecutory guilt. She recalls when a group came from Tempe, Arizona, and convinced the district to purchase a program based on whole language, even though the whole language movement had already moved out of neighboring states. Gayla has felt pressure from the district for the past 20 years. She feels the remorse of generations of kids that have gone through the programs and can't read. Another aspect that Gayla felt strongly about was that the district had spent hundreds of thousands of dollars over time. She recalls being excited to get trained in Lindamood Bell; however, the district came in and decided that the program wasn't showing results fast enough, and they "canned Lindamood Bell." Gayla stated that she and others were "being required and basically forced to spend time" during instruction in a certain way. Another persecutory feeling that Gayla expressed is that scheduling doesn't allow her time to spend with students how she knows they need. She said she's trying to "appease" others and can't group students like she needs to group them.

When I explicitly asked about feeling guilt, she stated, “No”; however, she had already talked about feeling emotions of remorse, frustration, disgust, and sadness. She stated that “I had to buy into a system that I didn’t believe in. For six years, I felt like a failure”. Remorse is a synonym for guilt, and while Gayla answered “no” to the exact emotion of guilt, her statements related to remorse were strong. As a researcher, I decided to use her strong statements, as with Kirsten and Nan, as evidence to link to either persecutory and depressive guilt because of the type of guilt related to self-efficacy being looked at in this study.

When Keely reflected on her years as a 2nd-grade teacher, she expressed feelings that could be linked to depressive guilt. She mentioned remembering specific students and feeling like she did them a disservice. Keely discussed that she wishes that the knowledge she has now is the knowledge she should have had in those initial years. Keely explicitly said, “I would go back and probably do a lot more focused work on phonemic awareness and phonics.” Keely reflected on one particular student from her 2nd-grade experiences. She recalls knowing that there was a problem but couldn’t quite put her finger on what that problem was and couldn’t help the student. Keely’s statements directly tied to depressive guilt because she recognized that she could have and probably did harm her students by not teaching in an evidence-based way that she understands now.

While Keely never explicitly said the word guilt, she did identify with the word guilt when I presented it to her at the end of the interview. She quickly jumped from the word guilt in reflecting on her prior experiences to feelings of joy that she has today. She now knows how to teach the explicit skills needed in reading in her role as a dyslexia

interventionist. The contrast of guilt in reflecting on prior experiences and joy in her current understanding and teaching practices further proves that teacher emotion is connected to teaching practices and is an area that needs further investigation and study.

As described above, the verbal descriptions of the pre-service education from the eight interviewees ranged from having no explicit training at all to a small window of time dedicated to a specific focus, such as having a day or two on the basics of how to teach foundational skills in reading to being fully immersed with a mentor. The range described in pre-service education indicates that the scope and depth of their exposure to the requisite knowledge needed to teach foundational skills in reading were wide and varied.

The emotional words used to identify with feelings when reflecting on their novice years in teaching were: anxious, scared, fearful, no way to feel relief, frustration, worry, guilt, remorse, sadness, overwhelm, anger, disgust, and bad feelings. These words have negative connotations associated with them. Only one individual used the word guilt in her comments about her feelings. Three individuals agreed with the word guilt when I presented the word to them, and three individuals responded “no” to the word guilt even though their statements and tone reflected otherwise. Questions seven and eight of the open-ended interview questions explicitly used the word guilt. Question seven mixed the word guilt in with other emotional words to give the interviewee options of emotions to consider. Question eight was more direct and only focused on the word guilt without any direct explanation of how it was being described or used in the study.

Seven of the eight individuals had statements and expressed feelings that could be tied to depressive guilt. Depressive guilt is when you realize that you may be harming

others (Hargreaves, 1998). Concern about harming students was evident in the individuals' statements tied to depressive guilt. Some of the statements included:

Man, I need a do-over. Can I just do a do-over for these kids because I screwed this up badly

Oh, these poor kids, how I added to their burden. You know, I'm the expert, I should know what to do for these kids, and I had no clue.

Why am I not reaching that child? Oh my gosh, it's my fault. I gotta be doing something.

Oh, these poor kids, what did I do to them. What did I do to those babies? Oh my goodness, did I brand them, or you know, scar them in later life when this stuff comes full circle, and they can't do that (*read*).

There's guilt involved when you can't find a way to meet their needs. Yeah, there's guilt.

Man, I know I did those kids a disservice because of my own lack of instruction that I had.

Man, I was clueless. I had no idea what I was doing. I had such a wide variety (*of students*), and I had not one clue what I was teaching.

I would say anger would be a better word, angry at the university, angry at educators, angry at professors for not teaching me what I needed to be equipped with to help my students be successful.

I feel like I did my students a disservice.

I want to go back and apologize for whole language.

I just feel bad that I didn't get a hold of that sooner to give that to those struggling readers because I just want to cry when I think about it.

These statements have a consistent theme of feeling like harm was done to students or feeling a sense of remorse for not affecting the outcomes of students, which is an indicator of the feeling of depressive guilt being looked at in this study.

From the review of qualitative data, there is consistent and strong evidence to show that there were links to either depressive or persecutory guilt among the seven of the eight interviewees and, in six cases, evidence of both for the same individual.

The feelings of remorse and guilt experienced on a large scale among the eight interviewees are further evidence to show that equipping teachers with the skills needed to teach foundational skills should take place before entering the classroom and parallels a research study by Madrid et al. (2010) that found educators that reflected on their teaching had feelings of stress, worry, and frustration concerning persecutory guilt. The idea of equipping educators to teach the foundational skills needed in reading before entering the classroom is evident in Marci's journey. There was no indication that Marci had feelings of guilt related to her novice years in education. When understanding that teacher emotion influences teaching behavior, self-efficacy, and, ultimately, student learning (Lohbeck et al., 2018), the path that Marci took relieves the feelings of guilt that could link to adverse outcomes, including teacher retention. The building up of educator knowledge before entering the classroom could impact the teacher retention issue that is a significant cause for concern in education (Huber et al., 2016) and on student outcomes (Callahan et al., 2009).

Triangulation of Data

Research Question 4

Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?

Triangulation of data occurred in research question four. The four-part survey's open-ended questions were used to understand the requisite knowledge and self-efficacy of novice educators triangulated with the experienced educators' open-ended interview questions.

Lack of Pre-Service Education On How to Teach Foundational Skills of Reading. One theme identified from the experienced educator interviews was the lack of pre-service education related to foundational skills of reading for six of the eight participants. Andy was the only individual who said her pre-service education on teaching reading was sufficient, yet still had feelings that could tie to both depressive and persecutory guilt. She attended college at a private Christian college. She was taught by an Ursuline Nun that believed all students had potential in education despite having gaps in reading or any area. Andy described her pre-service education as being very valuable, and she didn't realize how valuable until years later. She remembers taking a class called "Survey and Reading Problems" embedded in an Orton-Gillingham approach. Between the foundational knowledge she gained in her pre-service program from the Ursuline Nun and the "hundreds, and hundreds, and hundreds of hours" of everything she could get her hands on, she felt confident in teaching the foundational skills of reading. Andy spent a lot of time understanding dyslexia and even described herself as dyslexic. Andy's

pathway was untraditional in the sense that she went to a religious school, became a missionary, and then received a Master's degree from a Theological Seminary.

Andy had feelings that linked to persecutory guilt because of the mandates from her school district. The mandates were what made her become self-immersed in the research. When Andy sought information, she indicated that there weren't webinars and social media groups and no one to learn from. She would go to the library to check out books.

Six participants reported that their pre-service education was either non-existent or only occurred minimally. Jolene's undergraduate and pre-service path began in the field of psychology. She never intended to be in education and found herself in education through an alternative certification route, obtaining general education and special education certifications. Jolene started her career in a self-contained classroom for kindergarten through 3rd grade. The self-contained position was eliminated, and Jolene moved to a 1st-grade classroom for students with behavior issues. Her special education certification supported the transition. During this time, Jolene did not have any explicit education on teaching the foundational skills needed for reading. Jolene stated, "One of my biggest scariest things was being the first-grade teacher knowing I had to teach these kids to read and being so scared that none of them were gonna learn to read because I didn't have a clue what I was doing." Jolene recalls that to be certified, she took two online courses in reading and then, "Boom, I was certified to teach reading."

Nan received her pre-service education many years before she ever started in the classroom. It was ten years before she taught in the classroom. She describes some of her first learning experiences with teaching reading were with her children while she was

home with them for ten years. Her pre-service education was in early childhood elementary education, and she recalls thinking, “Now that certifies you as a reading specialist from kindergarten through high school?” She recalls feeling like she learned nothing in that program. Nancy’s son was 13 and was still unable to read, so she enrolled him in a private school where they taught him to read using an Orton-Gillingham-based approach. She wondered why the Orton-Gillingham instruction wasn’t available in public schools. She learned more about reading instruction from her son’s experiences and through her self-motivation to learn more where she discovered Hollis Scarborough’s Reading Rope. The reading rope has become a foundational structural framework for the science of reading movement (Scarborough, 2001). It was at this point of her journey that she began to ask herself, “If this is true, why are we not doing it? Because all we did was skill and drill.” Nan went on to receive training in the LIPS program and Lindamood Bell program. She recalls that she didn’t learn any foundational information from the LIPS program in her Master’s or undergraduate programs.

Debra recalls her pre-service education as being all about skill, drill, and apply using file folders. She did describe going through a dyslexia simulation. That was the only thing that stuck out for her as being something beneficial because it was in that simulation that she realized there was a lot that goes into teaching reading. It wasn’t until after her pre-service program that Debra began to learn about how to teach the foundational skills in reading. She went through the Heggerty program and read books from David Kilpatrick.

Kirsten was in a pre-service program that was being phased out; however, the college was trying to squeeze in some reading instruction for those finishing the program.

Kirsten described the instruction as being crammed in during two weeks after Christmas break and was led by an adjunct professor that “didn’t know what she was doing.” The instruction consisted of being assigned a group of students to tutor and being told to figure out how to help them. Kirsten described being given intervention resources and being required to track whether it made a difference in two weeks.

Gayla recalled that her pre-service education in the foundations of how to teach explicit skills in reading was just one day. She stated that what was taught was whole language with a heavy emphasis on writing. Gayla said that she could teach a writing unit “inside, outside, upside, downside” but didn’t know how to teach reading other than to integrate books into the unit. In Gayla’s Master’s program, she began to learn more about how to teach reading. She recalls a professor who focused on vocabulary but brought phonemic awareness, phonics, and comprehension.

Keely’s route to the classroom was non-traditional. She has an undergraduate degree in Business Management and then decided to transition into education. She went through an alternative certification process and spent 13 years teaching 2nd grade. She recently obtained her Master’s degree in curriculum and instruction with a focus on reading. Keely did not describe any specific education or formal training in teaching foundational reading skills.

Marci’s path to education began in a non-traditional way. Her undergraduate degree was in Business Administration, and she worked in the corporate world for nine years and then decided to transition to education. She then got her Master’s degree in Curriculum & Instruction, which did not include instruction on teaching reading. Before Marci ever started teaching reading, she went through a dyslexia-specific program and

was trained in an evidence-based approach; however, she did not receive a certification in that program. Marci's path of becoming educated before entering the classroom could link to her feeling equipped, which is why there was no evidence to link to either depressive or persecutory guilt.

The descriptions of the six individuals who felt their pre-service education in teaching foundational reading skills were minimal or non-existent can indicate that better pre-service pathways should be in place for novice educators. There is significant variance among the interviewees of their path to the classroom and the learning and knowledge that prepared them for the classroom.

The K-2 novice educators participating in the survey described varying examples of their pre-service education (see Table 9). Three individuals indicated they had no instruction at all; two individuals did not respond. The remaining respondents created an entire listing of different programs, topics, strategies, and discrete skills they learned in their pre-service program. The list indicates that there was a significant variance among pre-service education for novice teachers. Seven individuals made explicit statements that could tie their pre-service learning to a whole language approach. These statements included comments such as being training in guided reading, whole language, Reader's and Writer's workshop, and a leveled approach to reading instruction. These programs and approaches would be considered typical literacy practices. Spear-Swerling (2018) points out that "Typical literacy practices do not lend themselves to the application of learned phonics rules; they rely more on guessing words based on context and picture clues."

Based on the triangulation of data from the experienced educator interviews and the open-ended questions on the K-2 novice educator survey, there is significant evidence to suggest that there is a sporadic approach to pre-service learning that takes place for educators. The variance in what is taught in pre-service can indicate later feelings of depressive guilt for educators.

Table 9

Evidence of Specific Areas of Reading Instruction in Pre-Service Learning

	Evidence of Specific Areas of Reading Instruction in Pre-Service Learning
Describe the specific areas of reading instruction that you learned about in your pre-service program.	<ul style="list-style-type: none"> • None • Phonemic Awareness • Running records • Whole Language • Phonics Instruction • Language Arts • Guided Reading • Comprehension • Word Decoding • Vocabulary • Writing Workshop • Readers Workshop • Segmenting and blending • Digraphs • Syllables • Assessments • Read Aloud • Fluency • Supporting students with dyslexia • Supporting students with autism • Multi-sensory • Children's Literature

Lack of Requisite Knowledge On How to Teach Foundational Skills of

Reading. The lack of requisite knowledge described by six interviewees was evident in the statements made about inadequacy to teach foundational reading skills. The feelings

attached to the lack of knowledge were the evidence that was able to link feelings of depressive guilt of not having the requisite knowledge and self-efficacy to teach foundational reading skills in their beginning years as a teacher.

The novice educators responding to the survey had negative and positive feelings associated with their ability to teach foundational reading skills. The negative feelings outnumbered the positive feelings (see Table 10). Statements included: “Not equipped at all,” “At a loss,” and “I’m angry that I was never taught the science of reading” are evidence that novice educators have similar feelings to that of experienced educators when it comes to being equipped with the knowledge needed to teach foundational reading skills. Guilt was not a word used by the K-2 novice educators.

Eighteen K-2 novice educators had negative responses in the open-ended question portion of the survey linked to their preparedness to teach foundational reading skills. The statements centered around not feeling adequately trained with the knowledge they needed as they began their teaching careers. One individual stated, “I’m angry that I was never taught the science of reading, even though the research existed...I think universities should be held accountable for the literacy crisis”. A novice educator’s emotional feeling of anger coincides with the explicit statement of feeling angry by one of the experienced educators. Another novice educator stated that she taught 3rd grade in a low-income school her first year of teaching, and most of her students could not read at a 1st-grade level. She stated, “I did not have the resources or knowledge to help them effectively as a first-year teacher.”

Eight, or 21%, of K-2 novice educators made positive statements about being equipped to teach reading. The positive statements include: “I feel good,” “Good and

ready,” “I feel equipped,” and “I felt confident.” I classified these statements into two categories: Positive feelings/statements and Learning/Preparation was there (see Table 10). Even though the overall self-efficacy to teach reading was above the median, the statements made in the open-ended portion of the survey significantly support the fact that educators have a dichotomy of emotions happening when considering being equipped with the knowledge to teach reading. The dichotomy of emotion is evident because 18 of the 38 survey respondents, or 47%, indicated negative feelings towards being equipped with the requisite knowledge they need.

Table 10

Frequency Table of K-2 Novice Educator Positive Emotions Towards Being Equipped to Teach Reading

Statement	Frequency
Positive feelings/ statements	5
Learning/ Preparation was there	3
Total	8

Table 11

Frequency Table of K-2 Novice Educator Negative Emotions Towards Being Equipped to Teach Reading

Statement	Frequency
More to learn / Need more training	7
Negative feelings/statements	9
Wished for a chance to observe others	1
College was not enough	1
Total	18

Individual Views of What Should Be Included in Foundational Reading

Programs. The data used in the open-ended interview process with the eight interviewees to link to the survey results around what should be included in foundational reading programs was to look at the certifications or accreditations and their in-service

learning. Four of the eight interviewees had an accreditation or certification, including CALT-QI, Ed. D in Reading, Masters in reading, and Masters in Curriculum & Instruction. Other programs or support mentioned by the interviewees where they had received some training included Heggerty, Equipped for Reading Success, Wilson, Foundations, having a mentor, Lindamood-Bell, LETRS, Orton-Gillingham, MTA, and LIPS. These programs are all grounded in a structured literacy approach to reading instruction. These advanced programs on reading instruction supported the grounding of the personal views of what the interviewees thought should be taught in pre-service education.

K-2 novice educators indicated a list of programs (see Table 12) that align with the experienced educators' list, excluding the mention of Leveled Literacy Intervention (LLI). The Fountas & Pinnell Leveled Literacy Intervention provides short-term interventions through daily small-groups using leveled books and fast-paced, systematically designed lessons (2020). The list from novice educators indicates that in-service opportunities are occurring.

Novice educators listed out discrete skills that they thought should be included in a foundational reading program. Many of these skills (see Table 13) link to what an evidence-based program should include, according to the National Reading Panel (2000). Phonemic awareness, phonics, fluency, vocabulary, and comprehension were all listed among the novice educator responses.

Table 12*Evidence of Specific Areas of Reading Instruction Received in In-Service Opportunities*

	Evidence of Specific Areas of Reading Instruction Received in In-Service Opportunities
Describe any in-service learning opportunities you have engaged in around reading instruction.	<ul style="list-style-type: none"> • SIPPS training • Wired for Reading • District PD with curriculum adoption • Fountas & Pinnell • Guided Reading • House Bill 3 (Texas) • Dyslexia Training • Phonics First • Structured Literacy • Reading by Design • Neuhaus • Orton-Gillingham Training • Leveled Literacy Intervention (LLI) • CALT certification • Foundations • Reading Boot Camp • Institute for Multi-Sensory Education (IMSE)

Table 13*Individual Educator Views of What Foundational Reading Programs Should Include*

	Individual Educator Views of What Foundational Reading Programs Should Include
Explain your view of what a foundational reading program should include.	<ul style="list-style-type: none"> • Phonological awareness • Phonics • Reading out loud • Writing • Phonemic awareness • Vowel rules • Fluency • Comprehension • Multi-sensory, direct, explicit • Decoding and encoding • Morphology • Syntax • Oral Language • Highly intensive • Sight words

	<ul style="list-style-type: none"> • Love of reading • Vocabulary • Opportunities to read authentic texts • Assessments • Choral reading • Word study • Pictures with words
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The statements made from novice educators show that while pre-service learning is sporadic, in-service learning is taking place and is more targeted with an evidence-based approach. According to the responses, novice educators understand what is needed to teach foundational skills in reading.

Motivation to Change. Each of the eight experienced educators interviewed expressed feelings about their motivation to continue learning and changing how they taught the foundational skills of reading over the years. Their feelings of inadequacy to help and teach students spurred a desire to seek out resources and research to understand how best to teach foundational reading skills.

Jolene indicated that she researched on her own to understand the foundational reading skills that students need. She accepted a job as the director of a dyslexia center for a short time because she felt it was here that she would learn more about how students learn how to read. Jolene was motivated to seek further instruction because she knew she wasn't equipped to teach students to read based on the pre-service instruction she had received. Over the years, Jolene sought additional training and is now a Certified Academic Language Therapist and Qualified Instructor and a dyslexic therapist through the International Dyslexia Association. Another motivating factor for Jolene was that she began to get noticed for the outcomes that she was having with her students.

Nan found research independently; she turned to local resources and relied on her husband, another educator, to seek information about reading research. The path of independent research was the same for Kirsten, Gayla, and Keely. They each talked to peers, sought out resources and curricula on their own. They would spend hours in the library and do personal reading on their off time.

Andy had mixed feelings about being motivated to make changes. She talked about an internal fight with herself on whether or not she should go to an administrator to get the support for services that she knows a child needs. Andy described scenarios where she would only get students two days a week, and she knew she needed them five days a week to make a difference. She talked about being in a constant state of struggle.

Debra was self-motivated, which was in direct relation to her depressive guilt. “Well, I had the guilt, which made me revamp my whole program.” She attended some state-level training but mostly sought information on her own because of the direct tie to feeling guilty about the harm she might be causing her students.

Debra had a level of confidence in the way that she is currently instructing students. She works on phonemic and phonological awareness, which showed gaps in knowledge for novice educators in the survey. After teaching these skills to students, she sees progress. Debra asked her principal to come watch a lesson, and after observing the lesson and the kids were reading words, the principal told her, “That is simply amazing.” Debra described students responding to her approach. She specifically mentioned a boy that came into her room one day and said, “I turned into a reader today; I can read.”

Kirsten is currently in a school at the north end of the school boundaries, and she described it as a place where the teachers have the autonomy to do what they want. She is

confident in teaching reading with the knowledge she has gained over the years; however, the elementary schools will be merging, and she expressed concern about what will happen in the merge. Kirsten isn't confident that she will be able to continue to teach foundational reading skills the way that she knows works. When asked if she felt like she could be an influencer in the newly merged schools, she loved the thought of being able to be a leader but doubted her abilities.

Self-motivation is what drove Gayla to learn more. She describes herself as a “research-based teacher,” and she wanted to use that knowledge to help students. She shared how she would spend time after school with students to ensure they were getting explicit skill building in the foundations of reading.

Keely's motivation to continue to learn came out of her feelings of depressive guilt. She stated that she wanted to go back and apologize to her 2nd-grade students for teaching them with a whole language approach. Keely said that reading brain science independently spurred her to change and motivated her to continue learning more. Keely explicitly stated that “phonemic awareness and phonics is the heart and the core of learning how to read.” Keely's motivation to learn on her own is what spurred this need for change in her teaching.

Some of the same sentiments about learning more and being motivated to change were expressed in the survey's open-ended questions by the novice educators. Some of the comments from the 38 survey participants include:

I feel like we always have more to learn.

I'm very glad I pursued it so aggressively on my own.

I've learned a lot through great teachers since.

Wish I had a chance to observe experienced teachers to see strategies used.

Need continuous training.

My mentor was a great reading teacher.

Need more knowledge about phonemic awareness and syllables.

I need it! I think there should be far more reading training!

Learning every day!

I was at a loss as to how to do it effectively, so I spent last year and this year learning through my reading coach and on my own.

I think most of my learning came from watching other teachers.

The statements can link to a sense of understanding that learning should be ongoing and evolving. Novice educators had a strong sense that when teaching a young child to read, there should always be a chance to learn on the part of the educator. A major theme identified in the novice educator comments was receiving training from a mentor or more experienced educator. The ability to view and model from someone else is what spurred action to change many novice educators' practices. The comments and reflections from both the novice educators and experienced educators about their willingness to learn and change are evident in the statements and reflections expressed. There was a common understanding among both groups of educators that student outcomes in reading and the ability of an educator to address those needs is a catalyst for change and growth.

Based on the evidence produced from the survey, there is a strong need to ensure that educators are equipped to teach reading with evidence-based approaches and programs in their pre-service learning. While learning needs to happen during in-service,

there is a strong indication that pre-service programs need to adapt to the needs of the education system based on the alarming student proficiency rates (NCES, 2019).

Callahan et al. (2009) state that “If we are to accept the challenge of a professional vision of teaching, it is our responsibility to ensure that all teachers head into the field with an adequately filled toolbox.” Couple this statement with the fact that only 12% of elementary teachers feel fully confident to teach reading when leaving their pre-service programs (Kurtz et al., 2019), it is evident that there is a dire need for transformation of pre-service learning for educators.

Discussion of the quantitative and qualitative data will be further explained in the following chapter summarizing the results.

CHAPTER 5: DISCUSSION

Summary of The Study

The purpose of this mixed-methods study was to understand the requisite knowledge and self-efficacy that novice K-2 teachers with three or fewer years of experience have when it comes to teaching foundational reading skills and the guilt that experienced teachers with four or more years of experience have about teaching reading as they reflect on their first years in the classroom.

The research questions that guided this study included:

1. To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?
2. To what extent do novice teachers have a sense of self-efficacy when teaching reading?
3. To what extent do experienced teachers feel guilt about their knowledge and ability to teach the foundational reading skills in their first years as a teacher?
4. Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?

To answer research questions one and two, a quantitative survey was deployed through an online survey tool, Typeform, that included four parts: profile questions, the Teacher Knowledge Assessment: Structured Literacy (Mather et al., 2001), the Teacher Sense of Efficacy for Literacy Instruction Scale (Moran et al., 2011), and a series of open-ended questions.

To answer research question three, qualitative interviews were conducted to determine if experienced educators had a sense of guilt when it came to their reflection on their first years in teaching foundational reading skills. Participants for the interviews came from the Learning Ally database of educators that met the criteria of having four or more years of experience in teaching. An email was sent to the list of educators that met the criteria with a solicitation to participate in an interview. Of the individuals that responded positively to agreeing to participate, individuals were chosen through random sampling. Nine individuals were interviewed, and one interview was discarded after realizing that the individual was a college professor.

Triangulation of the data occurred in research question four with the qualitative interview data with experienced educators and the open-ended qualitative questions on the survey for K-2 novice educators.

Of the 38 novice educators who took part in the survey, most of them had three years of experience in the classroom, 22 had obtained a Bachelor's degree, 16 had no specific accreditation or certification in reading, and 22 were specialists. The profiles indicated a variety of pre-service education, skills, tenure, and exposure to reading instruction among the participants.

Summary of Quantitative Results

Research Question 1

To what extent do novice teachers have the requisite knowledge needed to teach the foundational skills of reading?

Moats (1994) states that the lack of teacher knowledge about the science of reading instruction is one reason why it is not implemented widely in schools and

districts. The requisite knowledge about the science of reading instruction that an educator should know to teach foundational reading skills includes, but is not limited to: phonemic awareness, phonological awareness, orthographic mapping, and syllable knowledge (Joshi et al., Kilpatrick, 2019; 2019; Moats, 2020; Spear-Swerling, 2018). The lack of educators' knowledge that Moats highlights (1994) were components of the questions on the TKA: SL (Moats et al., 2003). The TKA: SL survey results from the 38 responses studied were used to answer research question one. A descriptive statistics analysis was run on the TKA: SL data, including mean, standard deviation, skewness, and kurtosis.

Only one question on the survey pertained to the knowledge of orthographic mapping and had the lowest mean ($M=.16$, $SD=.370$) of the twenty-one-question survey indicating that orthographic mapping was a skill where educators lacked the most significant knowledge. However, with only one question about orthographic mapping, it would be hard to assume that the lack of knowledge in the foundational skills in reading could be applied to a broader population. More testing of knowledge about orthographic mapping should be done to make evidence-based claims.

Questions about phonological awareness had the lowest mean results as compared to other questions on the survey. The skill area of phonological awareness shows the most significant gap in knowledge among the participants. Syllable knowledge was assessed on three questions and showed the highest means across the questions.

Knowledge about phonemic awareness had the most varied correct responses across the sample. Twelve of the 21 questions dealt with phonemic awareness. Variation among the survey participants indicates a gap in skill in the area of phonemic awareness.

According to the results of the TKA: SL, novice educators lacked knowledge in the area of orthographic awareness and consistently lacked knowledge in phonological awareness, two critical components of teaching foundational skills in reading (Joshi et al., 2019; Spear-Swerling, 2018). The concept of phonemic awareness showed a considerable variation of correct answers across the survey, indicating that further research needs to be done in this area to establish a more reliable understanding of the knowledge of this discrete skill. Syllable knowledge among the participants had minor gaps in knowledge for novice educators.

Based on the data present in the TKA: SL survey, there is evidence to claim that K-2 novice educators lack knowledge in discrete elements of the foundational skills in reading. The survey data coincides with the extensive research in the literature about the concept of phonological awareness. McCutchen et al. (2002) stated that teachers still do not understand how to teach this particular skill. The lack of knowledge in requisite skills could indicate why 65% of our nation's students do not meet proficiency levels in reading (NCES, 2019).

Research Question 2

To what extent do novice teachers have a sense of self-efficacy when teaching reading?

Self-efficacy is the belief that an individual has in themselves to affect outcomes. Self-efficacy can either be tied to expectancy theory, in which a teacher believes that their ability to carry out specific actions of teaching, or outcome theory, in which a teacher believes that their specific teaching actions would have a positive outcome for students (Wheatley, 2002). Extensive prior research has been conducted to understand

self-efficacy beliefs among teachers (Ashton, 1984; Tschannen-Moran et al., 2011); however, there is a significant gap in that research when it comes to understanding self-efficacy beliefs of educators in the area of reading (Bostock et al., 2012; Guo et al., 2012; Jordan et al., 2019; Maloch et al., 2003; Schaich, 2016; Tschannen-Moran et al., 2011). Because a portion of this mixed methods research is about understanding the reality of teachers' beliefs about teaching reading compared to their requisite knowledge, research question two was asked to understand novice teacher's self-efficacy and then make an assumption as to how a teacher's requisite knowledge related to self-efficacy.

The TSELI was the survey instrument used to determine the self-efficacy of novice educators with three or fewer years of experience (Moran et al., 2011). The literacy area in which novice educators had the consistently lowest belief in their ability was in writing; however, the results showed that while novice educators had the lowest belief in writing, the overall responses indicated a greater than average belief in that ability. Participants had the highest rate of agreement in their beliefs in their abilities to adjust writing strategies based on formal and informal assessments, provide targeted feedback to students during oral reading, meet the needs of struggling readers, model effective reading strategies, and implement effective reading strategies in their classroom. The high agreement percentages among the novice educators indicate they had a strong belief in their abilities to teach reading which directly answers research question two.

Research questions one and two explain that K-2 novice educators have knowledge gaps related to requisite skills needed for foundational reading. In contrast, these same educators had a strong sense of self-efficacy in their abilities. There is a dichotomy evident in the data to show a problem between what K-2 educators know and

have been equipped to teach and their belief about that ability. The dichotomy of knowledge versus belief in one's ability could be an indicator that spurs a need for further investigation and research.

Summary of Qualitative Results

The feeling of guilt has mostly been excluded from education research (Hargreaves, 1998; Van Veen et al., 2005). In particular, the feeling of guilt has been excluded concerning teaching reading. When taking a closer look at guilt, social sciences researchers define guilt as either persecutory, feeling forced to do something, or failing to do what is expected, and depressive guilt, such as when individuals realize they may be harming someone else (Hargreaves, 1998). In the interview portion of this study, data was collected to determine if experienced educators had feelings of guilt when reflecting on their novice years as a teacher. The significance of research question three speaks to the fact that education research must recognize the guilt of educators because you cannot separate emotions from cognitive thinking (Van Veen et al., 2005).

Research Question 3

To what extent do experienced teachers feel guilt about their knowledge and ability to teach the foundational reading skills in their first years as a teacher?

Data from the interview portion of the study concluded that experienced educators had feelings that linked to guilt. Seven of the eight individuals interviewed shared highly negative words when reflecting on their novice years in education. While not explicitly saying emotional words, the eighth participant made statements that eluded to negative feelings; however, these negative feelings were linked to not impacting outcomes when she doesn't know what a student needs. The negative emotions of the seven included:

anxiousness, scared, fear, no way to feel relief, frustration, worry, guilt, remorse, sadness, overwhelm, anger, disgust, sadness, and bad feelings. While guilt is on the list, only one experienced educator used the word without prompting, and three others agreed to the word guilt when directly asked. Two participants used the word “remorse” which is a synonym for guilt, according to thesaurus.com.

Through a review of the emotional words, coupled with explicit statements from the participants, I was able to provide evidence that assigned these emotions to either persecutory or depressive guilt. Seven participants had evidence in their emotional words and statements that could link to feelings of depressive guilt. Depressive guilt was linked to the feeling that they had harmed their students or did not have the skill needed to affect outcomes. The statements included feelings about harming students, needing a do-over, not feeling equipped, doing students a disservice, and not being able to help students. While three educators answered “no” when explicitly asked about feeling guilty, I chose to link their statements to either depressive or persecutory guilt because this study was not looking at guilt through a legal or theoretical lens (Baumeister et al., 1994), but through a reflective lens tied to self-efficacy. Two of these educators did use the word remorse which thesaurus.com defines as a synonym for guilt.

Six of the eight participants had statements and expressed emotions that could link to persecutory guilt. As applied in this study, persecutory guilt is when you feel pressured to do something that is against your beliefs or doing something you know is right but don't (Hargreaves, 1991). The six experienced educators who had feelings and statements linked to persecutory guilt either felt like they were being asked to teach a curriculum they didn't agree with or were not allowed to teach the way they knew would

work for students. A statement from one of the participants that speak to the emotional struggle is, “I just feel bad that I didn’t get a hold of that sooner to give that to those struggling readers because I just want to cry when I think about it.” The interviewee’s statement speaks to the emotional tie that educators have to affect students’ outcomes and deal with highly charged emotions in that process.

There is substantial evidence from the qualitative interviews to show a link to depressive guilt only for one individual and both depressive and persecutory for six individuals. Based on the data, there is significant evidence showing that teachers have significant ties to feelings of guilt when reflecting on their novice years of teaching reading in the classroom. The reflective feelings of experienced educators could impact educational reform if further study is done to investigate these feelings and for researchers to begin exploring guilt as a key issue in teaching.

Research Question 4

Should there be a transformation of pre-service education for novice teachers based on the differences between requisite knowledge and self-efficacy as a novice teacher and experienced teacher guilt?

Baumeister et al. (1994) and Hargreaves et al. (1991) contend that guilt can be a great motivator towards improvement and change. Once an educator understands what research shows to be foundational principles in reading instruction, a sense of guilt could motivate change and transformation of their practice, which could be evidence to revamp pre-service education. In this study, both novice and experienced educators understood the need for a transformation of pre-service education. Evidence of the need for

transformation was apparent in statements from both groups of educators. The agreement in statements made by both groups was the place that the triangulation of data occurred.

Statements about pre-service learning from the novice group of educators included themes around feeling unprepared, acknowledging that there should be far more reading instruction, feelings of nervousness, wishing there was a chance to observe experienced teachers, not equipped at all, being torn between too many ideas floating around, begin at a loss, and feeling angry. Angry feelings from one of the novice educators were evident in the statement, “I’m angry that I was never taught the science of reading, even though the research existed back then.”

Anger was also an expressed emotion by Gayla in her statement, “I would say anger would be a better word, angry at the university, angry at educators, angry at professors for not teaching me that I needed to be equipped with to help my students be successful. For six years, I felt like a failure.”

The negative feelings expressed via the open-ended questions for the novice educators indicated a higher number of negative feelings about their pre-service experiences than positive feelings. For each of the experienced educators, six of the eight interviewees all expressed a lack of sufficient education about how to teach reading in their pre-service programs.

The interview data from Marci could not tie any emotional feelings to either depressive or persecutory guilt. Her profile data was another indicator that Marci’s path to the classroom was a preferred path. She had explicit training and skill-building in teaching foundational skills in reading before entering the classroom. The path of being equipped before teaching students allowed her to begin with a skillset and knowledge

base that did not send her on a path towards remorse, guilt, or anger. Additionally, it is essential to note that Marci does not have an accreditation or certification in reading. The initial knowledge base and training were adequate for her to feel the efficacy needed to teach reading.

The data about Marci and the high responses about negative feelings about pre-service from both groups, and the consistency of the negative terms used about pre-service learning from both groups, answers research question four, indicating a need for a transformation of pre-service education.

Limitations

A limitation of the study came from the low response rate on the survey for K-2 novice educators. The original goal was to obtain a sampling of approximately 100 K-2 educators with three or fewer years of experience from across the United States to participate. However, several contributing factors may have prevented me from reaching the sample size desired. Forty –seven individuals did complete the survey; however, only 38 of the survey responses were used after data cleaning procedures. There could have been several contributing factors to the low response rate. The online survey tool showed analytics resulting in 462 unique views, 181 starts, and a 61% drop-off rate on the introduction page. The limitations of being a K-2 educator with three or fewer years of experience could have excluded some individuals from participating. Another factor in the low completion rate could be the average time to take the survey, which was 50 minutes and 14 seconds. The limitation in the number of respondents is a limiting factor in that the results may not apply to a broader population of educators.

Another limitation of the study was that all experienced educators had at least 15 years of experience in education and were all specialists in their current positions. No general education teachers were randomly selected in the interview process. The narrow scope of the educators' demographic could have impacted the overall views and feelings expressed. Educators who have experience in the education profession for an extended time and have exposure to specialties in reading might have particular views on how to teach the foundational skills of reading. These particular views could result from the knowledge gained from on-going service and learning opportunities afforded to specialists. According to the interviewees, much of their on-going learning included exposure and training in evidence-based, multisensory structured literacy programs.

A third limitation in the study could be found in the survey tools that were used. While the TKA: SL assessed phonemic awareness, phonological awareness, orthographic mapping, and syllable knowledge, the TSELI assessed efficacy in feedback, modeling, applying reading strategies, fluency, assessments, student motivation, selection of classroom materials, and writing. There was no direct correlation between knowledge of a particular skill and the self-efficacy to teach that same skill. The discrepancy between skills assessed on the survey tools could be a limitation of the results.

Recommendations for Future Research

Doubts about one's self-efficacy can be beneficial because it creates an imbalance and sets the teacher on a pathway to change. The imbalance needs to be disruptive enough to spur a need for change (Tschannen-Moran et al., 2011).

A question that was asked by Moats et al. (2003) and remains with the result of the current study is how to address the knowledge gap for educators in the general

education setting to meet the needs of struggling readers. Further research could be conducted that is aimed at pre-service programs to assess what is being taught and the courses offered that address the science of the foundational skills needed to become a competent teacher of reading in the general education setting.

A future study could address the limitation of the survey tools not assessing the same skills. New survey tools that assessed knowledge about a particular skill and the self-efficacy to teach that same skill would need to be developed and proven reliable to undertake a study of this nature.

Other questions that could be addressed in future research could include: What level of requisite knowledge is required for general education teachers that all students should receive? What level of requisite knowledge is required for specialists providing interventions for struggling readers? What combination of required pre-service learning, mentorship by experienced educators, and on-going structured learning is necessary for general and special educators? What is the accountability for pre-service institutions that do not follow what science tells us about teaching foundational reading skills?

While all of the recommendations are worthwhile, the most significant gap in research exists in the area of guilt concerning teaching. Teacher guilt has mostly been left out of the equation when researching education, specifically researching reading, and has mostly been ignored by research (Hargreaves, 1998). There should be continued research that brings together teacher emotion, requisite knowledge in reading instruction, and self-efficacy to help address the reading crisis facing our nation.

The research study described was not intended to expose gaps in teacher knowledge or diminish teachers' self-efficacy in teaching foundational reading skills.

Teachers cannot teach what they do not know (Binks-Cantrell et al., 2012). Instead, this study is an opportunity to understand what we can learn from the emotions that live inside teachers to embark on educational reform that can positively impact the national reading crisis.

Recommendations for Practice

Several themes were identified in this study about practices that could change in schools and districts today. One recommendation came from the statements made by one of the interview participants, “I had no explicit training prior to being hired to teach 1st grade. I didn’t have a clue what I was doing.” The previous statement indicates that this school did not have hiring practices and foundations of baseline knowledge that a teacher needed to teach in 1st grade. First grade is primarily considered to be where foundational reading instruction occurs. An immediate recommendation is that schools and districts could establish baseline knowledge of educators and align on pedagogical practices with a potential candidate before hiring an individual. A potential problem could arise if this practice is instituted. That problem could be that the candidate base for K-2 teaching positions could be diminished. However, suppose schools and districts establish guidelines about the requisite knowledge needed for a K-2 educator. In that case, pressure could be put on pre-service programs to ensure that graduating candidates are well prepared.

Another recommendation is that pre-service programs preemptively analyze the courses they offer that address the body of knowledge known as the science of reading (ILA, 2020) and determine if books required and courses offered align to the body of research that begins with foundations in phonemic and phonological awareness (Joshi et

al., 2019; Spear-Swerling, 2018). According to the National Center on Teacher Quality (NTC Q), 40% of textbooks used in pre-service programs do not adequately instruct teachers in the science of reading (Drake et al., 2020). According to a 2019 EdWeek report, there is a high level of autonomy in selecting course materials at the post-secondary level. Nearly two-thirds of professors at the post-secondary level report they alone select their curricula, books, articles, and other materials for their early reading instruction courses (Kurtz et al., 2019).

A final recommendation for practice comes from the demographics of the educators that participated in the interview process. The experience level of the educators ranged from 17 to 35 years. Each of the educators were specialists in their current positions; all of them had received on-going training in an evidence-based reading program, and four of the eight had an accreditation or certification in reading. The educators described were highly skilled and knowledgeable about the “settled science” of reading (Moats, 1994). The recommendation for practice is that schools and districts should look to the educators in their schools and districts with a requisite level of knowledge, experience, and skill set to determine reading programs and curriculums. An Edweek report found that nearly two-thirds of K-2 and elementary special education teachers report that their district selects the primary reading programs and materials (Kurtz et al., 2019).

Conclusion

Through a mixed-methods research design, the results of this study indicate that novice educators with three or fewer years of experience lacked the most knowledge in orthographic awareness and phonological awareness, with varied results in phonemic

awareness and the most significant level of understanding, came in the area of syllable knowledge. These same novice educators that lacked knowledge in some of the core components of foundational reading instruction (Joshi et al., Kilpatrick, 2019; 2019; Moats, 2020; Spear-Swerling, 2018) had consistently high agreement percentages on the TSELI survey, indicating that there was a strong belief in their ability to teach reading. According to the data, there was a strong belief in one's ability to teach reading; however, a lack of knowledge in specific skill areas. The dichotomy of skill versus belief for novice educators could impact reading outcomes for students.

The interview process of this study indicated that among the eight experienced educators interviewed, there was a link to either depressive or persecutory guilt, or both, for seven of the individuals. The feelings of anger, frustration, disgust, sadness, anxiousness, and fear about reflections on being equipped in their novice years to teach reading were the evidence needed to link to persecutory or depressive guilt.

With each passing school year, more and more students will not succeed in reading, translating to not succeeding beyond the K-12 academic career, according to our Nation's Report Card (NCES, 2019). Reports show that the inability to read leads to poor grades, ultimately leading to school dropout (Fels, 2014). Suppose the education system does not address the preparation needed for educators that teach foundational reading skills and is understood and known by experienced educators, which Louisa Moats (1994) describes as "settled science'." In that case, students will suffer at the hands of an ill-equipped system.

To further prevent harm to students at risk of an ill-equipped system, it is time to listen to the voices of experienced educators to hear and learn what practice should look

like in the classroom and couple that with the research and science that produces positive reading outcomes. The International Literacy Association (ILA) defines this objective science as the science of reading: “A corpus of objective investigation and accumulation of reliable evidence about how humans learn to read and how reading should be taught” (2020). The experienced educator voices will come with feelings and emotions that will need to be explored and dissected to understand that while teaching the foundational skills of reading is a science, it is also a heart of passion, dedication, and application in the classroom. Pre-service programs should not produce ill-prepared teachers to teach students such as intricate and complex a task as reading. “Poor teacher preparation has been suggested as one of the major causes of reading failure” (Binks-Cantrell et al., 2012, p. 527). The linkage between guilt, requisite knowledge, and self-efficacy in reading are areas that have been historically overlooked (Bostock et al., 2012; Guo et al., 2012; Jordan et al., 2019; Maloch et al., 2003; Schaich, 2016; Tschannen-Moran et al., 2011). Researchers can no longer overlook these areas because teacher emotion is so closely linked to cognitive thinking. You cannot separate the two (Van Veen et al., 2005). Another reason that these areas cannot be overlooked is because student achievement in reading is at stake.

A novice educator from the survey understands the crisis facing students and educators today; “I’m angry that I was never taught the science of reading, even though the research existed... I think universities should be held accountable for the literacy crisis”. Additionally, the following words should never have to be spoken by another educator when reflecting on their novice years in the classroom: “There’s guilt involved when you can’t find a way to meet their needs. Yeah, there’s guilt” (Debra). The words

that should be used by every educator when teaching foundational skills in reading is,
“There’s joy involved when you can find a way to meet their needs. Yeah, there’s joy”.

APPENDIX A. IRB APPROVAL

Federal Wide Assurance: FWA00009066

Aug 20, 2020 3:27 PM EDT

PI: Terrie Noland
CO-PI: Olivia Stewart, Brett Blake
Education Specialties

Re: Expedited Review - Initial - **IRB-FY2021-68** *Teacher Guilt: How Can It Inform Reading Instruction in K-2*

Dear Terrie Noland:

The St John's University Institutional Review Board has rendered the decision below for *Teacher Guilt: How Can It Inform Reading Instruction in K-2*. The approval is effective from August 20, 2020, through August 19, 2021

Decision: Approved

PLEASE NOTE: If you have collected any data prior to this approval date, the data must be discarded.

Selected Category: 7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Sincerely,
Raymond DiGiuseppe, PhD, ABPP
Chair, Institutional Review Board
Professor of Psychology

Marie Nitopi, Ed.D.
IRB Coordinator

APPENDIX B. PROFILE QUESTIONS FOR NOVICE TEACHERS

1. School
2. District
3. State
4. How many years of experience do you have as an educator?
 - a. 1
 - b. 2
 - c. 3
5. What is the highest level of education you have completed?
 - a. Bachelor's
 - b. Master's
 - c. Doctorate
6. Please list any accreditations you have in teaching reading.
7. Job Title

APPENDIX C. OPEN-ENDED QUESTIONS FOR NOVICE TEACHERS

1. Describe the specific areas of reading instruction that you learned about in your pre-service program?
2. What are your feelings toward being equipped to teach reading after your pre-service learning?
3. Describe any in-service learning opportunities you have engaged in around reading instruction.
4. Explain your view of what a foundational reading program should include for K-2 students.

APPENDIX D. TEACHER SENSE OF EFFICACY LITERACY SCALE (Moran et al., 2011)

Teacher Beliefs – TSELI	This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.								
Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) “None at all” to (9) “A Great Deal” as each represents a degree on the continuum. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.	None at all		Very likely		Some degree		Quite a Bit		A great deal
1. To what extent can you use a student’s oral reading mistakes as an opportunity to teach effective reading strategies?	1	2	3	4	5	6	7	8	9
2. To what extent can you use a variety of informal and formal reading assessment strategies?	1	2	3	4	5	6	7	8	9
3. To what extent can you adjust reading strategies based on on-going informal assessments of your students?	1	2	3	4	5	6	7	8	9
4. To what extent can you provide specific, targeted feedback to students during oral reading?	1	2	3	4	5	6	7	8	9
5. How much can you do to meet the needs of struggling readers?	1	2	3	4	5	6	7	8	9
6. To what extent can you adjust writing strategies based on on-going informal assessments of your students?	1	2	3	4	5	6	7	8	9
7. To what extent can you provide your students with opportunities to apply their prior knowledge to reading tasks?	1	2	3	4	5	6	7	8	9

8. To what extent can you help your students monitor their use of reading strategies?	1	2	3	4	5	6	7	8	9
9. To what extent can you get students to read fluently during oral reading?	1	2	3	4	5	6	7	8	9
10. To what extent can you model effective reading strategies?	1	2	3	4	5	6	7	8	9
11. To what extent can you implement effective reading strategies in your classroom?	1	2	3	4	5	6	7	8	9
12. To what extent can you help your students figure out unknown words when they are reading?	1	2	3	4	5	6	7	8	9
13. To what extent can you get children to talk with each other in class about books they are reading?	1	2	3	4	5	6	7	8	9
14. To what extent can you recommend a variety of quality children's literature to your students?	1	2	3	4	5	6	7	8	9
15. To what extent can you model effective writing strategies?	1	2	3	4	5	6	7	8	9
16. To what extent can you integrate the components of language arts?	1	2	3	4	5	6	7	8	9
17. To what extent can you use flexible grouping to meet individual student needs for reading instruction?	1	2	3	4	5	6	7	8	9
18. To what extent can you implement word study strategies to teach spelling?	1	2	3	4	5	6	7	8	9

19. To what extent can you provide children with writing opportunities in response to reading?	1	2	3	4	5	6	7	8	9
20. To what extent can you use students' writing to teach grammar and spelling strategies?	1	2	3	4	5	6	7	8	9
21. How much can you motivate students who show low interest in reading?	1	2	3	4	5	6	7	8	9
22. How much can you do to adjust your reading materials to the proper level for individual students?	1	2	3	4	5	6	7	8	9

**APPENDIX E. THE TEACHER KNOWLEDGE ASSESSMENT: STRUCTURE
OF LANGUAGE (Moran et al., 2001)**

Correct answers are underlined

1. Which word contains a short vowel sound?
 - a. treat
 - b. start
 - c. slip
 - d. paw
 - e. father
2. A phoneme refers to
 - a. a single letter
 - b. a single speech sound
 - c. a single unit of meaning
 - d. graphemes
3. A pronounceable group of letters containing a vowel sound is a
 - a. phoneme
 - b. grapheme
 - c. syllable
 - d. morpheme
4. If *tife* were a word, the letter i would probably sound like i in:
 - a. if
 - b. beautiful
 - c. find
 - d. ceiling
 - e. sing
5. A combination of two or three consonants pronounced so that each letter keeps its own identity is called a:
 - a. silent consonant
 - b. consonant digraph
 - c. diphthong
 - d. consonant blend
6. A schwa sound is found in the word
 - a. cotton
 - b. phoneme
 - c. stopping
 - d. preview
 - e. grouping
7. A diphthong is found in the word
 - a. coat
 - b. boy
 - c. battle
 - d. sing
 - e. been

8. A voiced consonant digraph is in the word
 - a. think
 - b. ship
 - c. whip
 - d. the
 - e. photo
9. Two combined letters that represent one single speech sound are
 - a. schwa
 - b. consonant blend
 - c. phonetic
 - d. digraph
 - e. diphthong
10. How many speech sounds are in the word eight?
 - a. two
 - b. three
 - c. four
 - d. five
11. How many speech sounds are in the word box?
 - a. one
 - b. two
 - c. three
 - d. four
12. How many speech sounds are in the grass?
 - a. two
 - b. three
 - c. four
 - d. five
13. Why do many students confuse the sounds /b/ and /p/ or /f/ and /v/?
 - a. Students are visually scanning the letters in a way that letters are misperceived.
 - b. The students can't remember the letter sounds, so they are randomly guessing.
 - c. The speech sounds within each pair are produced in the same place and in the same way, but one is voiced, and the other is not.
 - d. The speech sounds within each pair are both voiced and produced in the back of the mouth.
14. What type of task would this be? "I am going to say a word, and then I want you to break the word apart. Tell me each of the sounds in the word *dog*."
 - a. blending
 - b. rhyming
 - c. segmentation
 - d. manipulation
15. * What type of task would this be? "I am going to say some sounds that will make one word when you put them together. What does /sh/ /oe/ say?
 - a. blending
 - b. rhyming

- c. segmentation
 - d. manipulation
16. Mark the statement that is false:
- a. Phonological awareness is a precursor to phonics.
 - b. Phonological awareness is an oral language activity.
 - c. Phonological awareness is a method of reading instruction that begins with individual letters and sounds.
 - d. Many children acquire phonological awareness from language activities and reading.
17. A reading method that focuses on teaching the application of speech sounds to letters is called:
- a. phonics
 - b. phonemics
 - c. orthography
 - d. phonetics
 - e. either (a) and (d)
18. What is the rule for using a ck in spelling?
- a. when the vowel sound is a diphthong
 - b. when the vowel sound is short
 - c. when the vowel sound is long
 - d. any of the above
19. Count the number of syllables for the word unbelievable
- a. 4
 - b. 5
 - c. 6
 - d. 7
20. Count the number of syllables for the word pies.
- a. 1
 - b. 2
 - c. 3
 - d. 4
21. If you say the word and then reverse the order of the sounds, ice would be:
- a. easy
 - b. sea
 - c. size
 - d. sigh
22. If you say the word and then reverse the order of the sounds, enough would be:
- a. fun
 - b. phone
 - c. funny
 - d. one

* Question 15 was unintentionally left out of the survey. The omission occurred during the transfer of questions to the online survey tool. Recognition of this omission occurred

during the analysis of the data stage. The decision was made to continue with the results because the reliability test of Crohnbach's alpha showed the assessment survey to reach a good level at $\alpha=.801$.

APPENDIX F. OPEN-ENDED INTERVIEW QUESTIONS FOR EXPERIENCED EDUCATORS

1. Describe the specific areas of reading instruction that you learned about in your pre-service program?
2. What were your feelings toward being equipped to teach reading when you began your career?
3. Describe any in-service learning opportunities you engaged in around reading instruction.
4. Describe how your attitude about reading instruction evolved over the years.
5. As you reflect on what you now know and what you knew as a novice teacher, how would you describe your feelings about how you taught your first-year students?
6. Describe any experience you had where you believed something different about reading instruction from what the administration had you teach or from administrators' belief systems. How did it make you feel?
7. Would any of these words describe how you feel about reading instruction when you reflect on what you knew at the beginning of your career and what you know now?
 - Pride
 - Anxiety
 - Joy
 - Guilt
 - Satisfied
8. Would you say that you have experienced feelings of guilt related to your reflection on how you taught reading in your first years?
 - a. Did those feelings result from your lack of knowledge or from demands that were placed on you to teach a particular curriculum that you knew didn't line up with research?

APPENDIX G. RECRUITMENT EMAIL TO NOVICE EDUCATORS

Subject: Participation in Research Project

You have been invited to participate in a research project to help Terrie Noland fulfill the requirements of a doctoral dissertation for a Ph.D. in Literacy. As you have indicated, you are a teacher that is responsible for reading instruction for students. The following information is provided to help you decide whether you wish to participate in this study. Your participation in this study is entirely voluntary, and you may refuse to participate or withdraw from the study at any time without any consequence.

Study Purpose: The purpose of this mixed-methods study will be to better understand the requisite knowledge that novice (less than four years experience) teachers have concerning their self-efficacy and the guilt that experienced (four or more years experience) educators have about teaching foundational skills in reading as they reflect on their first years in teaching reading.

Procedures: If you choose to participate, please select the survey link below, which contains questions that will ask about your knowledge related to reading instruction and your feelings regarding our self-efficacy to teach reading. Additional questions will inquire about your teacher education, professional learning experiences, and current teaching environment. Please respond to all questionnaire items. This questionnaire will take approximately 20 minutes to complete. Hit submit once you have completed the questionnaire.

Thank you so much for your time and interest.

Terrie Noland, CALP
Vice-President, Educator Initiatives
Doctoral Candidate, Ph.D. in Literacy

APPENDIX H. RECRUITMENT EMAIL TO EXPERIENCED EDUCATORS

Subject: Participation in Research Project

You have been invited to participate in a research project to help Terrie Noland fulfill the requirements of a doctoral dissertation for a Ph.D. in Literacy. As you have indicated, you are a K-12 educator responsible for reading instruction for students. The following information is provided to help you decide whether you wish to participate in this study. Your participation in this study is entirely voluntary, and you may refuse to participate or withdraw from the study at any time without any consequence.

Study Purpose: The purpose of this mixed-methods study will be to better understand the requisite knowledge that novice (less than four years experience) teachers have as teachers concerning their self-efficacy and the guilt that experienced (four or more years experience) educators have about teaching reading as they reflect on their first years in teaching reading.

Procedures: If you choose to participate in a 30-minute recorded interview, please indicate your interest by completing the attached form. Selection of participants will be done at random. If you are selected, you will be notified, and an interview will be scheduled. If you are not selected, you will receive an email notification. The interview will be recorded for purposes of transcribing and tagging information that will inform the study. Your interview will not be used for other purposes.

Thank you so much for your time and interest.

Terrie Noland, CALP
Vice-President, Educator Initiatives
Doctoral Candidate, Ph.D. in Literacy

APPENDIX I. RECRUITMENT POST ON SOCIAL MEDIA CHANNELS FOR K-2 NOVICE EDUCATORS

Quantitative Survey for K-2 Educators with less than three years' experience:

If you are a K-2 Educator with less than three years of experience, I need your help with this [survey](#) to help fulfill the requirements of my doctoral dissertation. It will take about 20 minutes to complete. If you know of others that meet these criteria and are willing to participate, please forward this email. It will help me out a lot and will advance our knowledge about teacher readiness!

Thank you so much for the kind gift of your time, knowledge, and expertise.

APPENDIX J. TEACHER CONSENT FORM



Dear Participant:

You have been invited to take part in a research study to learn more about the requisite knowledge that novice K-2 teachers have as general education teachers and their self-efficacy to teach reading, and the guilt that experienced educators and reading specialists have about teaching reading as they reflect on their first years as a teacher. This study will be conducted by Terrie Noland, Department of Education, Education Specialties, St. John's University, as part of her doctoral dissertation work. Her faculty sponsor is Dr. Olivia Stewart, Department of Education Specialties.

If you agree to be in this study, you will be asked to do the following: Take part in a survey that will take no longer than 20 minutes and answer open-ended questions as a part of the survey or take part in an interview to help the researcher understand if you have feelings of guilt when you reflect on your teaching experience. The interview will be video recorded virtually, and the file will be saved on an external hard drive. The interview will take no longer than an hour.

Federal regulations require that all subjects be informed of the availability of medical treatment or financial compensation in the event of physical injury resulting from participation in the research. St. John's University cannot provide either medical treatment or financial compensation for any physical injury resulting from your participation in this research project. Inquiries regarding this policy may be made to the principal investigator or, alternatively, the Human Subjects Review Board (718-990-1440).

Although you will receive no direct benefits, this research may help the investigator understand the effects of guilt, which could inform further research.

Confidentiality of your research records will be strictly maintained by removing your name, and any identifiers will be replaced with a number. Consent forms will be stored in a separate location from the interview documentation and will be stored in a locked file. Your responses will be kept confidential with the following exception: the researcher is required by law to report to the appropriate authorities suspicion of harm to yourself, to children, or others. Your responses will be kept confidential by the researcher, but the researcher cannot guarantee that others in the group will do the same.

Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty. For interviews, questionnaires, or surveys, you have the right to skip or not

answer any questions you prefer not to answer. Nonparticipation or withdrawal will not affect your grades or academic standing.

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Terrie Noland, terrie.noland18@my.stjohns.edu, St. John's University 8000 Utopia Parkway, Queens, NY, 11439 or the faculty sponsor, Dr. Olivia Stewart, at stewarto@stjohns.edu, St. John's University, 8000 Utopia Parkway, Queens NY, 11439.

For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair digiuser@stjohns.edu 718-990-1955 or Marie Nitopi, IRB Coordinator, nitopim@stjohns.edu 718-990-1440.

You have received a copy of this consent document to keep.

Agreement to Participate

Yes, I agree to participate in the study described above.

Subject's Signature

Date

APPENDIX K. APPROVAL LETTER TO USE TSELI



William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

February 24, 2021

Terrie,

You have my permission to use the Teacher Sense of Efficacy for Literacy Instruction Scale that I developed with Denise Johnson for your study. You'll find a copy of my website at <http://wmpeople.wm.edu/site/page/mxtsch>. The proper citation for this measure is:

Tschannen-Moran, M. & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education*, 27, 751-761. doi:10.1016/j.tate.2010.12.005

I've also attached the directions to access my password-protected website where you can access the Teaching and Teacher Education article where the measure was introduced.

All the best,

Megan Tschannen-Moran
William & Mary School of Education

APPENDIX L. APPROVAL TO USE TKA: SL

Original email to Louisa Moats:

Louisa,

I am currently in the dissertation phase of my Ph.D. program and would like to request permission to use the Teacher Knowledge Assessment.

My study is: Teacher Guilt: How Can It Inform Teaching Foundational Reading Skills

I'm conducting a concurrent mixed-methods study where I will survey novice K-2 educators with the Teacher Knowledge Assessment and then interview experienced educators about what they wish they would have known about reading instruction in their novice years.

Thank you so much for your consideration!

Terrie Noland, CALP

Doctoral Candidate, Ph.D. in Literacy

Reply email from Louisa Moats:

Yes, Terrie,

You have my permission to use the survey for your doctoral study.

Best wishes,

Louisa Moats

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Vita

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