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TEACHER PERCEPTION OF INCLUSION: A DAUNTING TASK OR WELCOME
CHALLENGE

By

ANNA KIRSTEN GRYSKIEWICZ

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
for the degree Doctor of Education
in Organizational Leadership

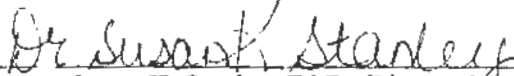
Southeastern University
January, 2019

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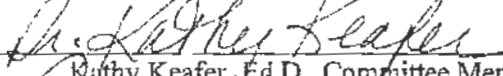
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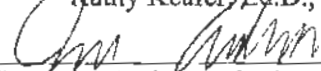
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DEDICATION

“Now to him who is able to do immeasurably more than all we ask or imagine, according to his power that is at work within us, to him be glory in the church and in Christ Jesus throughout all generations, for ever and ever! Amen” (Ephesians 3:20-21, New International Version). I am incredibly thankful for my Lord and Savior who remained my source of strength throughout my academic journey.

I am eternally grateful for the love, support, and strength of the beautiful people that I am honored to call family. Without the support of family, I would have been unable to pursue this God-given dream. From household responsibilities to ministry commitments, my family remained a pillar of strength and support. I learned invaluable lessons from our children. Thank you, Elizabeth, for your beautiful, tenacious spirit and determination. Joshua, you taught me much as you persevered through adversity and overcame many academic obstacles. Rebekah, thank you for reminding me of the importance of slowing down to enjoy pizza and movie night. You have patiently understood my study times and shared many vacations and holidays with mom and her coursework.

Finally, my loving and supportive husband, Tony, (better known as my research assistant) whose constant belief in me and encouraging words enabled me to continue when I felt I could not write another word or complete another revision. Your gentle words to “enjoy the journey” were a reminder of your love and devotion to our family and me.

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“If you want to fast, go alone. If you want to go far, go together.” I would be remiss without acknowledging the supportive colleagues I have met in the College of Education. Although I live on a different continent, the interaction and supportive words of affirmation from my colleagues shortened the distance.

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Finally, I am grateful for my committee. My chair, Dr. Stanley, thank you for reminding me that God provides the needed strength and grace for each day. Your encouraging words and belief in me enabled me to cross the finish line. Dr. Gollery, with humility and patience, you walked with me through the analysis and methodology. When I decided to complete a quantitative study, I did so with a little fear and trembling. You often said I did “the heavy lifting;” however, it was you who guided the lifting. Dr. Keafer, I appreciate your keen insight and attention to detail.

ABSTRACT

Approximately one-third of school-age children have been identified as students with learning disabilities. As a result, teachers are confronted with the challenge of providing quality instruction to students with diverse learning needs. Challenges and benefits abound in the inclusive classroom. Therefore, the study, considered quantitative, non-experimental, and survey research in nature, explored variables that influence teacher perception and participant-perceived satisfaction of inclusion. The cross-national study consisted of 112 participants hailing from public and private schools in Africa, Europe, and the United States. Differentiated instruction, social skills development, pre-service preparedness, and classroom culture represented the most statistically significant correlates in predicting teacher perception of inclusion as superior in meeting the comprehensive educational needs of students with mild to moderate learning disabilities.

Keywords: perception, Response to Intervention, differentiated instruction, learning disabilities, inclusion, satisfaction

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I. INTRODUCTION

According to the National Center for Education Statistics (2016), 34% of school-age children receive services for specific learning disabilities, suggesting that approximately one-third of the students in today's classrooms have been identified with a learning disability. As a result, teachers are confronted with the challenge of providing quality instruction for students with diverse learning needs. For this reason, the perception of inclusion varies from one teacher to the next. Although controversy exists regarding inclusion, this dissertation explored the factors that influence the perception of inclusion and teacher-perceived satisfaction of inclusion.

The Learning Disabilities Association of America (LDA) (2018) defined learning disabilities as “neurologically-based processing problems that can interfere with learning basic skills, such as reading, writing, and/or math” (para 4). Furthermore, learning disabilities can affect higher level skills such as organization, time management, abstract reasoning, long- or short-term memory, and attention (LDA, 2018). Learning disabilities impact people from all socioeconomic backgrounds and affect males and females equally (Aron & Loprest, 2012). Although considered challenging by some professionals, other educators find it rewarding to serve students with learning disabilities (Dev & Haynes, 2015). Many factors augment teacher perception of inclusion, including pre-service programs and teacher self-efficacy (Dev & Haynes, 2015; Lucas & Frazier, 2014).

Research has indicated that teacher perception of students with learning disabilities impacts teacher instruction as well as student performance (Baglieri & Shapiro, 2012; Crowson

& Brandes, 2014; Dev & Haynes, 2015). Additionally, cultural biases and personal experience with students with learning disabilities play a vital role in the perception of inclusion. Likewise, pre-service programs that provide field experience in an inclusive classroom equip teachers with practical experience teaching students with disabilities. For this reason, a teacher who is conversant with learning disabilities embraces strategies and instructional methods, such as Differentiated Instruction, to cultivate a classroom environment for students to find academic success. The classroom teacher must be familiar with the framework of Response to Intervention (RTI) and how it functions in the school and school district.

While some teachers enter the classroom with misconceptions based on cultural biases of students with learning disabilities, other teachers' perception is determined by previous personal experience (Baglieri & Shapiro, 2012; Sokal & Sharma, 2017). As teachers gain experience instructing students with learning disabilities, stereotypes diminish (Greenfield, Mackey, & Nelson, 2016). According to Baglieri and Shapiro (2012), opinions regarding students with learning disabilities are formed at a young age. In fact, how a culture perceives people with disabilities influences teacher perception of students with learning disabilities. In American culture, popular children's movies and books such as *Captain Hook* and *Forest Gump* convey negative images by portraying diverse people as helpless and foolish (Baglieri & Shapiro, 2012). Though subtle, the pictures and language embedded in media often create misconceptions of students with learning disabilities (Wexler, 2016). As a result, opinions regarding students with learning disabilities are formed at a young age.

Educators often begin a teaching career with little or no practical experience in teaching students with learning disabilities (Grima-Farrell, 2015; Leko, Brownell, Sindelar & Kiely, 2015; Sokal & Sharma, 2017). Pre-service teacher programs focus on theory and methodology, with

minimal classroom instructional experience (Grima-Farrell, 2015; Sokal & Sharma, 2017). Lack of interaction with students with learning disabilities cultivates a fear of the unknown. This dissertation presents quantitative non-experimental survey research identifying factors that contribute to teacher perception toward inclusion of students with learning disabilities as well as teacher-perceived satisfaction with inclusive classrooms as being superior in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

Background of the Study

The federal law known as The Education for All Handicapped Children Act (PL 94-142) was passed in 1975 and launched a new era in meeting the educational needs of students with disabilities (Hallahan, Kauffman, & Pullen, 2012). In 2004, PL 94-142 was amended and renamed the Individuals with Disabilities Education Act (IDEA). IDEA continued to ensure equitable education for students with disabilities. The major provisions of IDEA included a free and appropriate public education, due process, parent/guardian consultation, least restrictive environment (LRE), individualized education plan (IEP), nondiscriminatory evaluation, confidentiality, and personnel development (Hallahan et al., 2012).

Since the implementation of IDEA, researchers have continued to explore the vast educational needs of students with learning disabilities. Due to an increasing number of students with learning disabilities in the inclusive classroom, the instructional expectations of the general classroom teacher have continued to expand to meet the diverse learning needs of students with learning disabilities (Lucas & Frazier, 2014). While researchers acknowledge that the inclusive classroom avails the student with learning disabilities enhanced educational opportunities, challenges exist for educators (Baglieri & Shapiro, 2012). For this reason, it is important to consider the factors that contribute to teacher perception of inclusion.

While many factors influence teacher perception of inclusion, this study examined the classroom environment, instructional expectations, and teacher readiness (Ball & Green, 2014; Kirby, 2017; Lucas & Frazier, 2014). The classroom culture and environment contribute to the perception of the inclusive classroom. Likewise, classroom and behavior management, as well as academic expectations, contribute to the environment of the inclusive classroom.

Today's educator has daily responsibilities that demand time and energy. Instructional expectations necessitate diverse teaching methods to meet the needs of students with a wide range of abilities. To do so, educators must be proficient with Response to Intervention (RTI) and Differentiated Instruction (DI). Likewise, preservice teacher programs prepare future educators with the tools necessary to succeed in the classroom. However, do preservice teacher programs equip future educators with the resources needed for the inclusive classroom?

Although preservice teacher programs and professional development present opportunities to learn effective strategies and methodologies for the inclusive classroom, teacher self-efficacy remains a contributing factor in teacher perception of inclusion.

Theorists such as Jean Piaget, Lev Vygotsky, and Albert Bandura explored various aspects of developmental psychology and cognitive development. Jean Piaget's stages of development serves as a bridge to better understand the struggle teachers encounter in the quest for students with learning disabilities to achieve academic success. Lev Vygotsky recognized the significance of social skills in learning and identified the zone of proximal development (ZPD) as a range in difficulty between what a person can do independently and what can be done with assistance (Lerner & Johns, 2009). Bandura was noted for his social learning theory that he later named Social Cognitive Theory. In essence, Social Cognitive Theory stressed the importance of observational learning, imitation, and modeling. The research of Piaget, Vygotsky, and Bandura

delineated many facets of developmental psychology, cognitive development, and social cognition that have contributed to the understanding of learning disabilities and inclusion.

Although many factors are instrumental in the perception of inclusion, most educators agree that challenges and benefits exist. First, one of the challenges for students with and without learning disabilities is that they must adjust to a classroom of diverse learners. If transitioning from a non-inclusive classroom, the student needs to adapt to a new learning environment. Likewise, the classroom management and expected behaviors may be different than those in previous non-inclusive classrooms. Additionally, students may encounter challenges in curriculum, instruction, and assessments. Teachers also may encounter challenges as they endeavor to meet the diverse learning needs of students in an inclusive classroom. Time, energy, and patience are necessary in addressing the curriculum and instructional needs of students, while implementing accommodations and modifications for students with learning disabilities.

The benefits of inclusion impact students and teachers. Kirby (2017) recognized that inclusion creates a community of learning for students. An additional benefit of inclusion is that it fosters an awareness of learning disabilities for students without learning challenges (Anderson, 2012). Collaboration between general and special education teachers strengthens the skill sets of educators while providing effective academic instruction (Carter, Prater, Jackson & Marchant, 2009).

Problem Statement

The debate and complexity surrounding inclusion continues to impact students with learning disabilities. While opinions vary, Sokal and Sharma (2017) found that teacher perception of students with learning disabilities plays a vital role in student success. However,

teachers often lack the resources and experience to navigate the challenges involved in academic instruction in the inclusive classroom. Given the many facets of inclusion, further research is needed to more fully explore the attitudes of teachers towards inclusion. Therefore, the purpose of this quantitative, non-experimental survey study was to investigate factors contributing to teacher perception toward inclusion.

Significance

While numerous studies exist on the many facets of inclusion, this study examined the factors that contribute to teacher perception of inclusion. By examining the factors that contribute to teacher perception of inclusion, practitioners can identify specific components in need of improvement to better equip educators for the inclusive classroom.

Overview of Methodology

This study is considered quantitative, non-experimental, and survey research by specific research methodology. A purposive sample consisting of 112 educators serving in schools in Europe, Africa, and the United States represented the study's data source (Appendix A).

Study participants were provided with a voluntary survey packet (Appendix B) and were asked to provide a signature for consent. The packet included both demographic and Likert-scale items developed to assist the researcher in addressing the seven formally posed research questions that guided the study's data collection, analytics, and reporting of finding. The study's research instrument packet was researcher-established and designed and, as such, were validated through formal reliability analysis (Cronbach's alpha) once study data were collected.

A response rate of at least 50% was desired. In the event the 50% level was not achieved in the first round of mailings, a follow-up request for participation letter was issued. The potential sample pool for study purposes was approximately 200.

The judgment phase of the establishment of the survey instrument's content validity was executed through a content analysis of primarily the Teacher Attitude Toward Inclusion Scale (TATIS) instrument (Cullen, Gregory, & Noto, 2010). Items on the TATIS provided the basis of item development for the study's research instrument. A panel of subject matter experts (SMEs) assessed the content and wording of items on the TATIS, and subsequently offered themes that were central to the instrument. The themes, in turn, provided the framework for the development of items to be represented on the study's research instrument. The study's research instrument was an 18-item Likert-type survey utilizing a 5 point scale (Appendix C).

Research Questions

In order to address the research problem, the following research questions were explored:

1. To what degree do participants perceive that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities? And, is there an effect for demographic identifier concerning the perception that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities?
2. To what degree are participants satisfied with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed? And, is there an effect for demographic identifier concerning participant satisfaction with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the

comprehensive educational needs of students with mild to moderate learning disabilities are addressed?

3. Considering the variables of RTI, classroom instruction, academic skill development, differentiated instruction, and student social skills development, which represents the most robust correlate and predictor of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities?
4. Considering the variables of RTI, classroom instruction, academic skill development, differentiated instruction, and student social skills development, which represents the most robust correlate and predictor of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed?
5. Considering the variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy, which represents the most robust correlate and predictor of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities?
6. Considering the variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy, which represents the most robust correlate and predictor of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed?

7. Is participant perception of inclusive classroom settings as superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities predictive of their perceived satisfaction with inclusive classroom settings as the best means by which the comprehensive educational needs of students with mild to moderate disabilities may be addressed?

Hypotheses

H₀¹: The degree to which study participants perceive that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities will not be manifested at a statistically significant level.

H₀²: The degree to which study participants are satisfied with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities will not be manifested at a statistically significant level.

H₀³: None of the five independent predictor variables in Research Question Three's predictive model will represent statistically significant correlates predictors of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

H₀⁴: None of the five independent predictor variables in Research Question Four's predictive model will represent statistically significant correlates or predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the

comprehensive educational needs of students with mild to moderate learning disabilities may be addressed.

H₀⁵: The independent predictor variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy will not represent statistically significant correlates or predictors of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities are addressed.

H₀⁶: The independent predictor variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy will not represent statistically significant correlates or predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed.

H₀⁷: Study participant perception of inclusive classroom settings as superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities will not represent a statistically significant correlate or predictor of their perceived satisfaction with inclusive classroom settings as the best means by which the comprehensive educational needs of students with mild to moderate disabilities may be addressed.

Analysis

Preliminary Analyses

Prior to the analysis of research questions posed in the study, preliminary analyses were conducted. Specifically, missing data, internal consistency (reliability) of participant response,

essential demographic information, and dimension reduction of survey items were conducted on the study's data set.

Missing data were analyzed using descriptive and inferential statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative purposes. The randomness of missing data was assessed using Little's MCAR test statistic. An MCAR value of $p > .05$ was considered indicative of sufficient randomness of missing data. Should missing data manifest beyond the 10% level, consideration would have been given to the imputation of missing data through application of both expectancy maximization and multiple imputations of data.

Internal reliability of participant response to the survey instrument was assessed using Cronbach's alpha (α). The statistical significance of α was evaluated through the application of an F -test. F values of $p < .05$ were considered statistically significant.

Essential demographic information was analyzed using descriptive statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative purposes.

Analysis by Research Question

The study's research questions were addressed broadly using a variety of descriptive, associative, predictive, and inferential statistical techniques. Frequency counts (n), measures of central tendency (mean scores), and variability (standard deviation) represented the primary descriptive statistical techniques to be used in the seven research questions.

In Research Questions One and Two, the single sample t -test was used to assess the statistical significance of participant response in the first portion of the question. The alpha level of $p < .05$ represents the threshold for statistical significance of finding. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes

were employed for comparative purposes. In the second portion of Research Questions One and Two, the *t*-test of independent means was used to assess the statistical significance of difference in means scores between the two groups being measured (demographic identifiers). The alpha level of $p < .05$ represents the threshold for statistical significance of finding. The assumptions of normality and homogeneity of variances were assessed using the Shapiro-Wilk test and the Levene test respectively. Values of $p > .05$ was indicative of both assumptions having been satisfied. Cohen's *d* was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were employed for comparative purposes.

Research Questions Three through Seven are associative and predictive in nature utilizing multiple independent predictor variables. As such, the multiple linear regression test statistic was employed to assess predictive robustness of the respective independent variables in each question. Predictive model fitness was assessed through the interpretation of the ANOVA table *F* value. An *F* value of $p < .05$ is considered indicative of a viable predictive model. Variable slope (*t*) values represent the means by which the statistical significance of independent variables was interpreted. Values of $p < .05$ were considered statistically significant. R^2 values were utilized as the basis for effect size measurement and for comparative purposes. The formula $R^2 / 1 - R^2$ was applied to each predictor for comparative purposes. Effect sizes of $\leq .35$ were considered indicative of a large magnitude of predictive effect. Assumptions associated with the use of the multiple linear regression test statistic (linearity, independence of error, variable inflation, homoscedasticity, and outliers) were addressed and reported in the analytics process.

Limitations

While this study provided insight into the factors that influence teacher perception of inclusion, there were limitations to the study. The sample was purposive and drawn from

schools located in Europe, Africa, and the United States. Additionally, the study involved participant perception of inclusion. Therefore, the participant perception of inclusion in this study may not represent the opinions of educators in all schools.

Definition of Key Terms

Perception

Timmermans, de Boer, and van der Werf (2016) identified perception as an expectation that impacts student performance. Unfortunately, expectations often lead to self-fulfilling prophecy regarding student academic performance. Perception also refers to a positive or negative attitude demonstrated towards a concept, situation, or person (Tkachyk, 2013).

Response to Intervention

Response to Intervention (RTI) consists of a multi-tier approach to the early identification of students with learning disabilities (Otaiba et al., 2014). The first tier encompasses student performance and teacher observation. According to the framework of RTI, students receive more intensive instruction that increases in frequency and duration in Tier 2. Ideally, Tier 3 involves individualized intensive interventions that target the students' skill deficits (Otaiba et al., 2014). However, Zirkel and Thomas (2010) found considerable variability in state laws and guidelines that inform local education agencies regarding implementation of RTI.

Differentiated Instruction

Differentiated Instruction (DI) occurs during instruction. DI benefits the average learner, English language learner, the student with learning disabilities, as well as the gifted and talented learner. According to Tomlinson (2015), academic readiness and interest vary with each student due to “experiences, family circumstances, support systems, degrees of maturity, and confidence” (p. 204). Educators implementing differentiated instruction facilitate student

success by designing and adapting learning experiences to meet students' individual needs (Santangelo & Tomlinson, 2009). Three important components of DI are content, process, and product. Knowing students' learning profiles and preferred interests assists the classroom teacher in determining the content, process, and product (Gourneau, 2014).

Learning Disabilities

The Learning Disabilities Association of America (LDA) (2018) defined learning disabilities as “neurologically-based processing problems that can interfere with learning basic skills, such as reading, writing, and/or math” (para 4). Furthermore, learning disabilities can affect higher level skills such as organization, time management, abstract reasoning, long- or short-term memory, and attention (LDA, 2018). Learning disabilities is an “umbrella term that covers a range of neurologically based disorders in learning and various degrees of severity of such disorders” (LDA, 2018, p. 1). Buttner and Hasselhorn (2011) found that students with learning disabilities accounted for the largest category of students with special education needs.

Inclusion

Inclusion is complex and “seeks to ensure a place for students with disabilities in the general education curriculum to the maximum extent appropriate” (Conderman & Johnston-Rodriguez, 2009, p. 235). Inclusion can be defined as “a student, with an identified disability, spending greater than 80% of his or her school day in a general education classroom in proximity to nondisabled peers” (Baglieri & Shapiro, 2011, p. 2125). Essentially, the term *inclusion* refers to students with and without learning disabilities learning together in the classroom.

Satisfaction

In the context of the research, satisfaction pertains to the perceived fulfillment that a participant exhibits towards the inclusive classroom. Perceived satisfaction encompasses, but is not limited to, class enrollment, proficiency with differentiated instruction, and adequate training in teaching students with learning difficulties (Avramidis & Norwich, 2002).

II. REVIEW OF LITERATURE

Children with diverse learning needs fill today's general education classrooms. In 2016, the National Center for Education Statistics (NCES) reported approximately 34% of students identified with specific learning disabilities received services in public schools. As a result, and depending on teacher perception of inclusion, educators face what could be considered a daunting task or a welcome challenge to provide engaging instruction to meet the diverse academic needs of students. Teacher understanding of students with learning disabilities influences instruction and student performance. One of the earliest contributions to the perception of learning disabilities is one's culture (Wexler, 2016). Additionally, individual encounters with people with learning disabilities also influence one's understanding and acceptance of students with learning disabilities.

Jackson (2014) defined culture as "representations of cultural norms that are widely held in a given society and reflected in language...including expressions and behaviours [sic]" (p. 362). Therefore, a society's view of learning disabilities is evident in the acceptable language used when referring to students with learning disabilities. Equally important are the beliefs, values, worldviews, and traditions that contribute to the many facets of culture (Jackson, 2014). Culture is learned early in life and continues to develop as people grow and acquire a language (Baglieri & Shapiro, 2012). A child growing up in a culture that does not accept and value the strengths and weaknesses of a student with learning disabilities will later display the same

unaccepting attitude. While culture is learned, it is also shared among groups and communities. Furthermore, Wexler (2016) stated that “the language of disability embedded in culture predisposes us to beliefs about disabled people (p. 35).

Personal interaction with individuals with learning disabilities contributes to teacher perception (Jackson, 2014). For example, if people have a family member with a learning disability, they tend to be more accepting of students who learn differently. In many instances, positive encounters with someone who has a disability fosters an appreciation and acceptance to work alongside that individual (Baglieri & Shapiro, 2011). As with anything, a negative encounter fosters a negative attitude towards a person with learning disabilities.

The History of Learning Disabilities

The term *learning disabilities* has not always existed. In 1877, German neurologist Adolf Kussmaul described patients whose vision, language skills, and intellectual abilities were intact but were unable to recognize and read text. Kussmaul coined the term *word blindness* to describe the inability to decipher the written word which later became known as dyslexia (Loriaux, 2010). Later, in 1887, German physician Rudolf Berlin built upon Kussmaul’s work by coining the term *dyslexia* to refer to difficulty in interpreting written or printed symbols (Chakravarty, 2009). Early European physicians, such as Goldstein, studied the behavior of World War I soldiers who sustained head wounds during the war. Goldstein’s work influenced Werner and Strauss, scientists who left Germany in the 1930s. They later traveled to the United States where they continued to research neurological foundation of perceptual motor dysfunction. The contributions of physicians also established a foundation for psychologists and educators such as Samuel Kirk and Samuel Orton (Sleeter, 2010).

Samuel Kirk, born in 1904 to immigrant homesteaders in North Dakota, grew up in a rural community, teaching farmhands to read. He began his teaching career in Chicago teaching boys with learning challenges. Kirk obtained a Ph.D. in physiological and clinical psychology from the University of Michigan. In 1963, at a conference in Chicago, Samuel Kirk coined the term *learning disability*. Kirk and Bateman (1962) defined learning disability as a “retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by a possible cerebral dysfunction and or emotional or behavioral disturbances” (p. 73). In time, Kirk and Chalfant (1984) explored, researched, and solved existing problems, availing educational opportunities for students with learning difficulties. Furthermore, they found that parents were instrumental in advocating for learning disability programs in schools for two reasons. First, many parents refused to accept that their children needed placement in classes designed for the mentally retarded. Second, schools did not provide services for children with severe reading or language difficulties (Kirk & Chalfant, 1984).

Physician Samuel Orton pioneered the study of learning disabilities, specifically dyslexia. Orton (1925) believed that average developing readers “suppress visual images from the right hemisphere of the brain because the images could potentially interfere with input from the left hemisphere” (p. 1). In the early 2000s, researchers connected with Georgetown University conducted a study that included 41 people between the ages of six and 22. They used functional Magnetic Resonance Imaging (fMRI) to examine which parts of the brain the participants used when seeing words (Georgetown University Medical Center, 2003, p. 1). The study revealed that different phonological skills relate to different activity in the brain when children read (Eden et al., 2003). Furthermore, the results confirmed that children do “turn off” the right side of the

visual parts of the brain as they become accomplished readers, corroborating what Orton proposed (Georgetown University Medical Center, 2003).

Orton's interest in reading and language difficulties continued to grow through cases he encountered while working at a mental health clinic (Henry, 1998). The discrepancy between listening and reading comprehension intrigued Orton and prompted him to further research. Orton noted that 50% of his patients had reading and language difficulties, including problems with receptive and expressive language, passage comprehension, spelling, and composition (Henry, 1998). While some professionals focused on the weaknesses of students with learning difficulties, Samuel Orton believed that "all... are teachable with appropriate instruction" (Henry, 1998, p. 7).

In 1975, PL 94-142 launched a new era for students with disabilities, entitling students with sensory, physical, cognitive, emotional, or communicative exceptionalities the right to a free and appropriate education. The 1990s and early 2000s prompted further research in the field of learning disabilities. In 1996, Dr. Guinevere Eden, an associate professor at the University of Georgetown, and a team of researchers from the National Institute of Mental Health began using fMRI to examine the activity in the brain and identify regions of the brain that behave differently in individuals with dyslexia. In 2005, Dr. Jeffrey Gruen, along with a research team at Yale University, identified a gene that had patterns and variations strongly associated with dyslexia (Pollard, 2017).

Currently, learning disabilities is an "umbrella term that covers a range of neurologically based disorders in learning and various degrees of severity of such disorders" (LDA), 2018, p. 1). Buttner and Hasselhorn (2011) found that students with learning disabilities accounted for the largest category of students with special education needs. The term learning disability is

applied to an individual who demonstrates difficulty in one or more of the basic psychological processes: input, integration, memory, output, and motor skills (LDA, 2018). The following section examines inclusion, including its definition and history. Furthermore, the present study includes factors that contribute to teacher perception of inclusion as well as the challenges and benefits found in the inclusive classroom.

Inclusion

Inclusion can be defined as “a student, with an identified disability, spending greater than 80% of his or her school day in a general education classroom in proximity to nondisabled peers” (Baglieri & Shapiro, 2011, p. 2125). Essentially, the term *inclusion* refers to students with and without learning disabilities learning together in the classroom. Wexler (2016) argued that rather than an “alternative to or derivation of special education, inclusion might instead represent an approach to education” (p. 35). Titchkosky (2012) proposed that students with disabilities not be identified as individuals with “functional limitations” (p. 3). Instead, educators have an opportunity to view students with learning disabilities as unique individuals with unlimited potential.

The History of Inclusion

In the 1960s, students in the classroom who struggled academically were often identified as *developmental*, *corrective*, or *remedial* (Goldberg & Drash, 1968). Students characterized as developmental developed skills systematically whereas students who were not working up to potential were identified as corrective. Goldberg and Drash (1968) believed that students identified as corrective could be “restored...when put into the proper corrective situation” (p. 12). The remedial, or “retarded readers, were slightly below average to superior intelligence who (could not) profit from routine techniques used in the regular or developmental programs”

(Goldberg & Drash, 1968, p. 12). During that time, remedial students were distinguished by a variety of terms, such as *dyslexia* and *specific language disability*. The remedial student was considered in need of a “flexible, clinically oriented remedial approach” (Goldberg & Drash, 1968, p. 12). Therefore, the remedial student received remediation in a self-contained classroom. Goldberg and Drash (1968) believed that a correlation existed between intelligence and reading ability. Furthermore, in most cases, it was understood that a child of average to above average intelligence would have sufficient cognitive potential for the development of adequate reading skills (Goldberg & Drash, 1968).

Similar to the 1960s, Warren (1978) found that, during the 1970s, professionals used a variety of terms when referring to students with learning disabilities. For example, central nervous system dysfunction, learning disability, remedial reading problem, and “lazy kid” were terms used to identify a student with learning disabilities (Warren, 1978). However, Kirk (1984) warned that “we seemed to have confused those children who are educationally underachieving because of extrinsic reasons with those children who are underachieving for intrinsic reasons” (p. 234). Moreover, Kirk and Chalfant (1984) believed that the “real needs” (p. 9) of children with learning disabilities were neglected. In fact, middle-class parents with students who struggled academically found a justifiable solution with an organic damage diagnosis.

During the late 1970s, research focused on the “metacognitive problems students with learning disabilities experience while reading” (Gersten, Fuchs, Williams, & Baker, 2001, p. 280). An emphasis was placed on behavioral and basic skills, including repeated readings, vocabulary, and oral reading, which were considered integral components in reading comprehension (LaBerge & Samuels, 1974; Pany & McCoy, 1988). Though controversial, teacher feedback during oral reading was encouraged. Some argued that the attention required

for one process “decreases the capacity available for attending to another related process” (LaBerge & Samuels, 1974; Pany & McCoy, 1988). However, Pany and McCoy (1988) found that corrective feedback during oral reading had a positive effect on both word recognition accuracy and comprehension.

Mezynski (1983) recognized that a relationship exists between vocabulary knowledge and reading comprehension. Repeated readings increased accuracy and automaticity, allowing the reader to comprehend the content instead of focusing on decoding (LaBerge & Samuels, 1974). Additionally, repeated readings often provided reinforcement that increased reading fluency and comprehension. Teaching vocabulary in context introduced words to students and facilitated reading comprehension (Mezynski, 1983). Although vocabulary practice and training were identified as integral to reading comprehension, scholars noted the importance of learners remaining actively engaged in the learning process.

In the 1980s, enrollment in restrictive classes increased, most likely due to the identification of students with learning disabilities (McLeskey, Henry, & Axelrod, 1999). In fact, Carlberg and Kavale (1980) identified special (restrictive) classes as superior to regular classroom placement for student with learning disabilities. During this time, more cognitively-based interventions and approaches were investigated (Mastropieri & Scruggs, 1997). Educators believed that illustrations, imagery, spatial organization, and mnemonic illustrations provided strategic methods of reading instruction. Representational illustrations “provided an additional sensory code for input of text information” (Mastropieri & Scruggs, 1997, p. 201). Furthermore, teachers were encouraged to use charts, graphs, and diagrams to provide students with a method of organizing information. One strategy to improve reading comprehension encouraged students to pause while reading to create a mental picture.

During the 1990s, lack of training in special education created frustration for teachers (Zigmond & Baker, 1996). As a result, special education teachers provided recommendations for adaptations and accommodations, including reducing student workload, focused instruction on skills, peer partners, small group instruction, and individual instruction (Zigmond & Baker, 1996). Winter (1997) discovered that the inclusion movement needed to provide direction regarding the best curriculum models for the inclusive classroom. For this reason, Winter (1997) suggested SMART planning for inclusion that included the following components: select, match, adapt, relevant, and test. The first steps included selecting a flexible curriculum model and matching facilitation strategies to meet the different learning styles and preferences of students. A vital component of SMART planning allowed for adaptation, including differentiated instruction. The final element for SMART planning included testing that evaluated the whole child through an alternative assessment.

Many teachers in the early 2000s realized “inclusion is not going away” (Smith & Smith, 2000, p. 162). Consequently, training, class size, and support emerged as consistent areas of concern for the inclusive educator (Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006; Smith & Smith, 2000; Taylor, 2005). Many teachers felt unprepared to meet the diverse learning needs of students in the inclusive classroom (Smith & Smith, 2000). Additionally, the number of students with learning difficulties compounded teachers’ feelings of unpreparedness and led to frustration. Lack of support from administration and local school districts also impacted the perception of inclusion (Taylor, 2005).

Legalities of Inclusion in the United States

The federal law known as The Education for All Handicapped Children Act (PL 94-142) passed in 1975, launching a new era in meeting the educational needs of students with

disabilities (Hallahan, Kauffman, & Pullen, 2012). Students with limited academic opportunity were guaranteed an equitable education. In 2004, PL 94-142 was amended and renamed the Individuals with Disabilities Education Act (IDEA). IDEA continued to ensure equal education for students with disabilities. The major provisions of IDEA included a free and appropriate public education, due process, parent/guardian consultation, least restrictive environment (LRE), individualized education plan (IEP), nondiscriminatory evaluation, and confidentiality (Hallahan et al., 2012).

Every qualified person with disabilities within a school district is entitled to a free and appropriate education. Section 504 of the Department of Education defines a person with a disability as “any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having an impairment” (U.S. Department of Education, 2018, para. 17). Generally, all school-age children with disabilities are entitled to a free and appropriate education. An appropriate education occurs in regular classes with the use of aides and services or special education in a separate classroom for all or a portion of the school day (U.S. Department of Education, 2018). Furthermore, an appropriate education includes education services that meet individual needs of students and placement procedures that guard against misclassification or inappropriate placement (U.S. Department of Education, 2018).

Due process procedures must be implemented that enable parents and guardians to receive notices, review student records, and challenge identification, evaluation, and placement decisions. The requirements of due process were established in IDEA to facilitate appropriate decision-making and services for children with disabilities. As a result, due process procedures allow parents or guardians of elementary and secondary school students to dispute the

procedures and decisions of evaluation and placement procedures (U.S. Department of Education, 2018). Furthermore, due process hearings may be conducted on behalf of individual students or groups of students (U.S. Department of Education, 2018).

The Least Restrictive Environment (LRE) extends beyond the location in which instruction occurs in that it is a principle that guides a child's educational program. According to federal law, students with disabilities are entitled to receive education, to the maximum extent appropriate, with nondisabled peers and that special education students are not removed from regular classes unless, even with supplemental aids and services, education in regular classes cannot be achieved satisfactorily (U.S. Department of Education, 2018). Inclusion focuses on including students with special education needs into as many instructional opportunities as the student in the general education classroom.

Every child in public school who receives special education and related services must have an Individual Education Plan (IEP). An IEP is an individualized document created by teachers, parents, school administrators, related services personnel, and students (when appropriate) with the purpose of improving educational results for children with disabilities (U.S. Department of Education, 2018). The IEP includes accommodations, modifications, and supports that must be provided to the student. Additionally, the IEP states the educational needs, as well as the present levels of the student's academic achievement and functional performance. Furthermore, an IEP states the special education, related services, supplemental aids and services, assistive technology, and modifications or personnel support, as well as the duration, frequency, and location for each (U.S. Department of Education, 2018). The IEP also includes measurable annual goals and short-term objectives for the student, including a progress

measurement method for each goal. Periodic reviews of the IEP and progress reports must be provided to the parents.

Another provision of IDEA states that the student receives a nondiscriminatory evaluation in all areas of suspected disability as well as in a manner that is “not biased by language or cultural characteristics or disabilities” (Hallahan et al., 2012, p. 17). Additionally, the evaluation must be conducted by a multidisciplinary team. Confidentiality is critical throughout the process, evaluation, and placement; however, the student’s parents or guardians may have access to the records. In-service training for general education teachers and other professional personnel is a vital component in meeting the learning needs of students with disabilities (Hallahan et al., 2012).

Finally, the law guarantees confidentiality and parent/guardian examining educational records, as well as involvement in the decision-making process. Parents/guardians are equal members of a child’s Individualized Education Plan (IEP) team and assist in the development, reviewing, and revision process (U.S. Department of Education, 2018). Furthermore, parents must be notified of IEP meetings and strongly encouraged to participate.

Factors Influencing Inclusion

Since the implementation of IDEA, researchers have continued to explore the vast educational needs of students with learning disabilities. Due to an increasing number of students with specific learning disabilities in the inclusive classroom, the instructional expectations for the general classroom teacher have continued to expand to meet the diverse learning needs of students (Lucas & Frazier, 2014). While researchers acknowledge that the inclusive classroom avails the student with learning disabilities ample opportunities for an enhanced education, challenges exist for educators (Baglieri & Shapiro, 2012). The responsibilities of classroom

teachers expand beyond instruction. As a result, the environment, instructional expectations, and teacher readiness influence teacher perception and satisfaction with inclusion.

Classroom Environment

Kirby (2017) stressed the importance of understanding that inclusion extends far beyond placing a student with learning disabilities in the general education classroom. First, the school administration's attitude towards inclusion impacts the teacher as well as students and parents (Taylor, 2005). The inclusive classroom creates a sense of community that inspires or hinders learning (Kirby, 2017). Furthermore, the classroom environment, including culture and social skills, plays a critical role in the inclusive classroom.

Classroom Culture. Jackson (2014) recognized that values and worldviews contribute to culture. In fact, culture is learned and shared by communities (Jackson, 2014). The classroom culture, consisting of both the physical and human element, potentially creates a thriving atmosphere for learning. The socio-cultural context, where learning occurs, "nurtures, expands and builds a child's repertoire of knowledge and skills" (Ogunnaike, 2015, p. 13). Since students spend the majority of their time between home and school, the school environment is pivotal in fostering learning. While educators do not have the ability to control the home environment, they have the freedom to establish classroom boundaries and expectations, which ultimately impact student behavior and academic performance. Classroom management, including classroom procedures and behavior management, contributes to the environment in the school (Gourneau, 2014). The structure of the classroom environment, such as classroom layout and functional structures contribute to the culture. Furthermore, clear communication between teachers, parents, and students conveys expectations to students which fosters a healthy learning culture.

The human element consists of learning support assistants, speech pathologists, and special class teachers working cooperatively with the general education teacher (Avramidis & Norwich, 2002). Communicating expectations through media, classroom charts, and informational letters to parents, the general classroom teacher minimizes misunderstandings and fosters a trusting relationship. Additionally, the interaction between students influences the classroom culture. Student relationships between peers must display consideration and acceptance of learning differences. Equally important, students' disciplinary issues and emotional needs must be considered and managed. As students learn and adapt to the classroom culture, learning and growth occur (Ogunnaike, 2015).

Social Skills Development. Luczynski, Hanley, and Rodriguez (2014) identified one aspect of teaching social skills as a means of “decreasing and preventing” misbehavior (p. 246). While lack of teacher attention, teacher assistance, and classroom materials contribute to misbehavior in the classroom, developing social skills contributes to student self-efficacy (Kucukera & Tekinarslan, 2015; Kwon, Kim & Sheridan, 2014; Luczynski et al., 2014). Within a school setting, social competence “involves a student’s ability to engage in the learning process while at the same time possessing prerequisite behavioral and socio-emotional competencies required for school success” (Adera & Manning, 2014, p. 70). Therefore, students recognized as socially competent generally have a positive school experience (Adera & Manning, 2014). The inclusive classroom provides an environment for students to acquire knowledge through the observation of attitudes, actions, and behavior of others, supporting Bandura’s Social Cognitive Theory (Bandura, 1977).

Often, students with disabilities have difficulty initiating and responding to social interactions (Sreckovic, Schultz, Kernery, & Able, 2018). While the inclusive classroom

provides ample social opportunities, some students lack the social and communication skills to interact (Puckett, Mathur, & Zamora, 2017). Although some students are eager to connect with students, others find social interaction uncomfortable or avoid socializing. As a result, educators must use evidenced-based practices to promote social interactions (Sreckovic et al., 2018). Creating an environment that fosters social competence is important for every student in the inclusive classroom.

Instructional Expectations

In addition to instructional responsibilities, classroom teachers have an inordinate number of responsibilities. In most circumstances, the general education teacher is required to provide individualized instruction to students with learning disabilities, regardless of the learning disability (Kirby, 2017). Although teachers learn content and theory in education programs, applying theory and content requires practice and experience (Lucas & Frazier, 2014). As the general education and special education teacher work collaboratively, effective lessons and delivery models are created (Harvey, Yssel, Bauserman, & Merbler, 2010). To better meet the academic needs of students, teachers must fully understand the expectations for student academic gains, Response to Intervention, and Differentiated Instruction.

Response to Intervention. Response to Intervention (RTI) consists of a multi-tier approach to the early identification of students with learning disabilities (Otaiba et al., 2014). The first tier encompasses student performance and teacher observation. While screening all students to identify students at risk for school failure is stated in the framework, intervention varies in each school. In Tier 1, all students receive excellent, research-based instruction in the general education classroom. Ideally, student progress is monitored weekly, and all students are screened in the fall, winter, and spring to ensure adequate growth; however, state and local administrators have the freedom to choose the implementation process (Otaiba et al., 2014).

According to the framework of RTI, students receive more intensive instruction that increases in frequency and duration in Tier 2. Targeted instruction transpires in a small-group format in the general education classroom by a teacher or highly trained assistant or through pull-out services (Hallahan et al., 2012). Again, student progress is monitored and documented regularly by the teacher or teacher's assistant. In principle, when a student is unresponsive to Tier 2 intervention or shows minimal progress, the student is considered for more intensive intervention. However, ambiguity exists in the interpretation and implementation of RTI.

Ideally, Tier 3 involves individualized intensive interventions that target the students' skill deficits (Otaiba et al., 2014). As a result, students who struggle to progress in response to targeted interventions are then referred for a comprehensive evaluation. However, Zirkel and Thomas (2010) found considerable variability in state laws and guidelines that inform local education agencies regarding implementation of RTI. Otaiba et al. (2014) argued the benefits of implementing "good-quality" (p. 13) Tier 1 and fast-tracking students with high risk to Tier 3. While RTI serves as a framework for allocating resources to improve student outcomes, Otaiba et al. (2014) found that RTI is more than "standard protocols" (p. 24) to be followed. Instead,

Otaiba et al. (2014) advocated flexibility in pacing and grouping, individualized instruction, and differentiated instruction when addressing the learning needs of students through the RTI process.

Differentiated Instruction. Differentiated Instruction (DI) occurs during instruction. DI benefits the average learner, English language learner, and the student with learning disabilities, as well as the gifted and talented learner. Students' learning needs change frequently; therefore, teachers must maintain ongoing assessments, including before, during, and after a lesson. Teachers must know the academic readiness, interest, and learning profile of each student to meet diverse learning needs. According to Tomlinson (2015), academic readiness and interest vary with each student due to "experiences, family circumstances, support systems, degrees of maturity, and confidence" (p. 204). Readiness includes a tiered context, providing a variety of materials, and scaffolding. As teachers gain an understanding of student interest, learning materials are selected and learning contracts created. Knowing the individual learning profiles of students facilitates the presentation styles that the teacher practices. In every style, the teacher models the "I do, we do, you do" principle. Educators implementing differentiated instruction facilitate student success by designing and adapting learning experiences to meet students' individual needs (Santangelo & Tomlinson, 2009). Three important components of DI are content, process, and product. Knowing students' learning profiles and preferred interests assists the classroom teacher in determining the content, process, and product (Gourneau, 2014).

Content. Differentiated Instruction involves altering the content to teach the same skill or concept. In essence, the curriculum selected to teach a skill or concept may vary for each student. Student readiness, interest, and learning profile provide the framework for the teacher to differentiate instruction. Additionally, the educator determines the knowledge and skills that

students need to master. The instructor then examines the strategy that will be most effective in the instructional process (Tomlinson, 2015).

Process. To differentiate the process, the educator teaches the same skill or concept to each student; however, each student receives and processes information differently. Therefore, teachers opt to vary activities according to student readiness, interests, and learning profiles. Learning centers, interactive journals, graphic organizers, and manipulatives provide a variety of tools to present lessons. Students can engage in collaborative groups or pairs to work on different activities or tasks. The goal of the process is for students to remain engaged, active learners throughout the instructional process (Santangelo & Tomlinson, 2009).

Product. The classroom teacher assesses the same skill or concept for each student when differentiating a product. However, the teacher provides a variety of methods in which a student demonstrates knowledge. The product assignment should be challenging with attainable goals. Clear directions are essential, and students should extend the content into practical areas of life. Teachers must consider students' learning styles to ensure that assessments include auditory, kinesthetic, and visual options. Allowing students to choose the type of product they complete provides ownership and creativity. Tomlinson (2004) recognized that differentiated instruction is not simply something a teacher does, but instead "it is a learned way of thinking about 'being' that honors and contributes to the uniqueness and the possibilities of each person in the group, as it honors and contributes to the success of the whole" (p. 189).

Response to Intervention and Differentiated Instruction equip educators with tools to address the diverse learning needs in today's classroom. Ideally, the framework of RTI provides a process in which teachers support students with learning disabilities. Whether a student has learning difficulties, is considered average, or is a gifted learner, the strategies of DI promote an

engaging environment for students to be active participants in the learning process. Therefore, it is prudent for pre-service educators, as well as veteran teachers, to become familiar and confident with RTI and DI.

Teacher Readiness

According to Lucas and Frazier (2014), “teacher accountability, and student achievement have forced teacher education programs across the country to evaluate existing programs and re-envision new programs that prepare teachers to be literate about the students they are teaching” (p. 97). However, Kirby (2017) stated that “before a new structure for special education can be unveiled, it is essential to examine the current and past legislation and litigation to deduce the effectiveness of special education in its current form” (p. 178). Teacher readiness contributes to teacher perception of inclusion; therefore, an evaluation of current teacher preparation programs is necessary (Kirby, 2017). Dev and Haynes (2015) found that teacher education and preparation for inclusion is noted as the most critical component for success. Therefore, pre-service teacher programs must equip the future educator with the necessary tools to meet the diverse learning needs of students (Lucas & Frazier, 2015). Similarly, Sokal and Sharma (2017) documented the importance of both education and experience in preparing pre-service teachers for the inclusive classroom. For this reason, identifying and arranging extended teaching placement opportunities in an inclusive class for pre-service teachers bridges the gap between theory and practice (Conderman & Johnston-Rodriguez, 2009; Sokal & Sharma, 2017). Furthermore, field-based assignments must include experienced and successful mentors, so that the pre-service teacher observes and implements research-based strategies (Conderman & Johnston-Rodriguez, 2009). While teacher education programs must improve pre-service teachers’ understanding of learning

disabilities, a positive and accepting attitude towards inclusion needs to be cultivated at the same time (Lucas & Frazier, 2014).

According to Ball and Green (2014), a connection exists between training and experience that influences attitudes towards inclusion of students with disabilities. Minimal training and experience with the inclusive classroom create frustration for many teachers (Gray, Wilcox, & Nordstokke, 2017). Preparing general education teachers to address the needs of students with learning disabilities creates better practitioners and collaborators (Greenfield et al., 2016; Kirby, 2017). The transition from inexperienced teacher to confident classroom teacher requires a proactive and supported approach that empowers the teacher with skills, knowledge, and resilience to engage with a broad range of students with diverse learning needs (Grima-Farrell, 2015). As a result, teacher perception of special education can change as teachers gain understanding and knowledge of inclusive education (Kirby, 2017).

According to Silverman (2007), teacher “self-efficacy relates to a teacher’s confidence that he/she possesses the skills to teach students with disabilities effectively” (p. 100). Equally important, teacher self-efficacy is influenced by teacher attitude (Dev & Haynes, 2000). Sokal and Sharma (2017) found that in-service teachers with both education and experience in inclusion demonstrated higher efficacy and more positive attitudes than pre-service teachers who had an education but little experience. An effective pre-service teacher program includes components to build teacher self- efficacy, such as self-assessment of performance (Leko et al., 2015). An honest self-assessment allows for reflecting on communication ability, organization and knowledge of subject matter, and enthusiasm for the content and for teaching.

Deliberate, scaffolding practice opportunities and structured tutoring foster teacher self-efficacy (Leko et al., 2015). Furthermore, strategic placement in field experiences, peer

coaching, and performance feedback facilitate a learning atmosphere for teachers to connect, grow, and thrive. Teachers who have a high perceived self-efficacy for assisting students with learning disabilities tend to persist in the midst of challenges (Marshik, Ashton, & Algina, 2017). The length and depth of training and interactions with students with learning disabilities positively impacts pre-service teachers' attitudes towards inclusion (Greenfield et al., 2016).

Theoretical Framework

Born in 1896 in Switzerland, Jean Piaget studied natural sciences at the University of Neuchatel where he later obtained a Ph.D. Piaget studied developmental psychology and genetic epistemology, with a fascinating interest in knowledge. He concluded that knowledge grows in a progressive organization of mental processes as a result of the maturing process and the influence of the environment. Piaget disagreed that intelligence is a fixed trait and viewed cognitive development as a process occurring as a person matures and interacts with situations. Three essential components encompass Piaget's cognitive theory: schemas, adaptation processes, and stages of cognitive development (Piaget & Cook, 1952).

Schemas represent "a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning" (Piaget & Cook, 1952, p. 7). Schema connects the interactions relating to the world including, abstract objects. Moreover, Piaget believed that schemas facilitate storage and retrieval of information and interaction with the environment.

Adaptation refers to the assimilation, accommodation, and equilibration of schemas. In assimilation, a child uses existing schema to interpret or associate meaning to a new object or situation. Conversely, accommodation occurs when the current schema is inaccurate or dysfunctional and must adapt to the new object or situation. Furthermore, Piaget considered

equilibration a force that drives the learning process. Upon obtaining new information, it is stored into existing schemas (Piaget & Cook, 1952).

Jean Piaget identified four stages of cognitive development: sensorimotor, preoperational, concrete operational, and formal operational. The sensorimotor stage takes place from birth to 18 to 24 months of age. During this stage, the memory and imagination develop. Likewise, a child's thinking is based on intuition instead of logic during the sensorimotor stage. Children in the sensorimotor stage find it difficult to grasp complex concepts, such as cause and effect, time, and comparison. The preoperational stage begins from 18 to 24 months of age until age 7. Children in the preoperational stage find it difficult to grasp complex concepts, such as cause and effect, time, and comparison. From ages seven to twelve, children are in the concrete operational stage. During this stage, children demonstrate logical and concrete reasoning with more awareness of events happening around them. Finally, from adolescence to adulthood is the formal operational stage. Throughout the formal operational stage, students use symbols related to abstract concepts (Piaget & Cook, 1952).

Piaget identified cognitive processes where schema are assimilated and remain stable even when they are applied to new situations (Feuerstein, Feuerstein, & Falik, 2010). Interestingly, the schema have the “capability of expanding in order to adapt themselves to additional situations in a dual process of assimilation and accommodation” (Feuerstein et al., 2010, p. 13). Additionally, Piaget added the organism (O) to the stages of development as a “function of processes of maturation-to explain not only the manner of the organism's response but also which of the stimuli it is exposed to are significant for it and which are not” (Feuerstein et al., 2010, p. 26). Piaget considers the development of human intelligence conditional on the maturation of the nervous system (Feuerstein et al., 2010). According to Jean Piaget, a person

maintains active interaction with the world according to the level of maturity of the organism. However, Piaget's theory "does not allow one to fully explain the existing variations of the development of intelligence and its components-the modifiability of a person and the great difference between people and their level of functioning" (Feuerstein et al., 2010, pp. 64-65). While Piaget's stages of development provided an understanding of cognitive processes, Lev Vygotsky introduced the relevance of social skills in learning.

Lev Vygotsky, a developmental psychologist, was born in Belarus in 1896 and recognized the significance of social skills in learning. Vygotsky's social constructivist understanding of psychological development advocated the expression "it takes a village to raise a child" (Ogunnaike, 2015). According to Vygotsky (1930-1934/1978), interpersonal skills aid in the development of cognitive functions. The relationships between students in the inclusive classroom benefit both students with and without disabilities. Small group activities and interaction cultivate a learning environment that fosters growth (Ogunnaike, 2015).

Vygotsky (1930-1934/1978) identified the zone of proximal development (ZPD) as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). In essence, the zone of proximal development is the range between what a person can do independently and what can be done with assistance (Lerner & Johns, 2009). Moreover, role-playing and conversations are critical components in the collaboration between peers. In fact, Vygotsky (1930-1934/1978) concluded that "children solve practical tasks with the help of their speech" (p. 26). "Perception, speech, and action function together" to facilitate a child's effective manipulation of objects (and) also controls the child's own behavior (Vygotsky, 1930-1934/1978, p. 26).

The zone of proximal development provides insight for the special education and general classroom teacher. Vygotsky addressed mediation, proposing what he described as tools for mediation: verbal tools and other working instruments (Feuerstein, Falik, & Feuerstein, 2015). For Vygotsky, mediation meant a “social interaction that turned stimuli into ‘psychological tools’ that could then be used to enhance the processes of learning” (Feuerstein et al., 2015, p. 25). While Vygotsky’s ZPD provides a tool for the classroom teacher, Piaget’s stages of development facilitated an understanding of cognitive development.

Albert Bandura was born in 1925 in Mundare, Alberta, Canada. He graduated from the University of British Columbia in 1949, completing a B.A. in three years. In 1952, Bandura graduated from the University of Iowa with his Ph.D. He accepted a teaching position at Stanford University in 1953 and later was elected president of the American Psychological Association. Early in Bandura’s career, he was influenced by Robert Sears’ work on social behavior. Bandura (2006) continued to analyze the foundations of human learning and behavior, which was identified as Social Learning Theory. The Social Learning Theory recognized the interaction between “behaviors, cognitions, and the environment” (Bandura, 2006, p. 164). Bandura is most noted for an experiment, conducted in 1961, in which he studied children’s behavior after they watched a person act aggressively towards a Bobo doll. After watching the aggressive behavior, the children responded according to the repercussions the adult experienced for aggressive behavior. As a result of the experiment, the social learning theory grew in recognition, stressing that people learn through observing, imitating, and modeling.

In the mid-1980s, Bandura’s Social Learning Theory expanded and evolved into the Social Cognitive Theory. According to Bandura (2006), Social Cognitive Theory adopts an “agentic perspective toward human development, adaptation, and change” (p. 164). Four core

properties are present in Social Cognitive Theory. First, intentionality includes making plans and developing strategies to solve simple to complex problems (Bandura, 2006). Next, forethought involves one creating goals and anticipating likely outcomes (Bandura, 2006). The third component, known as self-reactiveness, implies that one is deliberate in making choices and plans (Bandura, 2006). Self-reflectiveness is the fourth core property and involves personal reflection (Bandura, 2006).

Piaget, Vygotsky, and Bandura contributed to the field of education with research in developmental psychology, cognitive development, and social cognitive theory. Piaget's theory of cognitive development outlines a child's stages of cognitive development. While the ages represent an approximate time frame, Piaget stressed the description of the stages as an indicator that a child reached a particular stage. Vygotsky's studies provide educators with an understanding of the importance of social interaction in the learning process. Additionally, Vygotsky's zone of proximal development provide today's educators with an understanding of student learning. Finally, the core properties of Bandura's Social Cognitive Theory including intentionality, forethought, self-reactiveness, and self-reflectiveness reveal four strategic components in cognitive development.

Challenges of Inclusion

Students. Many challenges exist for inclusion to be successful. Meeting the academic needs of students in the inclusive classroom extends beyond the special education teacher and includes the general education teacher. School administrations and teachers must recognize that inclusive education is a school-wide responsibility, and that everyone shares the obligation of ensuring that all students receive appropriate instruction (Grima-Farrell, 2015). As a result, teachers need extended time and resources to thoroughly plan daily lessons. Additionally,

educators must create meaningful adaptations to curriculum and instruction to challenge students with learning difficulties as well as students considered gifted (VanHover & Yeager, 2003).

Teachers. Today's classrooms are filled with students with diverse needs that can overwhelm the classroom teacher. As a result, some teachers resist the inclusive classroom for several reasons. First, teachers' attitudes are often the result of trying to manage overcrowded classrooms with minimal support (Tkachyk, 2013). Next, inclusion is complex and its ripple effect extends beyond the student with learning difficulties (Tkachyk, 2013). Some educators favor inclusion in the elementary grades due to the academic challenges found in the secondary grades. Finally, another challenging aspect that educators encounter is with parents. While parents want students to learn with appropriate accommodations and modifications, they can convey an attitude of entitlement, potentially causing conflict with the classroom teacher.

Lack of teacher training continues to plague educators, causing frustration for both teacher and student. Although a plethora of professional development continues to be offered for both in-service and pre-service teachers, the responsibility to implement learned strategies rests on the teacher (Sokal & Sharma, 2017). Often, the perception of the term "disability creates barriers to true inclusion" (Braunsteiner & Mariano-Lapidus, 2014, p. 32). An assumption pervades teachers that, with minimal educational commodities including time, resources, and personnel, the students with diverse learning needs are too demanding. To that end, teacher training programs should extend beyond a curricular focus and endeavor to towards "recruiting teacher candidates with disabilities and diverse cultural backgrounds" (Braunsteiner & Mariano-Lapidus, 2014, p. 34). Additionally, Braunsteiner and Mariano-Lapidus (2014) stressed the importance of curriculum that models unity and collaboration between educators, administration, and colleagues instructing in different grade levels and departments. In summary, the inclusive

classroom can improve academic outcomes, but only if teachers can meet the needs of diverse learners (NCLD, 2018).

Benefits of Inclusion

Students. Kirby (2017) recognized the importance of acceptance and acknowledged that disabilities are a part of our society and that students with learning disabilities should be included “to the greatest extent possible with their peers” (p. 179). The inclusive classroom creates an awareness of learning disabilities for students without learning challenges (Anderson, 2012). The successful inclusive classroom consists of meaningful adaptation to instruction and curriculum, including individualized instruction, DI, positive teacher beliefs towards inclusion and students with disabilities, and contextual support for general education teachers (VanHover & Yeager, 2003). Inclusion creates a community of learners that fosters acceptance and reduces societal barriers (Kirby, 2017). Both students with and without learning disabilities gain experience working cooperatively in the inclusive classroom.

Teachers. Many teachers find the inclusive classroom personally rewarding (Dev & Haynes, 2015). Collaboration between the special education and general education teacher can facilitate successful inclusion (Carter et al., 2009). According to Carter et al. (2009), “collaboration is a critical aspect of effective inclusion” (p. 61). Furthermore, Carter et al. (2009) found that students improve academically and socially when teachers are strategic in guiding collaborative planning. One of the greatest gifts an educator can give to a student is authenticity combined with realistic expectations while providing accommodations, without settling for minimal gains (Anderson, 2012). Communicating goals and maintaining high standards conveys a teacher’s belief in a student’s propensity. Though challenging, the

classroom teacher continually learns strategic instructional methods that benefit every student in the inclusive classroom.

Faith Integration

The student with exceptionalities is made in the image of God “despite being born or becoming profoundly disabled” (Anderson, 2012, p. 37). Labels do not define a student’s future or academic success. Indeed, the student qualifying for special education displays deficits; however, “both teachers and students who do not have a disability can come to recognize their shortcomings and fragility, as well as a mutual dependence upon God for daily life and breath” (Anderson, 2012, p. 38). God uniquely designs every student with personal strengths and weaknesses. While some deficits are more pronounced than others, God has given each person distinct talents, gifts, and abilities (Anderson, 2012).

Although the student with disabilities may experience feelings of inadequacy, doubt, and discouragement, the words of truth found in scripture offer assurance, encouragement, and hope. Reminding a student that God “makes everything beautiful in its time” (Ecclesiastes 3:11, New International Version) provides motivation and hope to sustain a child through academic obstacles. Additionally, teachers learn grace, patience, love, and endurance when providing instruction for the student with exceptionalities. Both student and educator grow as they “encourage one another and build each other up” (1 Thessalonians 5:11).

Learning disabilities also affect parents and extended family members. Hallahan et al. (2012) stated “the birth of a child with a disability can have a profound effect on the family” (p. 77). Those closest to students may inadvertently limit students due to viewing them through the “eyes of charity or pity” (Anderson, 2012, p. 153). Families must accept the fact that a child has a disability, which often involves a process of emotions. Parents may be inclined to focus on a

child's limitations or even blame themselves for the disability. Faith and life are integral components that families should focus on when processing the individual needs of a child (Anderson, 2012).

Often the sovereignty of God cannot be easily explained, yet in His providential wisdom, God selects specific families to shepherd the heart of a child with disabilities. In the process of raising a child with exceptionalities, Christian parents are “strengthened with all power according to His glorious might so that you may have great endurance and patience, and giving joyful thanks to the Father, who has qualified you to share in the inheritance of His holy people” (Colossians 1:11-12). Once a family overcomes the emotional aspects of raising a child with exceptionalities, the focus shifts towards the gifts the child brings to a family.

The Christian general education teacher recognizes that the call of God is much broader than an occupation. The teacher's relationship with the student and parents or guardians provides support, patience, and encouragement while “communicating confident expectation that the student can learn the lesson when appropriately presented” (Anderson, 2012, p. 57). As educators analyze a student's profile and develop intervention strategies, insight is gained into their divine design. Additionally, the classroom teacher recognizes personal vulnerability. The reality of being misunderstood, rejected, challenged by students, parents, faculty peers, or administration reminds the teacher of his dependence on God (Anderson, 2012).

The professional and personal life of the Christian educator “should be organized within a framework of consistent biblical theology and worldview” (Anderson, 2012, p. 18). Likewise, the Bible reveals instances when the Spirit of the Lord transformed lives. In fact, Matthew 17, Mark 9, and Luke 9 convey the visible difference in people who experienced an encounter with God. Faith must be integrated into the perception and possibilities of a student, as teachers

formulate goals for students with learning disabilities. The attitudes and mindset of people must be changed regarding special education. Often, Christians remain silent instead of speaking with boldness and authority. Jesus was the ultimate change agent, breaking down barriers between genders, ethnicities, social status, and disability/ability (Ortberg, 2012). Christian educators must follow in the footsteps of Jesus to break the barriers and advocate for the needs of students with learning disabilities.

Conclusion

In conclusion, every student has limitations. Educators have a responsibility to illuminate the truth by removing the obstacles of ignorance, prejudice, and misconceptions regarding disabilities. Bonker and Breen (2011) noted that some people might continue to view students with special needs as “problems to be endured” (as cited by Anderson, 2012, p. 238). Nevertheless, the Christ-minded teacher recognizes that every child is “fearfully and wonderfully made” (Psalm 139:14). The words found in Psalm 139 remind teachers to reflect on God’s creation. The Christian educator has an opportunity to demonstrate the love of Christ by viewing students with special needs as “treasures waiting to be unearthed” (Bonker & Breen, 2011, as cited by Anderson, 2012, p. 238).

Teacher perception of inclusion continues to be influenced by cultural and personal experience. Researchers and theorists such as Piaget, Vygotsky, and Bandura contributed significantly to the fields of developmental psychology, cognitive development, and social cognitive theory (Bandura, 2006; Piaget, 1952, Vygotsky, 1930-1934/1978). While the four stages of cognitive development identified by Piaget provide the inclusive classroom teacher with a cognitive framework for child development, a teacher can create unrealistic academic expectations for students. Likewise, Vygotsky’s emphasis on social skills in learning revealed

the importance of social interaction in the inclusive classroom. However, the classroom teacher may perceive the inclusive classroom burdensome and tutorial in that the students with learning difficulties depends on other students for support. Bandura's Social Learning Theory stresses the importance of self-reflection. While personal reflection is important for students, the classroom teacher must also reflect on the factors influencing perception of inclusion. Although the perception of inclusion varies with each teacher, some elements surface consistently as factors that contribute to teacher perception. Among these factors are classroom environment, instruction, and teacher readiness.

The culture in which a person is raised influences their understanding of inclusion (Jackson, 2014). Additionally, the pressure of individualizing instruction leaves some educators overwhelmed (Gray et al., 2017). As a result, teachers view the student with learning disabilities as a daunting task instead of a welcome challenge. Finally, teacher readiness surfaces as an obstacle and contributes to teacher perception of inclusion. Pre-service teacher preparation programs equip future educators with theory and practice; however, one of the greatest assets for future educators is practical experience (Sokal & Sharma, 2017). While theory and practice remain vital components in teacher preparation, expanding opportunities for pre-service teachers to engage in practical experience increases self-efficacy.

This literature review introduced learning disabilities and inclusion, while highlighting Response to Intervention and Differentiated Instruction, as well as the factors that contribute to the perception of inclusion. In Chapter 3, the methods used to study teacher perception of inclusion will be delineated. The sample and sample selection process, as well as the instrument and procedures used to collect data will be described. A description of the results will follow in Chapter 4.

III. METHODOLOGY

This chapter contains the methods used in the quantitative research of teacher perception of inclusion. The survey used in this study focused on the factors that contribute to teacher perception of inclusion. The study was considered in more general terms to be quantitative, and non-experimental, and survey research by specific research methodology. A purposive sample consisting of teachers serving private schools in the United States and select countries outside of the United States represented the study's data source. A total of 112 participants comprised the study's sample.

Procedures

Study participants were provided with a voluntary survey packet or a link to an electronic survey (Appendix B) and were asked to provide a signature for consent. The packet included both six demographic and 18 Likert-scale items that were developed to empirically address the study's research problem and the seven formally posed research questions and hypotheses that guided the study's data collection, analytics, and reporting of finding. The term *learning disability* was defined in the research instrument. The study's research instrument packet was researcher-established and designed and, as such, was validated through formal reliability analysis (Cronbach's alpha) once study data were collected.

The desired response rate of at least 50% was attained. The potential sample pool for study purposes was approximately 200, and, as such, the response rate was 56%. Additional

responses to the study's survey were received but not utilized for study purposes as they were submitted and received beyond the deadline established time for consideration as part of the study's data set. The additional responses would have increased the study's participation rate from 56% to 62%.

Instrumentation

The validation of the study's research instrument (survey) was conducted in two phases: content validity judgment and statistical validation of resultant data. The judgment phase of the establishment of the survey instrument's content validity was executed through a content analysis of the widely recognized Teacher Attitude toward Inclusion Scale (TATIS) instrument. Items on the TATIS provided the basis of item development for the study's subsequent research instrument (survey). A panel of subject matter experts (SMEs) assessed the content and wording of items on the TATIS and subsequently offered an agreed-upon list of specific themes that were deemed essential and central to the instrument and the research topic itself. The themes, in turn, provided the framework for the development of items to be represented on the study's research instrument (survey). The study's research instrument is an 18-item survey utilizing a 5-point Likert-type scale (Appendix B).

Statistical validation of the study's participant responses to the research instrument (survey) was conducted using the Cronbach's alpha (α) test statistic. An alpha of .80 was sought at the outset of the study for validation purposes. An alpha of .90 was achieved from analysis specifically conducted on the overall response of participants to the study's research instrument.

Data Analysis

Preliminary Analyses. Prior to the analysis of research questions posed in the study, three specific preliminary analyses were undertaken: missing data, internal consistency (reliability) of participant response, and essential study participant demographic information. Preliminary analyses and findings were evaluated using both descriptive and inferential statistical techniques.

Missing data was analyzed using statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative and comparative purposes. The randomness of missing data was foreseen to be assessed using Little's MCAR test statistic. However, in light of the intactness of the essential data arrays in the study's data set, neither MCAR nor formal data imputation techniques were considered for use.

Internal consistency or reliability of participant response to the study's survey instrument was assessed using the Cronbach's alpha (α) test statistic. The statistical significance of alpha was evaluated through the application of an F -test. F values of $p < .05$ were considered statistically significant. Internal reliability of participant response was measured in an omnibus fashion for research instrument validation purposes, as well as by specific study participant demographic identifiers.

Essential demographic information was analyzed using descriptive statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative and comparative purposes.

Proposed Analysis by Research Question. The study's seven research questions were addressed broadly using a variety of descriptive, associative, predictive, and inferential statistical techniques. Frequency counts (n), measures of central tendency (mean scores), and variability

(standard deviation) represented the primary descriptive statistical techniques that were used to address the seven research questions.

In Research Questions One and Two, the one-sample t -test was used to assess the statistical significance of participant response in the first portion of the question. The alpha level of $p < .05$ represented the threshold for statistical significance of finding. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were employed for comparative purposes. In the second portion of Research Questions One and Two, the t -test of independent means and one-way analysis of variance (ANOVA) was used to assess the statistical significance of difference in means scores between the two or more groups being measured (demographic identifiers). The alpha level of $p < .05$ represented the threshold for statistical significance of finding. The assumptions of normality and homogeneity of variances were assessed using the Shapiro-Wilk test and the Levene test respectively. Values of $p > .05$ were indicative of both assumptions having been satisfied. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were employed for comparative purposes.

Research Questions Three through Seven were associative and predictive in nature utilizing multiple independent predictor variables. As such, the multiple linear regression test statistic was employed to assess predictive robustness of the respective independent variables in each question. Predictive model fitness was assessed through the interpretation of the ANOVA table F value. An F value of $p < .05$ was considered indicative of a viable predictive model. Variable slope (t) values represented the means by which the statistical significance of independent variables was interpreted. Values of $p < .05$ were considered statistically significant. R^2 values were utilized as the basis for effect size measurement and for comparative

purposes. The formula $R^2 / 1 - R^2 (f^2)$ was applied to each predictor for comparative purposes. Effect sizes of $f^2 \leq .35$ were considered indicative of a large magnitude of predictive effect and were transformed into Cohen's d values for interpretive purposes. Assumptions associated with the use of the multiple linear regression test statistic (linearity, independence of error, variable inflation, homoscedasticity, and outliers) were addressed and satisfied by either statistical means or visual inspection.

Summary

The chapter presented the methodology of the quantitative, non-experimental survey research study of teacher perception of inclusion. The details of procedures, instrumentation, and data analysis were provided. The survey instrument for teacher perception of inclusion was identified and explained. Elements of the results were noted and will be further discussed in the following chapter.

IV. RESULTS

Chapter IV presents the results of this quantitative, non-experiment survey research study of 112 educators on the topic of teacher perception of inclusion. The research questions explored variables that contribute to teacher perception of inclusion. The following variables were investigated in the study: Response to Intervention, classroom instruction, academic skill development, differentiated instruction, student social skills development, classroom culture, pre-service teacher preparedness, and teacher self-efficacy. The researcher also included six demographic questions in the survey to gain insight into the participants' background in education. Overall, the participants' perceived satisfaction with inclusive classrooms as the best setting for students with mild to moderate learning disabilities was statistically significant.

Analyses/Findings

Prior to the analyses and reporting of finding relative to the study's seven formally posed research questions, three distinct preliminary analyses were conducted and reported. Missing data, internal reliability of participant response to items on the study's research instrument (survey), and essential demographic identifier information were analyzed using a variety of descriptive and inferential statistical techniques.

The study's essential data arrays were found to be completely intact. As a result, anticipated use of formal data imputation procedures for analytic purposes was unnecessary. The internal consistency of participant response (internal reliability) to the study's research instrument was measured using Cronbach's alpha (α). The omnibus internal reliability level for all study participants across all survey items was considered very high ($\alpha = .90; p < .001$). The internal reliability level was higher for study participants practicing in the United States ($\alpha = .92; p < .001$) than their study counterparts practicing outside the United States ($\alpha = .87; p < .001$) and higher for female study participants ($\alpha = .91; p < .001$) than for their male study counterparts ($\alpha = .85; p < .001$).

Considering study participant years of professional experience, those identified as serving professionally 26 years or more manifested the highest level of internal reliability at $\alpha = .94 (p < .001)$. Study participants identified with elementary school service manifested the highest level of internal reliability ($\alpha = .92; p < .001$) amongst their study peers associated with other categories of school identifier, and study participants possessing bachelor's degrees manifested the highest level of internal reliability of response ($\alpha = .92; p < .001$) amongst their peers with regard to the category of educational level.

Regarding gender of study participant, slightly over three-fourths (76.4%; $n = 84$) of study participants were female, with the remaining 23.6% ($n = 26$) identified as male. Approximately nine in 10 study participants (92%; $n = 103$) possessed either a bachelor's degree or a master's degree. The remaining participants possessed a doctorate. The greatest degree of study participation by level of educational service was manifested at the elementary school level as nearly four in 10 (36.6%; $n = 41$) study participants identified with this level of professional service.

Nearly two-thirds (62.5%; $n = 70$) of study participants identified as serving professionally outside of the United States. Nearly eight in 10 study participants (79.5%; $n = 89$) were credited with serving in the field of education for 20 years or less, with the single greatest service frequency in the study of 25 noted in the category of 11 to 15 Years (22.3%).

Findings by Research Question

Research Question 1: To what degree do participants perceive that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities?

And, was there an effect for demographic identifier concerning the perception that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities?

The one-sample t -test was used to assess the statistical significance of participant response to the notion that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities. As a result, the degree of participant perception that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities was considerable (Mean = 3.67; SD = 0.91), manifesting to a noteworthy statistically significant degree ($t_{(111)} = 7.75; p < .001$). Moreover, the magnitude of effect for finding in Research Question One was considered approaching large at $d = .74$.

H₀': The degree to which study participants perceive that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities will not be

manifested at a statistically significant level. In light of the statistically significant finding for Research Question One, the Null Hypothesis (H_0^1) associated with Research Question One was rejected.

Ancillary between-subjects comparison. Considering the demographic identifiers central to the study, comparisons by study participant identifier relative to Research Question One were found to be non-statistically significant across demographic identifiers thereby exerting no statistically significant effect upon participant perception that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

Differences by participant gender ($t_{(108)} = 1.24; p = .22$), years of experience ($F_{(5, 106)} = 1.39; p = .23$), geographic location of professional practice ($t_{(73.46)} = 1.67; p = .10$), professional degree ($F_{(3, 108)} = 0.49; p = .69$), and professional service ($F_{(5, 106)} = 0.29; p = .92$) were all manifested at non-statistically significant levels.

Research Question 2: To what degree are participants satisfied with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed? And, was there an effect for demographic identifier concerning participant satisfaction with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed? A one-sample t -test was used to assess the statistical significance of participant satisfaction with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities are

addressed. As a result, the degree of participant perception of satisfaction with inclusive classroom settings as superior to self-contained classroom environments and the best means of addressing the comprehensive educational needs of students with mild to moderate learning disabilities was considerable (Mean = 3.60; SD = 0.89), manifesting to a noteworthy statistically significant degree ($t_{(111)} = 7.15; p < .001$). Moreover, the magnitude of effect for finding in Research Question Two was considered beyond medium and approaching large at $d = .68$.

H₀²: The degree to which study participants are satisfied with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities will not be manifested at a statistically significant level. In light of the statistically significant finding for Research Question Two, the Null Hypothesis (H_0^2) associated with Research Question Two was rejected.

Ancillary between-subjects comparison. Considering the demographic identifiers central to the study, comparisons by study participant identifier relative to Research Question Two were found to be non-statistically significant across demographic identifiers, thereby exerting no statistically significant effect upon participant satisfaction with inclusive classroom settings as superior to self-contained classroom environments as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed.

Differences by participant gender ($t_{(108)} = 0.48; p = .64$), years of experience ($F_{(5, 106)} = 0.49; p = .78$), geographic location of professional practice ($t_{(110)} = 1.36; p = .18$), professional degree ($F_{(3, 108)} = 0.85; p = .47$), and professional service ($F_{(5, 106)} = 0.96; p = .45$) were all manifested at non-statistically significant levels.

Research Question 3: Considering the variables of RTI, classroom instruction, academic skill development, differentiated instruction, and student social skills development, which represents the most robust correlate and predictor of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities? The multiple linear regression test statistic was used to assess the associative and predictive abilities of the five independent variables in Research Question Three's predictive model. The predictive model was found to be viable ($F_{(5, 106)} = 13.83; p < .001$). The confluence of the five independent predictor variables in the predictive model contributed 39.5% of the explained variance in the model's dependent variable of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

The variable representing the most robust, statistically significant correlate and predictor of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities was differentiated instruction ($r = .31; p = .001$). Moreover, the predictive effect of differentiated instruction was considered between medium and large at $d = .65$.

Table 1 contains a summary of finding for Research Question Three.

Table 1

Predicting overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

| Model | <i>B</i> | <i>SE</i> | <i>Standardized β</i> |
|----------------------------|----------|-----------|-----------------------|
| Intercept | 0.17 | 0.53 | |
| RTI | 0.18 | 0.11 | .17 |
| Classroom Instruction | 0.03 | 0.14 | .03 |
| Academic Skill Development | 0.29 | 0.22 | .19 |
| Social Skills Development | 0.19 | 0.12 | .14 |
| Differentiated Instruction | 0.29 | 0.09 | .31*** |

*** $p = .001$

H₀³: None of the five independent predictor variables in Research Question Three's predictive model will represent statistically significant correlates predictors of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities. In light of the statistically significant finding for the independent predictor variable differentiated instruction, the Null Hypothesis (H_0 ³) for Research Question Three was rejected.

Research Question 4: Considering the variables of RTI, classroom instruction, academic skill development, differentiated instruction, and student social skills development, which represents the most robust correlate and predictor of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed? The multiple linear regression test statistic was used to assess the associative and predictive abilities of the five independent variables in Research Question Four's predictive model. The predictive model was found to be viable ($F_{(5, 106)} = 11.62; p < .001$). The

confluence of the five independent predictor variables in the predictive model contributed 35.4% of the explained variance in the model's dependent variable of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed. The two variables representing the most robust, statistically significant correlates and predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities were differentiated instruction ($r = .22; p = .02$), and student social skill development ($r = .21; p = .02$). Moreover, the predictive effect of both differentiated instruction and student social skills were considered approximating medium at $d = .45$ and $d = .43$ respectively.

Table 2 contains a summary of finding for Research Question Four.

Table 2

Predicting overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed

| Model | β | SE | Standardized β |
|----------------------------|---------|------|----------------------|
| Intercept | -0.01 | 0.53 | |
| RTI | 0.18 | 0.11 | .16 |
| Classroom Instruction | 0.17 | 0.14 | .14 |
| Academic Skill Development | 0.07 | 0.11 | .07 |
| Social Skills Development | 0.29 | 0.12 | .21* |
| Differentiated Instruction | 0.20 | 0.09 | .22* |

* $p = .02$

H₀⁴: None of the five independent predictor variables in Research Question Four's predictive model will represent statistically significant correlates or predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed. In light of the statistically significant finding for the independent predictor variables of differentiated instruction and social skills development, the Null Hypothesis (H₀⁴) for Research Question Four was rejected.

Research Question 5: Considering the variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy, which represents the most robust correlate and predictor of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the

comprehensive educational needs of students with mild to moderate learning disabilities are addressed? The multiple linear regression test statistic was used to assess the associative and predictive abilities of the three independent variables in Research Question Five's predictive model. The predictive model was found to be viable ($F_{(3, 108)} = 13.00; p < .001$). The confluence of the three independent predictor variables in the predictive model contributed 26.5% of the explained variance in the model's dependent variable of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

The two variables representing the most robust, statistically significant correlates and predictors of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities were pre-service teacher preparedness ($r = .30; p = .001$), and classroom culture ($r = .27; p = .002$). Moreover, the predictive effect of both differentiated instruction and student social skills were considered medium at $d = .63$ and $d = .56$ respectively.

Table 3 contains a summary of finding for Research Question Five.

Table 3

Predicting overall participant perceptions of inclusive classroom settings as being superior to exclusive (self-contained) classroom settings in addressing the comprehensive educational needs of students with mild to moderate learning disabilities

| Model | β | SE | Standardized β |
|--------------------------|---------|------|----------------------|
| Intercept | 0.88 | 0.48 | |
| Classroom Culture | 0.34 | 0.11 | .28** |
| Pre-Service Preparedness | 0.28 | 0.08 | .30*** |
| Teacher Self-Efficacy | 0.19 | 0.10 | .17 |

** $p = .002$ *** $p = .001$

H₀⁵: The independent predictor variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy will not represent statistically significant correlates or predictors of overall participant perception of inclusive classroom settings as being superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities are addressed. In light of the statistically significant finding for the independent predictor variables of classroom culture and pre-service teacher preparedness, the Null Hypothesis (H₀⁵) for Research Question Five was rejected.

Research Question 6: Considering the variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy, which represents the most robust correlate and predictor of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed? The multiple linear

regression test statistic was used to assess the associative and predictive abilities of the three independent variables in Research Question Six's predictive model. The predictive model was found to be viable ($F_{(3, 108)} = 19.72; p < .001$). The confluence of the three independent predictor variables in the predictive model contributed 35.4% of the explained variance in the model's dependent variable of overall participant- perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities.

Pre-service teacher preparedness ($r = .31; p < .001$), classroom culture ($r = .36; p < .001$), and teacher self-efficacy ($r = .19; p = .02$) were identified as the three independent predictor variables that represented robust, statistically significant correlates and predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means to meet the comprehensive educational needs of students with mild to moderate learning disabilities. Moreover, of the three variables in the predictive model, the variable classroom culture exerted the largest magnitude of predictive effect at $d = .77$.

Table 4 contains a summary of finding for Research Question Six.

Table 4

Predicting overall participant-perceived satisfaction with inclusive classroom settings as being the means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed

| Model | <i>B</i> | <i>SE</i> | <i>Standardized β</i> |
|--------------------------|----------|-----------|-----------------------|
| Intercept | 0.39 | 0.44 | |
| Classroom Culture | 0.43 | 0.10 | .36*** |
| Pre-Service Preparedness | 0.29 | 0.07 | .31*** |
| Teacher Self-Efficacy | 0.20 | 0.09 | .19* |

p* = .02 **p* < .001

H₀⁶: The independent predictor variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy will not represent statistically significant correlates or predictors of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities are addressed. In light of the statistically significant finding for the independent predictor variables of classroom culture, pre-service teacher preparedness, and teacher self-efficacy, the Null Hypothesis (*H₀⁶*) for Research Question Six was rejected.

Research Question 7: Is participant perception of inclusive classroom settings as superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities predictive of their perceived satisfaction with inclusive classroom settings as the best means by which the comprehensive educational needs of students with mild to moderate disabilities may be addressed? The simple linear regression test statistic was used to assess the

associative and predictive abilities of the independent variable in Research Question Seven’s predictive model. The predictive model was found to be viable ($F_{(1, 110)} = 101.03; p < .001$). The model’s independent predictor variable of participant perception of inclusive classroom settings as superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities contributed 47.9% of the explained variance in the model’s dependent variable of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities.

The independent predictor variable represented a robust, statistically significant correlate and predictor of overall participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities ($r = .69; p < .001$) and exerted a very large magnitude of predictive effect at $d = 1.91$.

Table 5 contains a summary of finding for Research Question Seven.

Table 5

Predicting overall participant-perceived satisfaction with inclusive classroom settings as being the means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed

| Model | β | SE | Standardized β |
|---|---------|------|----------------------|
| Intercept | 1.14 | 0.25 | |
| Inclusive classroom settings as superior to exclusive (self-contained) classroom environments | 0.67 | 0.10 | .69*** |

*** $p < .001$

H₀⁷: Study participant perception of inclusive classroom settings as superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities will not represent a statistically significant correlate or predictor of their perceived satisfaction with inclusive classroom settings as the best means by which the comprehensive educational needs of students with mild to moderate disabilities may be addressed. In light of the statistically significant finding in Research Question Seven, the Null Hypothesis (H₀⁷) for Research Question Seven was rejected.

Summary

The purpose of this study was to explore the variables that contribute to teacher perception of inclusion. Seven research questions with accompanying hypotheses were posed to address the stated research problem. The researcher-created survey was comprised of six demographic questions.

The participant sample consisted of teachers with experience in the inclusive classroom (n = 112) from the United States, Europe, and Africa. Slightly over three-fourths (76.4%) were female, and the remaining 23.6% were male. Nearly two-thirds of the participants identified as serving in the field of education outside of the United States. The participant survey posed the following as potential variables contributing to teacher perception of inclusion: Response to Intervention, classroom instruction, academic skill development, differentiated instruction, student social skills development, classroom culture, pre-service teacher preparedness, and teacher self-efficacy.

Considering the five variables stated in Research Question Three, differentiated instruction manifested as the overall predictor of participants' perception that inclusive classrooms are superior to exclusive classroom settings in meeting the educational needs of students with mild to moderate learning disabilities. However, the study participants identified differentiated instruction and social skills development as the variables that they are most satisfied with considering the inclusive classroom's superiority over exclusive classrooms.

Pre-service teacher preparedness manifested as the statistically significant predictor in the overall participant perception that inclusive classroom settings are superior to exclusive classrooms. However, when considering perceived satisfaction with the inclusive classroom, the respondents identified social skills development as being the best environment for meeting the educational needs of students with mild to moderate learning disabilities.

Chapter V provides a more detailed discussion of the findings. The following chapter includes the implications for practice and possibilities for future research.

V. DISCUSSION

As previously mentioned in Chapter 1, this study was conducted to explore the factors that contribute to teacher perception of inclusion. The intent of this study was to examine variables that influence the classroom environment, instructional expectations, and teacher readiness in relation to teacher perception of inclusion. The variables that contribute to the perception of inclusion are Response to Intervention (RTI), classroom instruction, academic skill development, differentiated instruction, and student social skills development, classroom culture, pre-service preparedness, and teacher self-efficacy. Identifying the key variable that contributes to teacher perception of inclusion has the potential to better prepare educators for the inclusive classroom.

Statement of the Problem

The debate and complexity surrounding inclusion continue to impact students with learning disabilities. While opinions vary, research has found that teacher perception of students with learning disabilities plays a vital role in student success (Ball & Green, 2014; Sokal & Sharma, 2017). However, teachers often lack the resources and experience to navigate the components of an inclusive classroom. Given the many facets of inclusion, further research is needed to explore the attitudes of teachers towards inclusion more fully. Therefore, the purpose of this quantitative non-experimental survey study was to investigate variables that may contribute to teacher perception toward inclusion.

Review of the Methodology

The 112 survey participants represented public and private schools throughout Africa, Europe, and the United States. Respondents hailed from Australia, Austria, South Africa, Canada, Kenya, United Kingdom, Hungary, Brazil, Germany, Philippines, Slovakia, Nigeria, and the United States. The majority of the participants were female. Most of the participants taught at the elementary school level. Missing data, internal reliability of participant response to items on the study's research instrument (survey), and essential demographic identifier information were analyzed using a variety of descriptive and inferential statistical techniques. A preliminary data analysis was conducted, including Cronbach's alpha (α) to measure internal reliability. The internal reliability for all study participants across all survey items had an extremely high level of consistency. The reliability was slightly higher for participants practicing in the United States than for those practicing outside the United States. Participants serving professionally for more than 26 years manifested the highest level of internal consistency which is likely due to the time invested in the profession.

In response to Research Question One, the one-sample t -test was used. As a result, slightly more than 6 in 10 (64.3%) participants agreed that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities. Furthermore, 23% of the participants ($n = 26$) were uncertain, and 12.5% ($n = 14$) disagreed that inclusive classroom settings are superior to self-contained classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities. Interestingly, differences by participant gender, years of experience, geographic location of practice, professional degree, or professional service manifested at non-statistically significant levels.

Similarly, the second research question was addressed with the one-sample *t*-test. As a result, the level of agreement was 61.6% ($n = 69$) regarding participant perception of satisfaction with inclusive classroom settings as superior to self-contained classroom environments and the best means of addressing comprehensive educational needs of students with mild to moderate learning disabilities. Of the 112 respondents, 26.8% ($n = 30$) were uncertain regarding satisfaction with inclusive classrooms as superior to self-contained classrooms. Similarly to Research Question One, differences by participant gender, years of experience, geographic location of practice, professional degree, or professional service manifested at non-statistically significant levels.

To address the third research question, the multiple linear regression test was used to assess the associative and predictive abilities of the five independent variables. The predictive model was found to be viable. The variable that represented the most robust, statistically significant predictor was differentiated instruction, with a predictive effect considered between medium and large ($d = .65$).

The fourth research question was addressed using multiple linear regression. The predictive model was found to be viable. Differentiated instruction ($r = .22$; $p = .02$) and social skill development ($r = .21$; $p = .02$) represented the most statistically significant predictors of overall participant-perceived satisfaction with inclusive classroom settings. The predictive effect of differentiated instruction was considered medium ($d = .45$). Additionally, social skills development was found to be statistically significant predictor of overall participant-perceived satisfaction with inclusive classroom settings, and the predictive effect was considered medium ($d = .43$).

Research Question Five was evaluated using multiple linear regression to assess the associative and predictive abilities of the three independent variables. Pre-service teacher preparedness ($r = .30$) and classroom culture ($r = .27$) were identified as the two variables that were predictors of overall participant perception of inclusive classroom settings as being superior to exclusive classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities. The predictive effect for pre-service preparedness was considered medium ($d = .63$). The predictive effect for classroom culture was deemed to be medium ($d = .56$).

The focus of the sixth research question was which of the three variables, classroom culture, pre-service preparedness, or teacher self-efficacy was the most significant predictor of perceived-satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities. The multiple linear regression was used to examine the independent variables in question six. Classroom culture surfaced with the most significant magnitude of predictive effect ($d = .77$).

Research Question Seven addressed participant-perceived satisfaction with inclusive classroom settings as being the means by which the comprehensive educational needs of students with mild to moderate learning disabilities. Simple linear regression was used to address the final research question. The study revealed that an overwhelming majority of participants were satisfied with inclusive classroom settings as superior to exclusive classroom environments. The finding was statistically significant ($r = .69$). The results indicated a very large magnitude of predictive effect ($d = 1.91$).

Summary of the Results

The internal consistency (reliability) of the participants' response to the survey questions was assessed using Cronbach's alpha (α) test statistic. The statistical significance of alpha was evaluated through the application of an F -test. F values of $p < .05$ were considered statistically significant. The essential demographic information was analyzed using only descriptive statistical techniques. Frequency counts (n) and percentages (%) were utilized for illustrative and comparative purposes.

Regarding RTI, classroom instruction, academic skill development, differentiated instruction, and student social skills development, the results seem to indicate that educators perceived differentiated instruction as the most robust predictor of overall perception that the inclusive classroom is superior to the exclusive classroom environment. Of the variables of classroom culture, pre-service preparedness, and teacher self-efficacy, the results seem to indicate that teachers perceived pre-service preparedness as the most robust predictor that inclusive classrooms are superior to exclusive classroom environments. Regarding teacher-perceived satisfaction with inclusion, differentiated instruction and social skills development represented the most robust predictors. Considering the variables of classroom culture, pre-service preparedness, and teacher self-efficacy, the results seem to indicate that teacher satisfaction with classroom culture represented the most statistically significant correlate. In conclusion, the overall participant-perceived satisfaction with inclusive classroom settings as being superior to exclusive classrooms was statistically significant ($r = .69; p < .001$) and exerted a very large magnitude of predictive effect ($d = 1.91$).

Discussion of the Results

The study's essential data arrays were found to be completely intact. Cronbach's alpha (α) was used to measure the internal reliability of the participant response. The statistical significance of alpha was evaluated through the application of an F -test. F values of $p < .05$ were considered statistically significant. The internal reliability for all study participants across all survey items was considered very high ($\alpha = .90; p < .001$). The internal reliability level was higher for participants practicing in the United States ($\alpha = .92; p < .001$) than their counterparts practicing outside of the United States ($\alpha = .87; p < .001$).

The total sample size was 112 participants, representing an overall 56% response rate. Regarding gender, 23.6 % of the respondents were male and 76.4% were female. Approximately 92% of the respondents possessed either a bachelor's degree or a master's degree. The majority of the study participants identified as elementary school educators. Nearly two-thirds (62.5%) of study participants indicated serving professionally outside of the United States. Considering the length of service in the field of education, nearly eight in 10 study participants were noted as serving for 20 years or less whereas 25 participants identified the category of 11 to 15 years.

Differentiated Instruction and Social Skills Development

Of the five variables, Response to Intervention, classroom instruction, academic skills development, differentiated instruction, and student social skills development, differentiated instruction represented the most statistically significant correlate of overall participant perception of inclusive classrooms being superior to exclusive classrooms in meeting the comprehensive educational needs of students with mild to moderate learning disabilities. The two variables representing the most robust, significant correlate of overall participant-perceived satisfaction

with inclusive classroom settings were differentiated instruction and student social skill development.

Differentiated instruction examines the student's academic readiness, interest, and learning profile to meet the diverse learning needs. Tomlinson (2015) noted that academic readiness and interest vary with each student due to differences in life experiences, maturity level, and confidence. To differentiate the content, the curriculum selected to teach skills and concepts may vary for each student. In the process of differentiated instruction, teachers present diverse activities based on student readiness, interests, and learning profiles. Similarly, teachers provide various methods for students to demonstrate mastery of skills and concepts. It is essential for students to remain active learners in the classroom (Santangelo & Tomlinson, 2009). The results of the study seem to indicate that educators perceive elements of differentiated instruction as vital in the inclusive classroom, which aligns with previous research (Dev & Haynes, 2015; West & Pirtle, 2014).

Additionally, differentiated instruction was the most robust predictor of participant-perceived satisfaction with inclusive classroom settings as being means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed. In essence, educators seem to demonstrate perceived satisfaction with differentiated instruction as an essential component for the inclusive classroom to benefit students more than an exclusive classroom. Some respondents wrote comments that support satisfaction with the inclusive classroom in addition to one-on-one support for students.

Furthermore, it appears that the majority of participants recognized the importance of differentiated instruction and were satisfied with classroom implementation. Although differentiated instruction represented the most statistically significant predictor of overall

participant-perceived satisfaction with inclusive classroom settings, the results of the study also seem to indicate perceived satisfaction with social skills development in the inclusive classroom. Albert Bandura's Social Cognitive Theory posed that learning occurs in a social context with the interaction between people, environment, and behavior (Bandura, 2006). Therefore, the results appear to substantiate that educators identified social skills development as a benefit of inclusion. The interaction between students in the classroom fosters observational learning, language development, problem-solving, self-regulation, and self-efficacy (Bandura, 2006; Vygotsky, 1930-1934/1978).

Pre-Service Preparedness

Since the inception of inclusion, teachers have been confronted with the challenge of addressing the educational needs of students with diverse learning needs. Considering the variables of classroom culture, pre-service preparedness of teachers, and teacher self-efficacy, the majority of the participants perceived pre-service teacher preparedness as the most vital component in addressing the educational needs of students with mild to moderate learning disabilities. The findings corroborate studies that note pre-service teacher programs and teacher readiness as critical components for inclusion (Dev & Haynes, 2015; Kirby, 2017). Likewise, Harvey et al. (2010) stressed the importance of creating a structured, comprehensive pre-service training program that provides opportunities for practical experience.

To create better practitioners and collaborators, pre-service teacher programs should establish partnerships with local schools to offer teacher candidates opportunities to observe and instruct in inclusive classrooms (Conderman & Johnston-Rodriguez, 2009; Greenfield et al., 2016, Kirby, 2017; Sokal & Sharma, 2017). Forging collaborative relationships between the

university and local schools fosters camaraderie between professionals of both institutions while investing in future educators.

Classroom Culture

Considering classroom culture, pre-service preparedness, and teacher self-efficacy, the results seem to indicate that teacher satisfaction with classroom culture represented the most statistically significant correlate. Although the classroom teacher makes noteworthy contributions to the classroom culture, the administration also influences the culture of a school and ultimately the classroom (Ball & Green, 2014). The perception of inclusion, whether positive or negative, begins with leadership (Ball & Green, 2014; Kirby, 2017). For this reason, the adage “attitude reflects leadership” is apropos.

The classroom culture potentially creates a thriving learning atmosphere for students with and without learning challenges (Ogunnaike, 2015). The findings of this study imply the importance of classroom and behavior management in the inclusive classroom (Gourneau, 2014). Clearly written class and behavioral expectations posted in the classroom remove ambiguity and establishes clear boundaries for students. Informing students and parents of the classroom procedures and expectations as well as behavior expectations minimize chaos and promote clear communication. Every student contributes to the culture of a classroom. To clarify, students bring personality, culture, and life experience to a classroom, as well as academic strengths and weaknesses; all of which contribute to the culture of a classroom.

Overall Perception of Inclusion

The focus of the final research question was on participant perception of inclusive classroom settings being superior to exclusive classroom settings for meeting the educational needs of students with mild to moderate learning disabilities. The majority of the participants

perceived that inclusive classrooms settings are superior to exclusive classrooms. One respondent shared an unsolicited response in addition to an “agree” to the inclusive classroom setting being superior to exclusive classrooms:

“If executed well, with differentiated materials when necessary, and additional support is given to students where needed.”

Implications for Practice

This study explored the factors that contribute to teacher perception of inclusion. Given the plethora of research surrounding the topic of inclusion, this study added to the existing literature by identifying specific variables that contribute to teacher perception of inclusion. As a result, there are implications for practice extrapolated from this study.

Differentiated Instruction and Social Skills Development

In this study, differentiated instruction and social skills development were found to be statistically significant predictors of teacher perception that the inclusive classroom setting is superior to the exclusive classroom in meeting the educational needs of students with mild to moderate learning disabilities. Differentiated instruction involves teachers facilitating student success by designing and adapting learning experiences to meet students’ individual needs (Santangelo & Tomlinson, 2009). In light of the results, it seems that educators should have ample exposure and practice implementing differentiated instruction in the inclusive classroom. Should teachers lack confidence or experience with differentiated instruction, a mentor should be assigned to the classroom teacher. The mentor’s first responsibility would be to model effective differentiated instruction.

Additionally, mentors would observe the novice educator and provide prompt feedback with practical suggestions. The mentor would also serve as a resource for the teacher to consult

with questions regarding the implementation of differentiated instruction. Effective mentoring relationships include regular meetings to communicate personal strengths and weaknesses. The mentor could also assist new teachers with implementing strategies to foster social skill development.

Social skills encompass both verbal and non-verbal forms as a means to communicate and interact with students and teachers. The non-verbal forms of social skills include gestures and body language. Social skills are sometimes overlooked and considered skills that students develop independently. In fact, the classroom is sometimes considered a restrictive environment for socialization. However, it is possible to foster social skill development in non-formal and formal classroom settings. Initiating evidenced-based practices that create opportunities for social interaction enables students to engage with peers.

In the study, participant-perceived satisfaction of social skill development was statistically significant and seems to indicate that educators recognized the importance of social skill development in an inclusive classroom. As a result, the inclusive teacher should provide ample opportunities for students to interact non-formally in the classroom. Bandura (2006) and Vygotsky (1930-1934/1978) recognized the importance of social interaction in child development. To that end, students could benefit from having allocated time for activities that involve interaction to promote social interaction.

Pre-Service Teacher Preparedness and Classroom Culture

Pre-service teacher preparedness and classroom culture were found to be statistically significant predictors of perceived satisfaction with inclusive classroom settings as the best means by which to meet the comprehensive educational needs of students with mild to moderate learning disabilities. Since pre-service teacher preparation occurs during the undergraduate years

of study, teacher preparation programs should ensure a link between coursework and fieldwork (West & Pirtle, 2014). Though unsolicited, some respondents left comments stating the importance of teacher competency with inclusion. One participant commented:

“While I agree the least restrictive environment is best, it depends so much on the attitude and competency of the teacher in working with students who have difficulty learning.”

The connection between theory and practice better equips the pre-service teacher to embrace the inclusive classroom. In addition to theory and practice, the pre-service teacher should be exposed to training activities and opportunities through a structured, comprehensive training program (Harvey et al., 2010). An overwhelming majority of participants identified differentiated instruction as a critical component for the inclusive teacher. As a result, it seems prudent to include differentiated instruction in the coursework of pre-service teacher programs. To integrate differentiated instruction in the classroom, teachers should first identify the academic readiness, interest, and learning profile of each student. As the teacher models the “I do, we do, you do” principle, students are guided through the learning process. The use of curriculum, instruction, and evaluation are then carefully selected based on students’ learning profiles and preferred interests.

Classroom culture encompasses the educational values, beliefs, and processes as related to learning. Individual personalities of students and teachers contribute to the classroom culture. According to feedback from some respondents, some cultures ostracize or ignore students with learning disabilities. One participant sent the following unsolicited comment:

“I work in an honor/shame culture. We aren’t allowed to say there’s anything wrong with a student because it brings shame to their family.”

The Christian educator has an opportunity to create a classroom culture where every student feels accepted and valued. Although the inclusive classroom has challenges, the teacher sets the atmosphere in the classroom, creating a culture conducive to learning.

Future Research

Teacher perception of inclusion remains a complex issue with several contributing factors. While this study employed a quantitative, non-experimental, survey research approach future research in this area could use a mixed-methods approach. Some participants opted to provide unsolicited comments to the survey questions, while others shared disappointment because they were unable to qualify responses. To that end, interviewing participants could allow for open-ended questions.

Additionally, interviews with participants from different countries would allow teachers to explain their perception of the inclusive classroom based on personal experience. A broadened sample could produce responses that would reflect different cultural perspectives. Questions that address resistance to inclusion could reveal areas perceived as weaknesses. Additionally, a mixed-methods approach would also allow the researcher to delve deeper into the cultural aspects of the participant's background and their perception of inclusion.

Conclusion

Although controversy surrounds inclusion, the inclusive classroom provides enhanced learning opportunities for students with diverse learning needs. While multiple factors contribute to teacher perception of inclusion, the results of this study identified differentiated instruction and social skills development as the most robust variables that contribute to teacher perception of the inclusive classroom. Furthermore, educators identified pre-service teacher preparedness and classroom culture as the most influential variables contributing to teacher

satisfaction with the inclusive classroom compared to the exclusive classroom. Despite participants' perception that inclusive classrooms are superior to exclusive classrooms, further research of teacher perception of inclusion is recommended. As researchers continue to explore the complexity of inclusion, educators may glean the expertise and confidence needed to view inclusion as a welcome challenge instead of a daunting task.

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APPENDICES

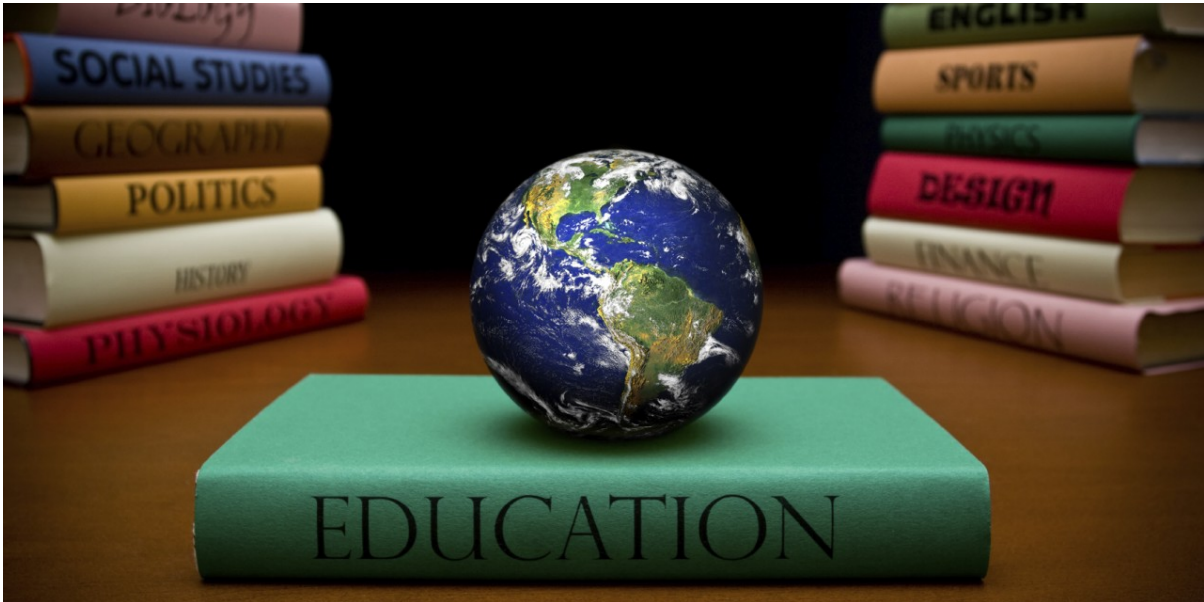
Appendix A

Study Sample: Country of Service

| Country | n | %* |
|---------------|-----|------|
| Austria | 37 | 33% |
| Bolivia | 1 | >1% |
| Germany | 1 | >1% |
| Hungary | 1 | >1% |
| Israel | 1 | >1% |
| Kenya | 22 | 20% |
| Panama | 1 | >1% |
| Palestine | 1 | >1% |
| Senegal | 1 | >1% |
| Spain | 1 | >1% |
| Turkey | 1 | >1% |
| United States | 44 | 39% |
| Total | 112 | 100% |

*Note: >1% = .89%

Teacher Attitude Toward Inclusion



Thank you for taking time to complete the demographic information. Your answers will be grouped with those of other teachers to help better understand teacher attitude toward inclusion. No individual information will be reported for any reason.

What is your gender?

- Male
- Female

What is the highest degree you have completed?

- High School
- Bachelors
- Masters
- Doctorate
- Other

In which area of instruction are you currently serving?

- Elementary
- Middle School
- High School
- Higher Education

Administration

How many years of teaching experience?

0-5 years,
6-10 years
11-15 years
16-20 years
21-25 years
26+ years.

What is your country of origin?

United States ____
Other _____

In which country are you currently teaching?

United States
Other _____

Thank you for agreeing to complete this survey on teacher perception of inclusion. For this survey, a learning disability is defined as “significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities” (National Joint Committee on Learning Disabilities). The survey will take about 10 minutes to complete. By submitting the completed survey, you are granting us permission to use your results in our study. No individual information will ever be reported or released from this survey. Thank you for helping us better understand teacher attitude toward inclusion.

1. Response to Intervention (RTI) efforts are best carried out in inclusive classroom environments.

5- Strongly Agree
4-Agree
3- Uncertain
2- Disagree
1- Strongly Disagree

2. I am satisfied with the efficacy of RTI efforts in inclusive environments.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

1. Instruction within inclusive classroom environments promotes greater academic achievement for students with mild to moderate learning disabilities than exclusive (self-contained) classroom settings.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

2. I am satisfied (that instruction within the inclusive classroom environment promotes greater academic achievement for students with mild to moderate learning disabilities.) with the instructional efficacy associated with inclusive classroom environments for students with mild to moderate learning disabilities.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

3. The academic skill development of students with mild to moderate learning disabilities are best fostered in inclusive classroom environments.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

6. I am satisfied with the impact that inclusive classroom environments have on the academic skill development of students with mild to moderate learning disabilities.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

7. The social skill development of students with mild to moderate learning disabilities are best fostered in inclusive classroom environments.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

8. I am satisfied with the impact that inclusive classroom environments have on the social skill development of students with mild to moderate learning disabilities.

5- Strongly Agree

- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

9. Differentiated instruction techniques are best implemented in inclusive classroom environments.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

10. I am satisfied with the efficacy of differentiated instruction efforts in inclusive educational environments.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

11. Classroom culture in inclusive environments exerts a positive impact upon the motivation and attitudes of students with mild to moderate disabilities.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

12. I am satisfied with the classroom culture of inclusive educational environments and its ability to positively impact the motivation and attitudes of students with mild to moderate disabilities.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

13. The preservice preparedness of teachers serving students with mild to moderate disabilities in inclusive educational environments is superior to that of teachers serving students with mild to moderate learning disabilities in exclusive educational environments.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

14. I am satisfied with the level of preservice preparedness of teachers serving students with mild to moderate learning disabilities in inclusive classroom settings.

- 5- Strongly Agree
- 4- Agree
- 3- Uncertain
- 2- Disagree
- 1- Strongly Disagree

15. Teacher self-efficacy is exhibited at its highest degree in the inclusive classroom environment.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

16. I am satisfied with the level of teacher self-efficacy exhibited within inclusive classroom environments.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

17. Overall, inclusive classroom settings are superior to exclusive (self-contained) classroom environments in addressing the comprehensive educational needs of students with mild to moderate learning disabilities.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

18. Overall, I am satisfied with inclusive classroom settings as the best means by which the comprehensive educational needs of students with mild to moderate learning disabilities may be addressed.

5- Strongly Agree

4- Agree

3- Uncertain

2- Disagree

1- Strongly Disagree

Thank you for taking time to complete this survey!

Appendix C

Hello,

Would you consider giving a few minutes of your time to respond to a survey on inclusion? The survey is designed to gather information for a research project conducted by Anna Gryskiewicz as part of her dissertation. The principle investigator at Southeastern University is Dr. Susan Stanley, Associate Professor in the College of Education. Dr. Tom Gollery, the methodologist, is also an investigator in this project.

The purpose of this study is to explore factors that contribute to teacher perception of inclusion. This survey should only take about 10 minutes of your time and will serve to further understanding of the relationships between Response to Intervention (RTI), classroom instruction, academic skill development, differentiated instruction, social skills development, classroom culture, pre-service teacher preparedness, teacher self-efficacy and the perception of inclusion. Please respond truthfully to all the items. The results of individual responses will remain totally confidential and will be used only for reporting grouped results in the dissertation.

By taking this survey, you certify that you are 18 years of age or older and that you consent to participate.

If you have any questions related to this survey, please feel free to contact Anna Gryskiewicz (personal information redacted). If you would like a copy of the results of the study when it is completed, please email Anna Gryskiewicz to request results.

Thank you so much for your assistance in this important research project! Your prompt response to the survey is very much appreciated.

Thank you,

Anna Gryskiewicz, M.Ed.

Survey Link: <https://survey.sogosurvey.com/r/Kdh8mE>

Appendix C

Study Sample: Country of Service

| Country | n | %* |
|---------------|-----|------|
| Austria | 37 | 33% |
| Bolivia | 1 | >1% |
| Germany | 1 | >1% |
| Hungary | 1 | >1% |
| Israel | 1 | >1% |
| Kenya | 22 | 20% |
| Panama | 1 | >1% |
| Palestine | 1 | >1% |
| Senegal | 1 | >1% |
| Spain | 1 | >1% |
| Turkey | 1 | >1% |
| United States | 44 | 39% |
| Total | 112 | 100% |

*Note: >1% = .89%