EARLY CHILDHOOD TEACHER ATTITUDES

REGARDING INCLUSION

By

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Abstract: Over the past 20 years, educational practices have become more inclusive of children with exceptional educational needs. As the continuum of practices has become more inclusive, early childhood teachers have taught more children with exceptional educational needs in their regular education classrooms. The purpose of this research was to determine if early childhood teachers in an inclusive setting with a high ratio (29% or more) of children with exceptional educational needs to typically developing children differ in their attitudes toward inclusion from teachers in an inclusive setting with a lower ratio (up to 28%). In addition, this study investigated if there a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and/or if there is a difference between the attitudes of teachers regarding inclusion years of teaching experience. Thirty-six early childhood teachers from a Midwestern state completed the "My Thinking About Inclusion Scale" and a demographic questionnaire. Based on Bandura's social learning theory, an individual's performance is influenced by the individual's perceived ability. Therefore, teachers' beliefs in their ability to practice inclusion could affect their success in doing so. While laws and policies are in favor of inclusion of students with exceptional educational needs being educated in the least restrictive environment, few schools utilize a fully-inclusive educational environment. Results of this study indicated no significant difference in teachers' attitudes towards inclusion based on a classroom setting characterized by a high ratio of children with exceptional educational needs to typically developing peers. In addition, this study revealed no relationship between the attitudes of teachers regarding inclusion and teachers' level of education or years of teaching experience. However, the study revealed through emergent anecdotal evidence that there was a great deal of inconsistency in teachers' knowledge of terminology regarding inclusion and services for exceptional learners. Based on these emergent findings, general education teachers could benefit from professional development regarding the terminology, benefits of inclusion, and strategies that may help implement inclusive practices.

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CHAPTER I

INTRODUCTION

Early childhood classrooms are made up of unique groups of children. Teachers must meet the individual needs of each and every student in their class. In the field of early childhood education, teachers will have students with different levels of ability across all developmental areas (Bredekamp, 2011). Some children will be typically developing whereas others will have exceptional educational needs. According to the Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8 position statement from the National Association for the Education of Young Children, experiences in an early childhood education setting must include and be responsive to all children in the class and their needs (NAEYC, 2009).

Prior to the Education for All Handicapped Children Act of 1975, there were no laws requiring schools to teach students with exceptional educational needs (Salvia, Ysseldyke, & Bolt, 2010). The Education for the Handicapped Children Act (EHA) passed in 1975 by the U. S. Congress states "all children with disabilities should be educated to the maximum extent possible with their non-disabled peers" (Monahan, Marino & Miller, 1996, p. 316). The law specified that all children receive an appropriate education in the least restrictive environment. Specifically, the

least restrictive environment required by federal law mandates that children with exceptional educational needs be placed with typically developing peers, unless even with supplemental aids and services they cannot succeed in such a classroom [20 United States Code (U.S.C.) Sec. 1412(a)(5)(A).]. Since then, individuals with exceptional learning needs have been included and integrated in the public school system, and education has become increasingly inclusive (Kersh, 2011).

Teachers must treat all students as respected participants of the classroom and strive to meet their unique needs. Teachers must consider these needs when planning their curriculum, creating learning groups, and supporting positive interactions among the students (Odom & Diamond, 1998). Teachers' attitudes regarding inclusion may be related to the way they teach the population and how effective this teaching is (Baar & Bracchitta, 2008). For inclusion to be successful, all children must be able to participate in activities that are developmentally appropriate to their individual needs; some children may require accommodations to participate, but activities should be meaningful for all children (Bredekamp, 2011).

In 2007, the U.S. Congress reported that "approximately 48% of children ages 3-5 years with disabilities spent at least 80% of their time in inclusive settings with typically developing peers, while 25% receive[d] services in specialized or self-contained settings" (Souakou, 2012, p. 478). Many children with exceptional educational needs are served in an educational setting where at least part of their time is in an inclusive classroom. In order to meet their needs, strategies, for engaging and facilitating the participation of all children, are needed (Harte, 2010). Therefore, it is important to know how teachers feel about inclusion.

Research examining pre-service teachers' attitudes towards inclusion reported differences in their beliefs, specifically a higher sense of efficacy with regards to working with children with exceptional needs, when they worked in classrooms with higher ratios of children with exceptional educational needs to typically developing children (Atiles, Jones, & Kim, 2012). Therefore, we should investigate if the attitudes of early childhood teachers in classroom settings

with a high ratio of students with exceptional educational needs are different from teachers in settings with a lower ratio, this setting being more typical of public schools where teachers usually have just one to four children with exceptional educational needs. An informal survey of public school administrators reported one to four children with exceptional educational needs in the general education classroom.

Purpose

The purpose of this research was to determine if early childhood teachers in an inclusive setting with a high ratio of children with exceptional educational needs to typically developing children differ in their attitudes toward inclusion from teachers in an inclusive setting with a lower ratio. In addition, this study investigated if there was a difference between the attitudes of teachers regarding inclusion and the teachers' level of education, and/or if there was a difference between the attitudes of teachers regarding inclusion and the teachers' years of teaching experience.

Research Questions

- Does the classroom setting characterized by a high ratio of children with exceptional learning needs to typically developing peers relate to teachers' attitudes toward inclusion?
- 2. Is there a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and/or is there a difference between the attitudes of teachers regarding inclusion and years of teaching experience?

Definitions

Age appropriate. Age appropriate means "age-related human characteristics that allow teachers to make general predictions within an age range about what materials, interactions, and experiences will be safe, interesting, challenging, and within reach for children and, thus, likely to best promote their learning and development" (Bredekamp, 2011, p.77)

Beliefs. Beliefs are a way of thinking about ideas, principles, and practices (Garner & Alexander, 1994). "Beliefs related to inclusion are formed by parents and practitioners on the basis of their personal experience and, more importantly, are used to develop expectations about how a child might function in a classroom or about the outcomes of inclusion" (Stoiber, Gettinger & Goetz, 1998, p. 109).

Categories of IEPs. There are thirteen disability categories (Goldberg, 2011):

Autism. "A pervasive developmental disorder, a social communicative problem that emerges before a child is three" (Allen & Cowderdy, 2005, p. 438). It could be identified as a sensory processing disorder that includes a spectrum of abilities. For example, some autistic children need more sensory input where as others may be overwhelmed by too much stimuli. Each child with autism is unique and the characteristics of behaviors are diverse.

Deaf-blindness. "Concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness" (Goldberg, 2011).

Deafness. Deafness occurs when children are born without hearing or have hearing loss that is "so severe that the individual cannot process spoken language even with amplification devices" (Allen & Cowerdy, 2005, p.438).

Emotional Disturbance. "Are disorders that relate to mood" (Deiner, 2010, p. G-6). A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.(C) Inappropriate types of behavior or feelings under normal circumstances.(D) A general pervasive mood of unhappiness or depression.(E) A tendency to develop physical symptoms or fears associated with personal or school problems (Goldberg, 2011).

Hearing Impairment. A "hearing impairment means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance" (Deiner, 2010, p.436). This includes children who have a limited ability to hear but the ability to process spoken language. Students with a hearing impairment may or may not have hearing aids to help them hear.

Intellectual Disability/ Mental Retardation. This classification is applied when an individual fails to meet the typical age-appropriate language, motor, and socio-adaptive developmental milestones (Batshaw, Shapiro, & Farber, 2007). Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18 (American Association on Intellectual and Developmental Disabilities, 2013).

Multiple Disabilities. Multiple disabilities are simultaneous impairments (such as mental retardation-blindness or mental retardation orthopedic impairment), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. Multiple disabilities do not include deaf-blindness (Goldberg, 2011).

Orthopedic Impairment. An orthopedic impairment is characterized by a loss or limitation of mobility. "The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures)" (Deiner, 2010, p. 408). For example, children can be born with an impairment such as clubfoot, or cerebral palsy, or an injury to the body. Children can have difficulty participating in physical activities. They can have ankle/ leg braces, a walker, crutches, or a wheelchair to assist them with mobility.

Other Health Impairment. Other health impairment could be a result of an illness that affects children's overall health. Their health can be impacted in many different areas. A health impairment can be temporary or permanent. There are two levels of health needs: "categorical definition determines whether the condition falls within state guidelines; the functional definition looks specifically at how the child is affected. In most cases the categorical definition is used for reported purposes and the functional definition for curriculum planning" (Deiner, 2010, p.375). When a student has a health need, it is important for teachers to be aware when the condition is happening, the severity of the current symptoms and how to help the child (Deiner, 2010). For example, if a student were to have a seizure disorder, it would be important for the teacher to recognize when the child is having a seizure, the severity of the episode, and how to respond to the child.

Specific Learning Disabilities. A learning disability is a condition that interferes with learning to perform academic tasks such as reading and writing. This includes individuals "whose intellectual difficulties are related to processing and expressing information" (Bach, 2007, p.35). For example, dyslexia, a specific intellectual difficulty is categorized by "a difficulty with written language, particularly reading and spelling, based on how the brain processes written language" (Brown & Percy, 2007, p. G-5).

Speech or Language Impairment. A communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child's educational performance (Goldberg, 2011).

Traumatic or Brain Injury. Trauma or injury could be temporary or permanent resulting in mental or physical consequences. For example, brain injury, emotional distress after the death of a parent, or a physical accident such as a sport injury (Goldberg, 2011).

Visual Impairment Including Blindness. "an impairment in vision that, even with correction, adversely affects the child's educational performance. The term includes both partial sight and blindness" (Deiner, 2010, p. 457). Students are classified as having a visual impairment when they have limited ability to see (Brown & Percy, 2007).

Chronological age. The number of years a person has lived used as a standard against which to measure typical behavior, intelligence, etc. (Copple & Bredekamp, 2009).

Co-operatives. "Voluntary associations of school districts that band together to provide special education services using a shared administrative structure" (Rogers, n.d.).

Developmental age. Developmental age is the age of an individual based on their physical, socio-emotional, language, and cognitive development instead of the norm based on chronological age (Copple & Bredekamp, 2009).

Developmental delay. A developmental delay is a "condition that represents a significant delay in the developmental processes, not a slight or momentary lag in development, which will continue without intervention" (Brown & Percy, 2007, p. G-5). Individuals who fall into the classification of developmental delay include "children birth up to 9 years" (Deiner, 2010, p.336).

Developmental disability. A developmental disability refers to a limited or lack of ability associated with human development (Brown, 2007). For example, attention deficit/hyper activity disorder is a type of developmental disability that is categorized by hyper behaviors and difficulty concentrating (Brown & Percy, 2007, p.718).

Exceptional educational needs. The White House Conference on Handicapped Individuals created the term "exceptional children" to refer to "all children who are different from typically developing children" (Allen & Crowdery, 2005, p.441). This can include any type of need. For example an intellectual or developmental disability, a learning disability, a physical impairment, a health concern, emotional and behavior difficulties, and sensory processing disorders.

Inclusion. The practice of inclusion is one that involves including students with exceptional educational needs in chronologically age-appropriate general education classes while receiving the specialized support and instruction outlined by their individualized education programs (IEP's) within the context of the general education curriculum and activities (Halvorsen & Neary, 2001). The goal of inclusion is to design services around children's needs rather than trying to fit children into existing services (Deiner, 2010, p.12).

Individualized Education Plan (IEP): An IEP is a document "tailored to the unique needs of the child, includes a description of the child's present level of performance, annual goals and objectives, a description of necessary accommodations, and specifications about related services, such as physical therapy, occupational therapy..." (O'Neill, 2013, p.63).

Mainstreaming. The practice of mainstreaming includes educating students with exceptional educational needs in the general education classroom.

Pull Out Services/Program. For a pull-out program, students with exceptional educational needs are removed from their class and taken to a special setting for less than half a child's school day. This can include a table and chairs in a designated hallway location, or a room often called the special education classroom or resource room, to receive therapy (Allen & Cowdery, 2005; Rogers, n.d.).

Ratio. A ratio says how much of one thing there is compared to another. Furthermore, it states the relationship in quantity, amount, or size between two or more things (Merriam-Webster, 2013). A higher ratio is classified as 29% or more of the students with exceptional educational needs to typically developing students. A lower ratio is classified as up to 28% of students with exceptional educational needs to typically developing students.

Self-Contained Special Education Classroom. Self-contained classrooms are classrooms specifically designated for children with disabilities. Self-contained programs are usually indicated for children with more serious disabilities who may not be able to participate in general education programs at all. These disabilities include autism, emotional disturbances, severe intellectual disabilities, multiple handicaps and children with serious or fragile medical conditions (Webster, n.d.).

CHAPTER II

REVIEW OF LITERATURE

This review of the literature provides support for the importance of teachers' beliefs about inclusion of children with exceptional educational needs in the early childhood classroom. First, a brief history of educational practices concerning students with exceptional educational needs will be presented to set a context. The theoretical framework that serves as the basis for this research will be discussed, followed by the role knowledge and experience have in the formation of attitudes towards individuals with exceptional educational needs. Next, attitudes towards inclusion will be addressed. Finally, the role of the ratio of typically developing children to children with exceptional educational needs in the classroom environment plays in teachers' beliefs will be presented.

History of Educational Practices with Students with Exceptional Educational Needs

Prior to 1973, our society had a "forget and hide" attitude towards individuals with exceptional learning needs; "As much as possible, children with disabilities were kept out of sight. Families were often advised to immediately institutionalize an infant with an obvious disability such as Down syndrome" (Allen & Cowdery, 2005, p. 5).

In 1973, The Rehabilitation Act (PL 93-112) provided equal opportunities for children with disabilities in preschools and schools that receive federal funds (Deiner, 2010, p. 8). As a result children with exceptional educational needs were entitled to a free public education. Shortly after, in 1975, the Education for All Handicapped Children Act (PL 94-142) "mandated a free and appropriate public education in the least restrictive environment for children and youth (5-21) with disabilities" (Deiner, 2010, p. 8). The addition in 1975 moved from students with exceptional educational needs receiving free public education to receiving free and appropriate education. For example, in 1973 children with exceptional educational needs were allowed to come to school but were often given tasks that were not fitting to their capabilities.

In 1986, amendments were made to the Education of the Handicapped Act (EHA); the amendments expanded services for children with exceptional educational needs to include services to children birth through three (Deiner, 2010). It was around this time when early intervention began. Society moved to a perspective of identifying children with special needs and helping them as soon as possible (Allen & Crowdery, 2005). In 1990, the law was reauthorized and became known as the Americans with Disabilities Act (ADA) (PL 101-336); the revision mandated that "schools, employers, and government agencies provide reasonable accommodations to allow individuals with disabilities to participate fully" (Deiner, 2010, p.8).

An additional law regarding individuals with exceptional educational needs was adopted in 1990. The Individuals with Disabilities Education Act (IDEA) of 1990 (PL 101-476) mandated that schools provide services to support children with exceptional educational needs and "people first language" be used when talking about the population of individuals with exceptional educational needs (Deiner, 2010, p.8) The IDEA (PL 105-17) was amended in 1997. The amendment entitled "everyone with a disability, ages 3 to 21, to a 'free and appropriate public education.' Additionally, it requires every child with a disability to be educated in the least restrictive environment" (Allen & Cowdery, 2005, p. 3). IDEA also clarified least restrictive environment; the least restrictive environment required by federal law mandates that children

with exceptional educational needs be placed with typically developing peers, unless even with supplemental aids and services they cannot succeed in such a classroom [20 United States Code (U.S.C.) Sec. 1412(a)(5)(A).]. Essentially, "Children with disabilities should participate in regular curriculum and assessment procedures" (Deiner, 2010, p.8). Most recently, in 2008, the Americans with Disabilities Act Amendments Act (ADAAA) (PL 110-325) was amended to "expand civil rights protection to children and adults with disabilities" (Deiner, 2010, p.8).

Although, by law, schools are mandated to provide educational and related services for children with disabilities, "it is up to the states and their local school systems to see that special education is delivered" (Connelly, 2010, para. 7). Parents have a right to get their child tested and evaluated, at public expense, even when the child's teachers or principal do not deem it necessary. Schools are obligated to pay even if they lack financial resources or expertise to conduct the evaluation. At public's expense, a child can be evaluated at the private sector. Likewise, when a school does not have the resources to provide IEP mandated services, the law stipulates that the services be provided at public expense by a private provider (Connelly, 2010). Children with exceptional educational needs must be advocated for if they are to be educated in the least restrictive environment, arguably a fully inclusive one. There are few schools that practice full inclusion of students with exceptional educational needs. Children with exceptional educational needs who require greater accommodations are not always given the chance to be included in a general education class. For example, "Five-year-olds with severe disabilities should be using materials and exploring environments that are typical for all five-year-olds regardless of his or her developmental age" (Allen & Cowerdy, 2010, p. 48). This, however, is not the case. These children are often separated and learn in different environments. Goldstein, Kaczmarek, and Heating (1996) advocated that best practice involved bringing therapies to the early childhood classroom. In contrast to that, Graham and Bryant (1993) found that most therapies provided to early childhood students are conducted in resource rooms out of the general education classroom. The interventions, services, and/or therapies provided to students with

exceptional educational needs in a general educational setting are a crucial aspect of inclusive educational practices (Peck, Furman, & Helmstetter, 1993).

There are various levels of inclusion and the term inclusion has been used in different ways. Over the past twenty years, several attempts have been made to define inclusion as well as other educational practices that serve students with exceptional educational needs, such as mainstreaming and integrated special education. These terms were developed based on the ratio of children with exceptional educational needs to typically developing children (Odom & Speltz, 1983). Bricker (1995) suggested that the term inclusion was commonly used in policy and practice; however, there was an inconsistency in how the term was applied: "Of particular concern is the fact that little empirical effort is invested in describing what is happening in the integrated environment" (p.192). Bricker also suggested that a description of what takes place in inclusive classrooms is crucial to have support from policy makers and administration to better implement inclusive environments.

The Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) issued a position statement in April, 2009, defining early childhood inclusion as:

the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports (p. 2).

Furthermore, DEC and NAEYC state, among many other recommendations, that federal and state accountability systems must be revised "to reflect both the need to increase the number of

children with disabilities enrolled in inclusive programs as well as to improve the quality and outcomes of inclusion" (p.2).

Practices Regarding Students with Exceptional Needs and Criticism of Inclusion

In an inclusive setting, children with exceptional educational needs are included in a classroom with their peers who are typically developing (Bredekamp, 2011). The public has been found to have mixed feelings about inclusion of children with exceptional educational needs in the classroom. Some people advocate for not having self-contained classrooms for students with exceptional educational needs; whereas, others are concerned with how inclusion will influence the education of the students who are typically developing (Stoiber et al., 1998).

A review of the literature conducted by Odom and Speltz (1983) revealed an inconsistency with terminology regarding "inclusive" educational practices used to describe how preschool programs were serving children with exceptional educational needs. There are different levels of inclusion such as co-ops, a self-contained special education program that serves a county, and self-contained classrooms, separate classrooms for individuals with exceptional educational needs within the same school. These different levels of inclusion and the variation of terminology have led to much confusion about the definition of inclusion. Odom and Speltz suggest that the term "integrated" be used for high proportions of children with exceptional needs in a group. "Mainstreamed" and "mixed groups" were terms suggested for programs with low proportions. The researchers compiled a list of studies that describe the ratios of children with exceptional needs to typically developing peers and the labels used by the researchers of those studies. "Mainstream" was the term preferred by researchers when describing classrooms with up to 28% of students with exceptional educational needs. "Integrated" was the descriptor more frequently used for groups with a higher percentage or ratios. This review shows that terminology is differing and sometimes conflicting, offering various percentages for students with exceptional educational needs served in the classroom. This variation may be partially to blame for the confusion surrounding what the practices are as related to these different terms.

There are various practices concerning the delivery of services to children with exceptional needs. In a continuum from most restrictive to least restrictive environments these include co-ops, self-contained classrooms, pull out services/programs, mainstreaming, and inclusion. The continuum of educational practices available for students with exceptional educational needs varies based on which school district the child attends. Some school districts "provide only self-contained classes for mild and moderately mentally retarded children, resource rooms for learning disabled children, and itinerant speech therapists for children with communication problems" (Levine, Hummel, & Salzer, 1982, p.5); whereas, "others provide a variety of services and placement options to children who are severely and profoundly retarded, blind, deaf, orthopedically handicapped, and emotionally disturbed, as well as mildly learning disabled" (Levine et al, 1982, p.5). As can be seen, there is a wide range of options for educating children with exceptional educational needs even though fully inclusive settings have been argued to be best practice because they support the development of a healthy sense of belonging and membership, facilitate the development of positive social relationships and friendships, and offer opportunities for development and learning to reach full potential (DEC/NAEYC, 2009).

However, there are some criticisms of the practice of inclusion. A criticism of inclusion is that children with behavior disorders may injure or exhibit aggression, putting themselves or other children at risk; in addition, children with self-stimulatory behaviors can be disruptive to the class (Deiner, 2010). Other children with health impairments may have a medical problem that puts them at a risk for a medical emergency (Deiner, 2010).

Theoretical Framework

Despite established legal rights of individuals with exceptional educational needs and the advocacy that takes place through professional associations' position statements, for inclusion to be successful, school personnel must display a positive attitude and commitment to inclusion (Praisner, 2003). According to Stoiber et al. (1998), teachers' beliefs and attitudes regarding inclusion are reflected in their classrooms, essentially how teachers adapt instructional strategies,

choose materials, manage classroom behavior, respond to students, among others. Furthermore, parents, administrators, and other related service staff must buy into the concept of full inclusion (Monahan, et al., 1996). Research has found that when a person holds a positive attitude toward individuals with exceptional educational needs, that person is better able to incorporate them in a group (Coles & Scior, 2012). Monahan, et al. (1996) reported, based on 342 surveys from general education teachers throughout South Carolina that 67% of general education teachers prefer for students to go to the special education classroom rather than having special education teachers come to the regular education classroom to provide services, as required for full inclusion to take place. Furthermore, Monahan and colleagues state that "according to 72% of the respondents, inclusion of students with special needs will not succeed because of too much resistance from regular education teachers" (p.317). The researchers attributed this lack of support to regular education teachers is lack of instructional skills and educational backgrounds to teach students with special needs.

Teachers' fears, values, beliefs, and perceived inadequacies are all very influential in the way they respond to children with exceptional educational needs. Attitudes are critical to the success or failure of inclusion (Ross-Hill, 2009). Social learning theory provides a lens for understanding the impact of teachers' beliefs in their practice. This theoretical framework proposed by Bandura (1977) has three core concepts: people can learn through observation, internal thoughts and cognitions play a role on how individuals behave, and learning does not mean that it will result in a change in behavior. Bandura (1994) proposed that these beliefs that individuals hold, whether perceived or real, affect life decisions, motivation levels, how well they function, and how well they overcome adversity and deal with stress. In other words, social learning theory suggests that individuals' performance is influenced by how they view their ability to handle life events.

Beliefs and Attitudes

An attitude is a paradigm of judgment toward a topic, item, or circumstance; it determines the behavior intended for that topic of interest (Kersh, 2011; Scior, 2011). The attitude a person holds on a matter can often predict the way that person will respond to the situation including those with individuals with exceptional educational needs. In other words, our values and beliefs delineate our inclusion practice; in turn, our practice influences future values and beliefs (Odom, et al., 1996).

Factors that affect general beliefs and attitudes. There are several factors that affect beliefs and attitudes. The main factors examined include knowledge based on experience, knowledge based on education, and the context/setting of the topic.

Knowledge based on experience with topic. "Attitudes form directly as a result of experience. They may emerge due to direct personal experience, or they may result from observation" (Cherry, 2013, p. 1). In short, our experiences shape our beliefs and attitudes in both positive and negative ways.

Knowledge from academic training: level of education. As people acquire knowledge, they develop attitudes to help sort and understand the information.

Setting. "Social roles and social norms can have a strong influence on attitudes. Social roles relate to how people are expected to behave in a particular role or context. Social norms involve society's rules for what behaviors are considered appropriate" (Cherry, 2013, p.2). Setting is the context in which people form their beliefs and attitudes. Setting plays a crucial role because setting determines the social norms required for that situation.

Beliefs and attitudes of teachers

Factors that affect teachers' beliefs and attitudes. Early childhood teachers' feelings about inclusion of children with exceptional educational needs were found to be associated with educational level, length of experience, and background training (Stoiber, et al., 1998). Specifically, researchers found that teachers with more experience indicate a more positive attitude toward inclusion of children with exceptional educational needs than teachers with less experience.

Knowledge: based on experience working with children with exceptional educational needs. Janney, et al. (1995) found that general education teachers' attitudes towards inclusion of students with exceptional educational needs were influenced by their experience teaching students of that population:

Already wary of reforms and overloaded with work, general education teachers' initial balancing of the anticipated high cost of integration against its uncertain benefit created hesitation or resistance. Following their implementation experiences, teachers re-evaluated the balance between the cost of teachers' time and energy as compared to the benefit for students, and judged the integration effort successful (p.436).

In contrast, Leyser, Kapperman, and Keller (1994) indicated that teachers with 14 years or fewer of experience had more positive attitudes toward inclusion than those with more than 14 years of experience, though this relationship was not necessarily significant. However, the researchers found that teachers who had extensive experience with students with exceptional educational needs exhibited more positive attitudes towards inclusion than teachers with little or no experience. These findings show that teachers with experience teaching a larger number of students with exceptional educational needs expressed more positive attitudes regarding the practice of inclusion and that more experience teaching does not equal a more positive attitude toward inclusion.

Similarly, LeRoy and Simpson (1996) conducted a study that examined if the attitudes of Michigan teachers regarding inclusion of children with exceptional educational needs changed over a three year period; in that three year period, the teachers gained experience teaching in an inclusive classroom. LeRoy and Simpson (1996) found that as teachers' experience with children with exceptional educational needs increased, their confidence in their ability to effectively teach those children increased as well. Their findings were also reflected

by the Villa, Thousand, Meyers, and Nevin (1996) study that found that teacher commitment to including children with exceptional educational needs in their classrooms increased after they had completed a successful year and understood the practices and skills needed to implement inclusive practices.

Knowledge from academic training: level of education. A Lieber, Capell, Sandall, Wolfberg, Horn, and Beckman (1998) study examined the beliefs of 29 preschool teachers who worked in 14 different schools. The teachers all identified their programs as being inclusive to students with exceptional educational needs but demonstrated different educational approaches when it came to serving students with these needs. This study found no evidence of a relationship between teachers' levels of education and their beliefs and practices regarding inclusion of children with exceptional educational needs.

For example, the approach of master's level teachers in one program was to present undifferentiated instruction to the group and minimize children's differences. In contrast, in another program staffed by a teacher with an associate's degree, instruction was differentiated based on children's needs (Lieber et al., 1998, p.101).

It seems from studies to date, the teachers' levels of education had little to no effect on their beliefs and attitudes toward inclusion.

Educational setting tied to beliefs and attitudes. In addition to beliefs and attitudes formed by knowledge and experience, a few researchers have found that the group characteristics, specifically the ratio of students with exceptional educational needs to typically developing children, may have an influence on teachers' attitudes towards inclusion. A study by Hestenes, Cassidy, Shim and Hedge (2008) found that "teachers in inclusive classrooms had higher quality and more appropriate interactions with all children than did teachers from noninclusive classrooms" (p. 519).

Atiles et al. (2012) surveyed 165 pre-service teachers to examine impact of field experiences on pre-service teachers' efficacy regarding their work with children with exceptional educational needs. The researchers found that inclusive field experiences were positively correlated to participants' sense of efficacy. More specifically, they found that classrooms with higher ratios of children with exceptional needs to typically developing peers provided preservice teachers with more opportunities to develop a positive sense of efficacy.

Number of children with disabilities was also a variable in a study by Buchanan, Burts, Bidner, White and Chalesworth (1998) that looked at 277 classroom teachers of 1st, 2nd, and 3rd grade and the characteristics that were related to reported beliefs. Specifically, they were looking for variables that related to developmentally appropriate practice as measured by The Primary Teacher's Beliefs and Practices Survey. Number of students with disabilities was one of the classroom characteristics they examined. Their work was based on the assumption that inclusion of young children with exceptional learning needs may facilitate more developmentally appropriate practice because the need to follow and IEP would heighten the importance of students' individual differences. They found that teachers with lower ratios of students with exceptional educational needs to typically developing children reported utilizing more inappropriate practices than those teachers with a higher ratio. In their attempt to explain the causality of the relationship between number of children with disabilities and developmentally appropriate practice, the researchers suggested that it could be due to additional classroom resources, such as an aide, and the impact in the belief that developmentally appropriate practice is possible.

Higher ratios of children with exceptional educational needs are related to the development of more positive attitudes of pre-service teachers regarding inclusion (Atiles, et al., 2012). Though uncertain about the causality, classrooms with a higher ratio of children with exceptional educational needs to their typically developing peers, have reported the use of more developmentally appropriate practices (Buchanan, et al., 1998). While the terminology to

describe educational practices related to services for children with exceptional educational needs varies, there seems to be a preference for the use of mainstreaming for lower ratios, identified Odom and Speltz (1983) as 28% or less, and integration for programs with higher ratios.

A 1998 study by Lieber, Capell, Sandall, Wolfberg, Horn, and Beckman (1998) found that teachers' beliefs may be impacted by the type of setting where they teach. Therefore, it is important to examine what the attitudes of teachers who teach students with exceptional educational needs through various educational practices. The practices examined include: co-ops, self-contained, pull-out programs, mainstreaming, and inclusive. The attitudes of teachers will be examined from the most restrictive educational practices for students with exceptional educational needs to the least restrictive.

Experience teaching in co-op's/self-contained special education classrooms. A 2011 study by Recchia and Puig examined the attitudes of fifteen pre-service teachers, who were working on a dual-certification in Early Childhood Special Education and Early Childhood Education; these pre-service teachers were placed in a self-contained special education classroom serving children from birth to second grade for a full semester. The pre-service teachers reported finding value in their experience in the self-contained special education program. It allowed them the opportunity to work on part of a team that served students with various exceptional educational needs. These pre-service teachers felt that their experience provided them with access to the support needed to serve students with "more severe and complex disabilities" (Recchia & Puig, 2011, p.149). These pre-service teachers reported having a better understanding of terminology regarding individuals with exceptional educational needs, how to use assessments, and how to implement services mandated on an IEP after gaining experience in a self-contained special education class. Furthermore, after having experience in a self-contained special education classroom, these pre-service teachers felt that they had better "links between assessment and intervention, including the active use of IEP documents as learning tools" (Recchia & Puig, 2011, p.149).

Experience teaching in mainstream/pull-out services in early childhood programs. Center and Ward (1987) found that teachers in the primary grades demonstrated more positive attitudes of integration when their school did not have a self-contained classroom attached to their school. However, a Forlin (1995) study found that the attitudes of policy makers regarding inclusion were more favorable of the practice of inclusion and that coping with children with and without exceptional educational needs in the mainstream would be equal; he implied that teachers with experience of a child being mainstreamed into their class may have a less favorable attitude toward the practice of inclusion due to the stress of their experience coping with students with exceptional educational needs. Forlin (1995) compared the attitudes among special education teachers, resource room teachers, and general education teachers and found that special education teachers had more positive attitudes regarding the inclusion of students with exceptional educational needs in their classroom than general education teachers.

Many educators [in mainstream settings] want fewer children per adult so they can have the opportunity to individualize programming and respond to each child's needs. The assumption is that including children with disabilities will increase the time educators spent in collaboration, planning, and carrying out plans. Adult-child ratios, like many other aspects of inclusion, can be affected in surprising ways, and may result in requiring different skills (Deiner, 2010, p.16).

Experience teaching in higher ratio inclusive settings. The Lieber, et al. study (1998) previously discussed found that while teachers in the inclusive setting all believed that inclusive educational practices were beneficial to children with exceptional educational needs this belief varied between teachers. For example, "for some teachers that meant minimizing differences by ignoring them, for others it meant dealing with children's questions as they arose, and for others, differences were to be highlighted and respected" (Lieber, et al.,1998, p. 100). Furthermore, the belief that children would benefit from interaction with typically developing peers varied as some teachers believed that "simply putting children in proximity" would benefit the child where was

others felt that the teacher needed to facilitate interaction (Lieber, et al., 1998, p. 100). This expanded upon the findings from the Minke, Bear, Deemer, and Griffin (1996) study, which found that teachers in inclusive classrooms settings that involved co-teaching by a regular teacher and any necessary special education teachers, reported positive attitudes regarding inclusion and high levels of self-efficacy, capability, and fulfillment.

Summary

In the literature review, a history of key legislation and practices related to the education of children with exceptional needs was presented. Literature reflecting the relationship of teachers' educational level and experience working with children with exceptional needs was discussed in relation to beliefs and attitudes. Finally, a look at terminology used, and impact of ratios of children with exceptional needs to typically developing peers were offered.

CHAPTER III

METHODOLOGY

The purpose of this research was to determine if early childhood teachers in an inclusive setting with a high ratio of children with exceptional educational needs to typically developing children differ in their attitudes toward inclusion from teachers in inclusive settings with a lower ratio. In addition, this study investigated the relationship between teachers' level of education and years of experience teaching in early childhood classrooms with attitudes towards inclusion.

Research Questions

- Does the classroom setting characterized by a high ratio of children with exceptional learning needs to typically developing peers relate to teachers' attitudes toward inclusion?
- 2. Is there a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and/or is there a difference between the attitudes of teachers regarding inclusion and years of teaching experience?

Participants

Thirty-eight pre – Kindergarten through third grade teachers from the northwest region of a Midwestern state were asked to participate in research about the practice of inclusion in early

childhood classrooms. Thirty of the teachers who were invited to participate worked in various public school districts with a low ratio of students with exceptional educational needs. Eight of the teachers who were invited to participate worked at a child development laboratory that has a high ratio of students with exceptional educational needs. Of the 38 teachers who were invited to participate, thirty-six teachers completed the "Demographic Questionnaire" and the "My Thinking About Inclusion Scale." Of the 36 participants, 29 were public school teachers and seven were teachers at child development laboratory. Based on Odom and Speltz (1983), discussion of terminology used in the literature regarding special education, lower ratios will be utilized to describe classrooms with 28% or fewer children with exceptional educational needs and 29% or more will characterize programs with higher ratios.

Sampling Procedures

The sampling procedure was one of convenience. For purposes of data analysis, data were divided into two groups. The data from "Group 1", the 29 early childhood teachers from across the northwest region of the Midwestern state, were participating in a professional development program during the summer of 2011 when they were invited to respond to the "Demographic Questionnaire" and the "My Thinking About Inclusion Scale." The data from "Group 2" came from responses to the same questionnaires collected from volunteer teachers who worked at a university Child Development Laboratory during the spring of 2013. IRB approved data collection protocols were followed (See Appendix A for copy of IRB approval letter).

Measures

Demographic Questionnaire. The "Demographic Questionnaire" that the early childhood teachers completed can be found in Appendix B. Data collected from participants asked them to report the number of students they had in their class during the academic year preceding the data collection. To determine average number of children with exceptional learning needs, key personnel in the participating public school districts were informally contacted via e-

mail. They were asked via e-mail "If you have kids with disabilities in your classroom—what would you say is the average number you usually have in one class, do not include English Language learners— just kids with IEPs (may be going to be on EIP)." The responses were used to calculate the ratios presented in Table 1. A participant from Rural school district 1 reported that "[school district name] has one student that is at the Co-op full time & then a couple that go for part of the day (like 5/7 of the day), but most are mainstreamed with the resource room available as needed. I think there are a few that are pulled out on a regular basis for certain subjects. In pre-k I do not usually have IEP students, however I did have one student pulled out for speech last year" (N. Gaisford, personal communication, July 2, 2013). While Suburban school district 1 reported "4-5 students on IEP IS THE AVERAGE. Including speech too" (D. McCune, personal communication, July 2, 2013). The child development laboratory was contacted by phone and reported specifically, that they served 20 students with exceptional needs out of 69 during the 2012-2013 school year (K. Clark, personal communication, July 3, 2013).

Table 1

	Average number of children with exceptional learning needs X number of participants	Number of students served by participants in this study	Percentage	
Rural School District 1	1	15	6.6%	
Rural School District 2	4.5 X 2 teachers	43	20.9%	
Rural School District 3	4.5 X 3 teachers	62	21.7%	
Rural School District 4	4.5 X 5 teachers	102	22.1%	
Rural School District 5	4.5 X 4 teachers	73	24.7%	
Suburban School District 1	4.5X 11 teachers	251	19.7%	
Urban School District 1	English Language Learner Teacher	N/A	N/A	
Child Development Laboratory	20 total for 7 teachers	69	29%	

Ratio of Children with Exceptional Needs to Typically Developing Peers by School District

Note. One teacher from Rural School District 2 not included as participant was the schools' special education teacher. One teacher at Urban School District 1 not included as participant was the schools' ELL teacher.

All of the participants in this study were female and spoke English as their first language. Thirty-four of the participants identified themselves as Caucasian/White, one participant was multiethnic, and one participant marked her ethnicity as "Other". Twenty-seven of the teachers had a Bachelors' degree as their highest level of education and nine had Master's degrees. Eleven participants were Nationally Board Certified and the other 25 were not. Table 2 summarizes the participants' number of years of teaching experience. For purposes of this research participants are categorized as "Novice" (zero to five years of experience) and "Experienced" (six or more years of teaching experience) based on Kim and Roth (2011) definitions.

Table 2

Participants' Years of Teaching Experience

Years of teaching Experience	0-5	6-9	10-14	15-19	20-24	25-29	30-34	35+
Number of Participants	12	8	6	2	2	2	3	1

Participants were asked to check all applicable IEP categories of children they have

served in their present school district. Responses are summarized in Table 3.

Table 3

	Rural District 1	Rural District 2	Rural District 3	Rural District 4	Rural District 5	Suburban District 1	Child Development Laboratory
Autism		1	1	1	1	5	7
Deaf-blindness							
Deafness			_		1	2	2
Developmental	1	1	2	5	3	11	7
Delay				•	•	-	4
Emotional			1	2	2	7	4
disturbance				3	2	5	4
Hearing impairment				3	Z	5	4
Intellectual				3	2	7	5
Disability/				5	2	/	5
Mental							
retardation							
Multiple				2		3	5
disabilities							
Orthopedic				5	1	3	3
Impairment							
Other health					2	3	2
impairments							
Specific		1	2	4	2	5	2
learning							
disability			2		•	0	-
Speech or		1	3	4	2	9	7
language							
impairment Traumatic or				3		4	3
brain injury				3		4	3
Visual				2	1	4	5
impairment,				2	1	4	5
including							
blindness							

Number of Participants That Reported Working with Children in the Following Categories

Note. Rural District 2 had a special education teacher not included on above table. That participant reported having had experience working with children who had Autism, developmental delays, emotional disturbance, intellectual disabilities/mental retardation, multiple disabilities, orthopedic impairments, other health impairments, specific learning disability, speech or language impairment, and visual impairment, including blindness. Urban District 1 participant did not respond to questionnaire.

The last two questions in the demographic questionnaire related to services provided at the participants' schools. Question number 7 asked, "Have you ever had a student with an intellectual and/or developmental disability (e.g., autism, cerebral palsy, Down syndrome) mainstreamed in your class?" The responses to this question demonstrated that some participants did not understand the question or knew the terminology to properly respond. For example, one participant responded "Autism, down syndrome, hydrocephalus." Rural school district 1 reported "once." Rural school district 2 had 2 participants reply "no" and the third participant stated she was the special education teacher. The researcher wonders where the children the special education teacher served came from, if not from the other participants' classrooms. There were two negative responses and one positive from Rural school district 3. Rural district 4 reported one "no" 3 "yes," and one who stated "Not 100% of the time" therefore indicating lack of understanding of the term mainstream. Rural schools district 5 had 2 "no" and 2 "yes." Nine out of 11 participants in the suburban school district 1 responded positively. The participant from Urban school district 1 did not respond to this question. The participants from the child development laboratory all responded positively, one added "30% of my current class."

Question number 8 asked "Does your school have a self-contained special education classroom? If so do your students interact or interface with students in that class on a daily or weekly basis?" Rural school district 1 reported that her district has a county wide co-op. The Rural school district 2 teachers, from the same county but different district, reported that they do not have a self-contained special education classroom. Rural school district 3 teachers reported "Has self-contained classroom but they don't interact." While another participant from the same school responded, "No. A district one not at my school. No interaction." And a third teacher from the same school stated "No." Teachers from Rural school district 4 had inconsistent responses, "Yes, but no child is in special ed. all day," "Yes self contained. Yes students interact," "Our school does have a self-contained special education classroom, but the most of the students are

mainstream and spend about 30 to 45 minutes per day in the special education room for individualized help," "Yes we have a self-contained special education classroom, but I have never had any children who stayed in the special ed. classroom," and "Yes. Daily Basis." The Rural school district 5 had two teachers respond that their school did not have a self-contained classroom, while two other participants reported the opposite, "Our ID special ed. classroom is self contained. Our LD special ed. classroom is not" and "Yes we have a self contained classroom for special education we interact on a regular basis." The participants from the child development laboratory had 6 negative reports to the existence of a self-contained special education classroom and one "Yes these students interact fully on daily basis." Like responses to question 7, responses to question 8 showed a lack of understanding of the term self-contained, and even lack of knowledge of their school practices, having or not a self-contained classroom.

My Thinking About Inclusion Scale. In order to measure teachers' beliefs concerning early childhood inclusion, the "My Thinking About Inclusion Scale" by Stoiber et al. (1998) was utilized. The instrument is comprised of twenty-eight questions related to inclusion of children with exceptional educational needs. The questions were categorized into three subscales: Core Perspectives, Expected Outcomes, and Classroom Practices. According to Stoiber et al. (1998), Core Perspectives of practitioners reflect a positive attitude towards inclusion of individuals with intellectual and developmental disabilities and deem it to be best practice. Sample questions from this subscale are: 1) Students with special needs have the right to be educated in the same classroom as typically developing students, and 2) Children with exceptional education needs should be given every opportunity to function in an integrated classroom.

The second subscale "Expected Outcomes" identified that practitioners' positive expectations for their students learning are linked to higher student achievement; the researchers found that teachers' attitudes regarding inclusion were linked to their knowledge and experience. Sample questions from this subscale are: 1) Children with exceptional needs are likely to be isolated by typically developing students in inclusive classrooms (reversed coded), and 2)

Children with special needs in inclusive classrooms develop a better self-concept than in a selfcontained classroom.

Finally the last subscale "Classroom Practices" reflects teachers' everyday practices as influenced by inclusion. Essentially, how teachers adapt instructional strategies, choose materials, manage classroom behavior, and respond to students, among others. Sample questions from this subscale are: 1) The behaviors of students with special needs require significantly more teacherdirected attention than those of typically developing children (reversed coded), and 2) Children with exceptional needs monopolize teachers' time (reversed coded).

The Likert style scale asked for responses ranging from (1) strongly accept to (5) strongly reject. Thus the range of total scores is 28- 140. It is important to note that items 2, 3, 7, 8, 9, 14, 15, 19, 22, 23, 24, 25, 26, and 28 required reverse coding. Reliability information concerning the "My Thinking About Inclusion Scale" has been published (Stoiber et al., 1998). For the total scale there was a consistency of a 0.91. Questions 1 through 12 comprised the Core Perspective subscale and yielded a coefficient alpha of 0.80. Questions 13 through 23 comprised the Expected Outcomes subscale with a coefficient alpha of 0.85. Finally, Questions 24 through 28 addressed the Classroom Practices subscale with a coefficient alpha of 0.64. Thus, this scale is considered to be reliable. The authors of the scale reported that validity was established through a factor analysis of the scale scores; each of the domains loaded on their own factors (Stoiber et al., 1998).

Analysis

Statistical analyses were conducted to address the two Null hypotheses that correspond to the research questions.

 H_0 1: There is not a difference between the attitudes of teachers in classrooms settings characterized by a high ratio of children with exceptional educational needs to typically developing peers to teachers in classrooms with low ratios.

 H_0 2: There is not a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and there is not a difference between attitudes of teachers regarding inclusion and years of teaching experience.

Due to the difference in group size between the two groups; teachers in lower ratio settings N = 29 and teachers in higher ratio settings N = 7, one cannot assume that the mean distribution of scores between both groups is accurate. Furthermore, the questionnaire contained more questions than participants in Group 2. To compare the groups as two independent samples, a non-parametric statistic test, the Mann-Whitney U test, was used; the alpha was set at .05. According to Huck (2012), "If the two comparison groups truly do differ from each other, the Mann-Whitney U test (as compared to the median test) is less likely to produce a Type II error" (Huck, 2012, p.443). A Type II error would mean that one accepts a null hypothesis that is actually false. In order to protect from Type II errors, the Mann-Whitney U test uses more information from the data by comparing the variables with the groups combined and then separately (Huck, 2012).

Utilizing SPSS, a sum of the "My Thinking About Inclusion" scores were calculated for participants in each group. The SPSS program calculated a value called U. Based on this value, the computer "can then derive a p that includes how likely it is, under H₀ to have two samples that differ as much or more than do the ones actually in the study" (Huck, 2012, p.443). A small p indicates that the H₀ is unlikely to be true. Therefore, the SPSS program yielded a p value utilized to accept or reject the H₀ 1 regarding a difference between the attitudes of teachers in the two sample groups, and H₀ 2 regarding the relationship between the attitudes of teachers and teachers' level of education and years of experience.

CHAPTER IV

RESULTS

Introduction of Results

In the results section, each one of the research questions will be addressed, as well as the conclusions derived from the data analysis.

- Does the classroom setting characterized by a high ratio of children with exceptional learning needs to typically developing peers relate to teachers' attitudes toward inclusion?
- 2. Is there a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and/or is there a difference between the attitudes of teachers regarding inclusion and years of teaching experience?

Research Question One

In order to determine whether the classroom setting characterized by a high ratio of children with exceptional educational needs to typically developing peers relate to teachers' attitudes toward inclusion, participants were divided into two groups: Group 1 (up to 28% of children with exceptional needs) and Group 2 (29% or higher of children with exceptional needs),

the group means of Group 1 and Group 2 for each item on the "My Thinking About Inclusion Scale" were calculated.

Due to the difference in group size between the two groups, teachers in lower ratio settings N = 29 and teachers in higher ratio settings N =7, one cannot assume that the mean distribution of scores between both groups is accurate. Furthermore, the questionnaire contained more questions than participants in Group 2. To compare the groups as two independent samples, a non-parametric statistic test, the Mann-Whitney U test, was used; the alpha was set at .05. Participants' scores on the "My Thinking About Inclusion Scale" were used to run the Mann-Whitney U test in SPSS. From this data, there was not a statistically significant difference in the mean ranks of Group 1 (18.17) and Group 2 (19.86) on the participants' total scores on the "My Thinking About Inclusion Scale", U = 111.000, p = .704, r = .063. It can be concluded that Null Hypothesis 1 needs to be retained as the statistical test yielded a p = .704 which is greater than the significance level of .05. Thus, there was not a statistically significant difference between the sum of scores on the "My Thinking About Inclusion Scale" for Groups 1 and 2.

While not statistically significant, it is interesting to see the differences in the mean scores between groups for each question because certain questions reflected a difference in mean scores whereas the overall the overall scores did not. Figures 1-4 present graphs providing a visual comparison of the scores. Following will be a discussion of Figures 1-4 addressing the three subscales.

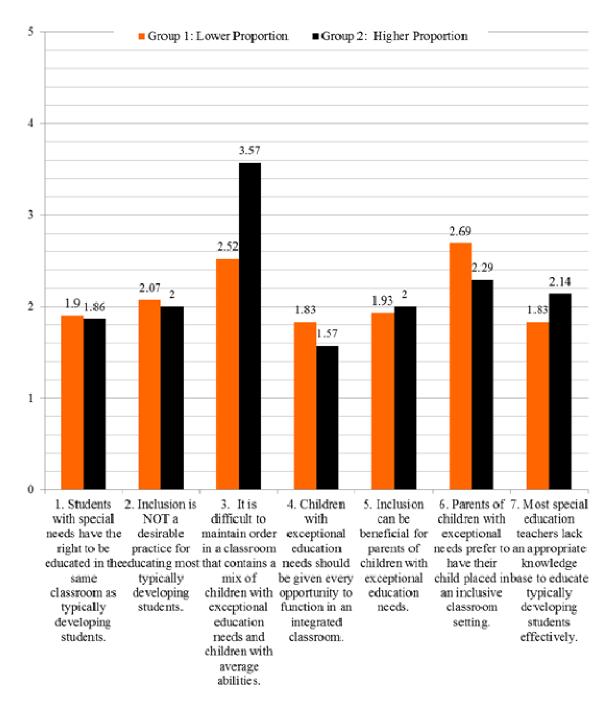


Figure 1. Items 1-7 mean scores of the "My Thinking About Inclusion Scale", comparing Group 1, participants who worked in classrooms with 28% or less children with exceptional educational needs, and Group 2 participants who worked in classrooms with 29% or higher children with exceptional educational needs.

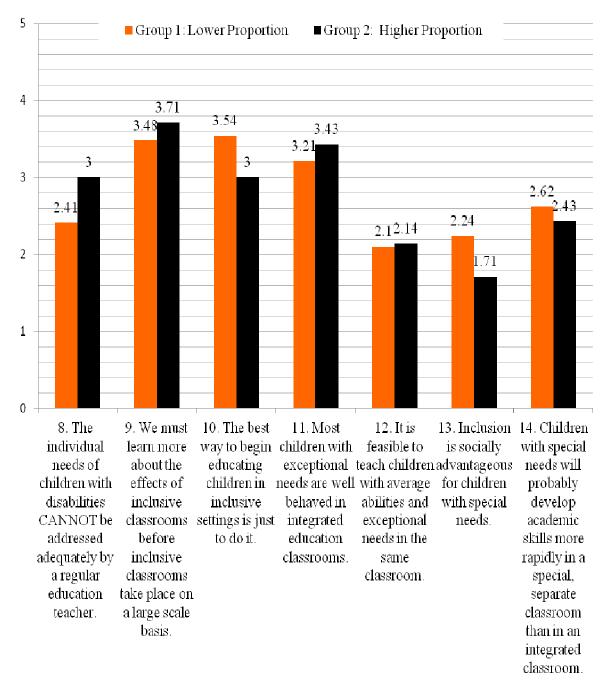


Figure 2. Items 8-14 mean scores of the "My Thinking About Inclusion Scale", comparing Group 1, participants who worked in classrooms with 28% or less children with exceptional educational needs, and Group 2 participants who worked in classrooms with 29% or higher children with exceptional educational needs.

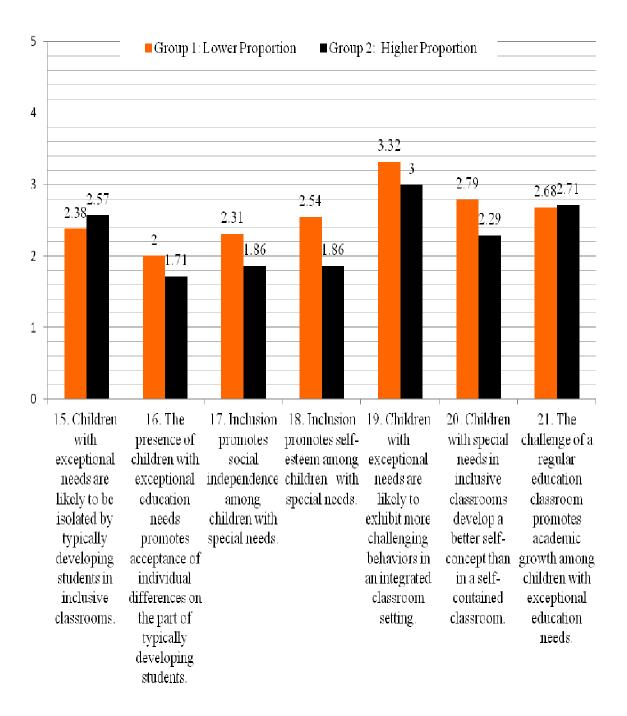


Figure 3. Items 15-21 mean scores of the "My Thinking About Inclusion Scale", comparing Group 1, participants who worked in classrooms with 28% or less children with exceptional educational needs, and Group 2 participants who worked in classrooms with 29% or higher children with exceptional educational needs.

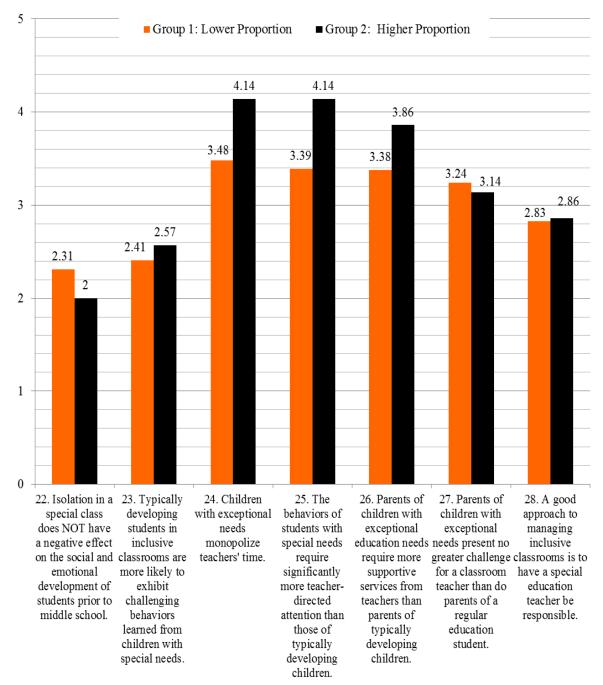


Figure 4. Items 22-28 mean scores of the "My Thinking About Inclusion Scale", comparing Group 1, participants who worked in classrooms with 28% or less children with exceptional educational needs, and Group 2 participants who worked in classrooms with 29% or higher children with exceptional educational needs.

Core Perspectives subscale of the "My Thinking About Inclusion Scale." This subscale's questions reflect a positive attitude towards inclusion of children with exceptional educational needs and deem inclusion to be best practice. Overall, participants in Group 2 scored higher (M = 2.56) than Group 1 (M = 2.46). This subscale had five questions (1, 2, 4, 6, and 10), where the mean score of Group 1 was slightly higher (though not statistically significant) than Group 2. The subscale had seven questions (3, 5, 7, 8, 9, 11, and 12) where the mean score of Group 1 was slightly higher (though not statistically significant) than Group 2 was slightly higher (though not statistically significant) than that of Group 1. The one question in this subscale, and the entire survey, with more than a one point difference of scores between Group 1 and Group 2 was Question 3 which states, "It is difficult to maintain order in a classroom that contains a mix of children with exceptional education needs and children with average abilities." The mean score of teachers in a setting with a higher proportion of children with exceptional educational needs (29% or higher) was 3.57 which is 1.05 points higher than the mean score of teachers in classrooms that had a 28% or less children with exceptional educational needs affirmed that it is indeed harder to maintain order in an inclusive classroom.

Expected Outcomes subscale of the "My Thinking About Inclusion Scale". This subscale is comprised of Questions 13-23, which reflect the practitioners' positive expectations for their students' learning, which is linked to higher student achievement. Overall, participants in Group 1 scored higher (M = 2.51) than Group 2 (M = 2.25). This subscale had three questions (15, 21, and 23), where the mean score of Group 1 was slightly higher (though not statistically significant) than Group 2. This subscale had eight questions (13, 14, 16, 17, 18, 19, 20, and 22) where the mean score of Group 2 was slightly higher (though not statistically significant) than that of Group 1. Keeping in mind that the statistical analysis did not find a significant difference between the two groups, it is interesting to note that as higher scores are associated with less positive attitudes toward the full inclusion of children with exceptional educational needs, the results in this portion of the scale were consistent with the reviewed literature. The one question

from that subscale that had a mean score for Group 1(M = 2.54) that was slightly higher (though not significant) than Group 2 (M = 1.86) was Question 18, which states "Inclusion promotes selfesteem among children with special needs." Thus, the teachers serving more children with exceptional educational needs affirmed that inclusion is a positive experience for children with those needs, as it promotes higher self-esteem. It is also important to note that none of these questions had a difference in mean scores greater than .68. The biggest differences between Group 1's and Group 2's mean scores in this subscale were found in Questions 17, 18, and 19. These questions related to the social and emotional development of children with exceptional educational needs in an inclusive environment. To summarize, Group 2 reported having less positive expected outcomes.

Classroom Practices subscale of the "My Thinking About Inclusion Scale." The Classroom Practices subscale was primarily focused on teachers' attitudes toward the classroom practice of including children with exceptional educational needs. The mean score of Group 2 (M = 3.63) was higher than the mean score of Group 1 (M = 3.27), though not statistically significant. The results from this section were the most surprising; on all but one question, the responses from Group 2 participants (higher percentage of children with exceptional educational needs) scored higher. On Question 27, "Parents of children with exceptional needs present no greater challenge for a classroom teacher than do parents of a regular education student," the mean score of Group 1 was 3.24, while the mean for Group 2 was 3.14. The difference in scores was only .10 between the groups on this question and was not significant. The responses on Questions 24, 25, and 26 were also surprising. These questions were about children with exceptional learning needs monopolizing the teachers time and requiring more teacher-directed attention. On these three questions, the mean score of Group 2 was between .5 and .7 higher than Group 1. It make sense that teachers with a higher ratio of students with exceptional educational needs reported that these students take more of the teachers' time and attention as they teach more students with exceptional educational needs. Group 2 reported that students with exceptional

educational needs require more supportive services, which is logical as they experience the coordination of the various services for the children in their classes. To summarize, teachers in the group with a higher ratio of children with exceptional educational needs reported less positive attitudes towards the classroom practice of including children with exceptional educational needs

Research Question Two

To test $H_o 2$, is there a difference between the attitudes of teachers regarding inclusion and teachers' level of education and/or is there a difference between the attitudes of teachers regarding inclusion and years of teaching experience, two separate statistical tests were performed. The first test compared the teachers' total scores on the "My Thinking About Inclusion Scale" by two independent groups categorized by teachers' level of education. "Group A" included the teachers whose highest level of education was a Bachelor's degree. "Group B" included teachers who had completed a Master's degree.

To compare the groups, a non-parametric statistical test, the Mann-Whitney U test, was used; the alpha was set at .05. There was not a significant difference in the mean ranks of teachers in Group A (20.30) and Group B (13.11), U = 73.000, p = .076, r = -.296. It can be concluded, based on the data, that the first part of Null Hypothesis 2 needs to be retained as the statistical test yielded a p = .076 which is greater than the .05 significance level. Because of this result, there was not a statistically significant difference between scores on the "My Thinking About Inclusion Scale" between teachers in Group A (Bachelor's degree) and teachers in Group B (Masters' degree).

Table 4

Participants' Level of Education

Level of Education	Group A	Group B	
Number of Participants	27	9	

The second test compared the teachers' total score on the "My Thinking About Inclusion Scale" by two independent groups representing teachers' years of experience. The "Novice" group included teachers with zero to five years of teaching experience. The "Experienced" group included teachers with six or more years of teaching experience.

To compare the groups as two independent samples, a non-parametric statistic test, the Mann-Whitney U test, was used; the alpha was set at .05. There was not a significant deference in the mean ranks of teachers in the Novice group (14.54) and teachers in the Experienced group (20.48), U = 191.500, p = .110, r = .266. Based on the data, that the second part of Null Hypothesis 2 needs to be retained as the statistical test yielded a p = .110 which is greater than the .05 significance level. It can be concluded, based on the data, that there is not a statistically significant difference between the teachers in the Novice group and the Experienced group regarding their scores on the "My Thinking About Inclusion Scale."

Table 5

Participants' Years of Teaching Experience

Years of teaching Experience	Novice	Experienced
Number of Participants	12	24

CHAPTER V

DISCUSSION

The purpose of this research was to determine if early childhood teachers in an inclusive setting with a high ratio of children with exceptional educational needs to typically developing children differ in their attitudes toward inclusion from teachers in an inclusive setting with a lower ratio. In addition, this study investigated whether there is a difference between teachers' level of education and their attitudes towards inclusion, and/or between teachers' years of experience teaching in early childhood classrooms and their attitudes towards inclusion.

Both null hypotheses were retained:

 H_0 1: There is not a difference between the attitudes of teachers in classrooms settings characterized by a high ratio of children with exceptional educational needs to typically developing peers to teachers in classrooms with low ratios.

 H_0 2: There is not a difference between the attitudes of teachers regarding inclusion and teachers' level of education, and there is not a difference between attitudes of teachers regarding inclusion and years of teaching experience.

H₀ 1 – Overall Discussion

In this study, we used the Mann-Whitney U test, a non-parametric statistical test, to determine whether the hypotheses needed to be retained or rejected. The retention of H_0 1 is contradictory to previous studies that report that teachers' attitudes about inclusion are influenced by their experience teaching in an inclusive classroom (Janney et al., 1995; Leatherman & Niemeyer, 2005; LeRoy & Simpson, 1996). The discussion of subscales is presented in the order they stand in the questionnaire. The Core Perspectives subsection is first, the Expected Outcomes subsection is second, and then the Classroom Practices subsection is third.

Core perspective subscale results in relation to the ratio of children with exceptional educational needs. The results on this subscale were consistent with the studies in the literature review. The question, "It is difficult to maintain order in a classroom that contains a mix of children with exceptional education needs and children with average abilities", scored the most difference between the two groups (high and low percentage of children with exceptional educational needs). In lower-ratio inclusive settings, teachers may have one to four students who are mainstreamed into their class for part of the day (Odom and Speltz, 1983). As the ratio increases, the literature shows that management becomes more challenging. Teachers with experience in both self-contained special education settings and in inclusive settings have reported that the self-contained classroom was more challenging (Recchia & Puig, 2011).

Predictive outcomes subscale results in relation to the ratio of children with exceptional educational needs. Scores of the predictive outcomes subscale were higher for Group 1 (lower number of children with exceptional educational needs), indicating a less positive attitude towards inclusion, though these scores were not statistically significant. The two questions with the largest difference in mean scores were related to children with exceptional educational needs' social and emotional development. This is reflective of the Khochen and Radford (2012) study that found "participants expressed reservations about including all students especially those with social-emotional and behavioral difficulties" (p. 139). Previous research

supports that children with exceptional education needs have stronger social skills when they are served in an educational setting with their typically developing peers (Kwon, Elicker, & Kontos, 2011). Some studies have found that children with exceptional educational needs do not achieve the same social acceptance in the class as their peers without a delay or disability; however, the focus should not be on whether their social skills are at the same level as their typically developing peers but rather that they are developing those social skills (Odom, 2000).

Classroom practices subscale results in relation to the ratio of children with exceptional educational needs. Group 2 scored higher than Group 1 relating to teachers' time and attention spent with children with exceptional educational needs. The teachers in Group 2 have classrooms that include a higher ratio of children with exceptional educational needs. There are a wider variety of educational needs being served in classrooms that include a higher ratio of students with exceptional educational needs, which may be a reflection of how the teachers responded the way they did. Therefore, teachers in educational settings that serve a higher ratio of students with exceptional educational needs may be making more accommodations to meet the individual needs of their students.

However, Group 2 had lower scores for questions about parent-teacher interactions. Teachers from Group 2 are in a child development laboratory preschool setting (12 months – kindergarten), where parents are probably more involved, leading to more interactions between parents and teachers. Teachers from Group 1 teach in public elementary school settings; therefore, the children's age range expands to 3rd grade and the parents may not be as involved. At the child development laboratory, parents or guardians must bring their children into the building, type a code to enter the laboratory, sign their children in for the day, and drop off their belongings in their classrooms; at the end of the day the parents must come into the building, enter a code to access the laboratory, and sign their children out. Whereas in a public school, many parents drop their children off through a parent loop, car-pool, or send their children on a

bus. Children in a public school setting are not typically required to be signed in and out by parents/guardians at the beginning or end of the day.

The biggest difference found was on questions regarding teachers' time and attention focused on the students with exceptional education needs. The mean score from Group 2, the teachers in a higher ratio classroom setting, were slightly higher on these questions. The lower the score, the more positive view the teachers expressed toward inclusion of children with exceptional educational needs. Similarly a 2012 study by Hadjikakou1 and Mnasonos, discussed that positive attitudes about inclusion may be related to having less experience with it. For example, Avramidis and Norwich (2002) suggested "that school district staff who are more distant from students, such as administrators and advisors, express more positive attitudes to integration than those closer to the classroom context, the class teachers" (p.132). This outcome was however not consistent with some of the studies in the literature review that stated teachers in the inclusive settings have more positive attitudes, because it reported no statistical difference between the attitudes of teachers regarding inclusion from Group 1 and Group 2.

H_02 – Overall Discussion

In this study, we used the Mann-Whitney U test, a non-parametric statistical test, to determine if there was a significant difference between a) teachers' level of education and b) teachers' years of experience and their total score on the "My Thinking About Inclusion Scale." There are two parts of this hypothesis to discuss. Part one will include the relationship between teachers' level of education and total score on the "My Thinking About Inclusion Scale." Part two will include the findings for a relation between the length of teachers' experience and their total scores on the "My Thinking About Inclusion Scale."

H_o2 – Part 1

For teachers' level of education, teachers were classified into two groups. "Group A", included teachers who had completed a Bachelor's degree. "Group B", included teachers who had completed a Master's degree. No significant difference was found between teachers who had a

Bachelor's degree and teachers who had a Master's degree. This is consistent with the Lieber et. al (1998) study that found no evidence of a difference existing between teachers' beliefs and practices regarding inclusion of children with exceptional educational needs and level of education. Some teachers with a Bachelor's degree reported a more positive attitude regarding inclusion of students with exceptional educational needs; whereas, other teachers with a Bachelor's degree reported a less positive attitude regarding inclusion. The same was true for teachers with a Master's degree. Some teachers with a Master's degree reported a more positive attitude regarding inclusion; whereas, others reported a less positive attitude regarding inclusion.

$H_02 - Part 2$

For teachers' length of experience, teachers were classified into two groups. The "Novice" group, included teachers with zero to five years of teaching experience. The "Experienced" group, included teachers with six or more years of teaching experience. The current study findings of no difference between teachers' years of experience are inconsistent with the findings of the 1998 study by Stoiber et al., which reported that a significant relationship between teachers' attitudes toward inclusion and their years of teaching experience. The Stoiber et al. (1998) sample included early childhood practitioners of which "39 were special educators, 35 were regular educators, 35 were paraprofessionals, and 19 were support service personnel (i.e., school psychologists, speech and language therapists, occupational therapists, or administrators)" (p. 112). In contrast, the current study had 34 regular educators, 1 special education teacher, and 1 ELL (English language learner) teacher. Therefore the population of participants sampled for this study and the populations of participants for the Stoiber et al. (1998) study were not equivalent. One can argue that paraprofessionals and support service personnel may have very different attitudes toward inclusion due to their training and field of expertise.

Limitations

There are limitations that should be noted for future research. There were a few issues with the Demographic Questionnaire. First, the questions could have been worded more clearly and consistently. For example question 5 asks "How many years have you taught in a Pre K - 3 classrooms?" This question is specific to teaching experience in grades pre-K - 3, whereas other questions did not specify an age range. Question 6 asks "In your years of teaching in your current district, how many years have you had a child on an IEP in your class?" This question specifies teachers' experience in their current school district but does not account for teachers' experience outside of their district or with different age levels (i. e, teachers may move districts, or changed the age level they taught). Another issue is the formatting and specifics of the IEP Categories question; it asked for teachers to mark the categories of IEP that they had experience working with in their current or previous class (regardless of if the grade or district has changed from the previous questions); it might have provided more useful information if it asked teachers to mark the total number of students served for each category. To overcome these limitations, the researcher suggests a revision of the Demographic Questionnaire to ask teachers about either their total experience or their experience from the current school year. It might also be helpful for participants to be given a definition of the terms on the questionnaire prior to completing it to ensure that they understand the terminology and what the questions are asking.

Another limitation of this study includes unequal group size between the groups. Group 2 only accounted for 7 of the 36 teachers; these teachers teach in a higher-ratio, preschool – kindergarten setting and have two teachers per classroom and one or two teacher aids in each class. In contrast, Group 1 has 29 teachers, who serve children who are in kindergarten through third grade with one teacher per class and may or may not have a teacher's aide. The data also compares groups of teachers that are inconsistent with the age range of students taught. To account for this difference, the researcher suggests comparing teachers' attitudes regarding inclusion with an equivalent size sample of teachers in each group (high ratio and low ratio);

additionally, to use groups that compare teachers' attitudes regarding inclusion between two groups that teach the same age range of students.

Group 2 additionally has access to many services being a university based program (such as speech therapists, occupational therapists, etc.). Group 1, may have more limited access to these support personnel. For example, in the laboratory setting there are fewer classrooms and access to many university resources, whereas in the public school setting the special education teachers and support personnel may be shared between more teachers and relate to the amount of students being served in pullout programs.

It is also important to note that teachers in Group 2 teach in a setting that participates in research and serve as a model school for pre-service teachers. Each of classrooms in this setting has an observation booth connected; therefore, the teachers are not always aware of who may be watching their teaching. Parents of students, pre-service teachers, supervisors, and other individuals may be observing through a one-way mirror at any time. There may be more pressure on teachers in Group 2 to appropriately address the needs of all students in every interaction as they never know who is watching. Teachers in Group 1, may be more aware of when someone is watching their teaching as well as who is watching their teaching. To account for this difference, comparing teachers' attitudes regarding inclusion between teachers in settings high and low ratios of students with exceptional educational needs, the existence or non-existence of an observation booth attached to the classroom should be consistent between both groups.

Implications

Results of this study indicated no significant difference in teachers' attitudes towards inclusion based on a classroom setting characterized by a high ratio (29% or more) of children with exceptional learning needs to typically developing peers. In addition, this study revealed no relationship between the attitudes of teachers regarding inclusion and teachers' level of education and years of teaching experience. The study did reveal that there was a great deal of inconsistency in teachers' knowledge about the meaning of the terminology regarding inclusion and services for

exceptional learners. Thus, general education teachers could benefit from professional development regarding the terminology, benefits of inclusion, and strategies that may help. To best serve children with exceptional education needs it is crucial that teachers have an understanding of different methods of teaching students with exceptional educational needs and the terms used regarding various IEP categories.

The researcher still believes that the beliefs and attitudes of teachers regarding inclusion are important, even though there was not a significant relationship found between teachers' attitudes and classroom setting, level of education, and years of teaching experience. It has been found that teachers' beliefs and attitudes regarding students with exceptional educational needs greatly influence their classroom practices (Lieber et al., 1998). As previous studies have found that attitudes are more positive when teachers have more knowledge about serving individuals with exceptional educational needs; therefore, it is suggested that teachers are exposed to the terminology and how those terms are applied during their pre-service teacher training and/or professional development training.

As educational practices have become more inclusive of children with exceptional educational needs, early childhood teachers have taught more children with exceptional educational needs in their regular education classrooms. As beliefs and attitudes have been found to affect behavior, it is important to know how teachers feel about inclusion of students with exceptional educational needs, as those beliefs may affect their teaching practices. Furthermore, based on Bandura's social learning theory, teachers' performance is related to teachers' perceived ability to effectively implement inclusive practices. Therefore, if teachers believe that they are able to effectively teach students with exceptional educational needs in an inclusive setting then they will teach in a way that reflects their beliefs.

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APPENDICES

APENDIX A

IRB Approval

Oklahoma State University Institutional Review Board

Date:	Wednesday, May 15, 2013				
IRB Application No	HE1339				
Proposal Title:	Teacher Attitudes Toward Working with Children with Intellectual and Developmental Disabilities				
Reviewed and Processed as:	Exempt				
Status Recommend	led by Reviewer(s): Approved Protocol Expires: 5/14/2014				
Principal Investigator(s):					
Jodi Delgado	Julia T. Atiles				
924 Oakridge Dr	233 HES				
Stillwater, OK 7407	4 Stillwater, OK 74078				

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- Conduct this study exactly as it has been approved. Any modifications to the research protocol
 must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring
 approval may include changes to the title, PI, advisor, funding status or sponsor, subject population
 composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and
 consent/assent process or forms.
- Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
- Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
- Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

helie M. Kennian

Shelia Kennison, Chair Institutional Review Board

APENDIX B

Questionnaires

Demographic Questionnaire

Participant number

1. How many students do you have in your class?

2. What college or university did you receive your degree from?

- 3. What was your degree in?
- 4. When and how did you become certified in Early Childhood education?
- 5. How many years have you taught in a Pre K 3 classrooms?
- 6. In your years of teaching in your current district, how many years have you had a child on an IEP in your class?

Please check **all** applicable IDEA-IEP categories of these current or previous students in your class.

	Other health impairment		
Autism	(i.e., having limited strength,		
Deaf-blindness	vitality, or alertness that affects a		
Deafness	child's educational performance)		
Emotional disturbance	Specific learning		
Hearing impairment	disabilities		
Intellectual Disability/	Speech or language		
Mental retardation	impairment		
Multiple disabilities	Traumatic or brain injury		
Orthopedic impairment	Visual impairment,		
	including blindness		

- 7. Have you ever had a student with an intellectual and/or developmental disability (e.g., autism, cerebral palsy, down syndrome) mainstreamed in your class?
- 8. Does your school have a self-contained special education classroom? If so do your students interact or interface with students in that class on a daily or weekly basis?

MY THINKING ABOUT INCLUSION SCALE

Please indicate the degree to which you accept or reject each statement below by circling the appropriate number to the right of each statement.

	Strongly Accept	Agree	Undecided/ Neutral	Disagree	Strongly Reject
Students with special needs have the right to be educated in the same classroom as typically developing students.	1	2	3	4	5
Inclusion is NOT a desirable practice for educating most typically developing students.	1	2	3	4	5
It is difficult to maintain order in a classroom that contains a mix of children with exceptional education needs and children with average abilities.	1	2	3	4	5
Children with exceptional education needs should be given every opportunity to function in an integrated classroom.	1	2	3	4	5
Inclusion can be beneficial for parents of children with exceptional education needs.	1	2	3	4	5
Parents of children with exceptional needs prefer to have their child placed in an inclusive classroom setting.	1	2	3	4	5
Most special education teachers lack an appropriate knowledge base to educate typically developing students effectively.	1	2	3	4	5
The individual needs of children with disabilities CANNOT be addressed adequately by a regular education teacher.	1	2	3	4	5
We must learn more about the effects of inclusive classrooms before inclusive classrooms take place on a large scale basis.	1	2	3	4	5
The best way to begin educating children in inclusive settings is just to do it.	1	2	3	4	5
Most children with exceptional needs are well behaved in integrated education classrooms.	1	2	3	4	5

It is feasible to teach children with average abilities and exceptional needs in the same classroom.	1	2	3	4	5
Inclusion is socially advantageous for children with special needs.	1	2	3	4	5
Children with special needs will probably develop academic skills more rapidly in a special, separate classroom than in an integrated classroom.	1	2	3	4	5
Children with exceptional needs are likely to be isolated by typically developing students in inclusive classrooms.	1	2	3	4	5
The presence of children with exceptional education needs promotes acceptance of individual differences on the part of typically developing students.	1	2	3	4	5
Inclusion promotes social independence among children with special needs.	1	2	3	4	5
Inclusion promotes self-esteem among children with special needs.	1	2	3	4	5
Children with exceptional needs are likely to exhibit more challenging behaviors in an integrated classroom setting.	1	2	3	4	5
Children with special needs in inclusive classrooms develop a better self-concept than in a self- contained classroom.	1	2	3	4	5
The challenge of a regular education classroom promotes academic growth among children with exceptional education needs.	1	2	3	4	5
Isolation in a special class does NOT have a negative effect on the social and emotional development of students prior to middle school.	1	2	3	4	5
Typically developing students in inclusive classrooms are more likely to exhibit challenging behaviors learned from children with special needs.	1	2	3	4	5
Children with exceptional needs monopolize teachers' time.	1	2	3	4	5
The behaviors of students with special needs require significantly	1	2	3	4	5

more teacher-directed attention than those of typically developing children.					
Parents of children with exceptional education needs require more supportive services from teachers than parents of typically developing children.	1	2	3	4	5
Parents of children with exceptional needs present no greater challenge for a classroom teacher than do parents of a regular education student.	1	2	3	4	5
A good approach to managing inclusive classrooms is to have a special education teacher be responsible.	1	2	3	4	5

VITA

Jodi Michelle Delgado

Candidate for the Degree of

Master of Science

Thesis: EARLY CHILDHOOD TEACHER ATTITUDES REGARDING INCLUSION

Major Field: Human Development and Family Science – Early Childhood Education

Biographical:

Education:

Completed the requirements for the Master of Science in Human Development and Family Science – Early Childhood Education at Oklahoma State University, Stillwater, Oklahoma in July, 2013.

Completed the requirements for the Bachelor of Science in Human Sciences, Human Development and Family Science, with option in Early Childhood Education at Oklahoma State University, Stillwater, Oklahoma in December, 2011.

Experience:

- Graduate Research Assistant for Dr. Whitney Bailey in Human Sciences at Oklahoma State University in Stillwater, Oklahoma Summer 2013.
- Graduate Teaching Assistant for Academic Programs and Services for Human Sciences at Oklahoma State University August 2012- May 2013.
- Nanny and Structured Play Group Teacher for the Sternberg family in Stillwater, Oklahoma from Spring of 2012 - Present.
- Student Teacher and then Substitute Teacher at Oklahoma State University's Child Development Laboratory in Stillwater, Oklahoma from January 2011 - Present.
- Babysitter and nanny for several families in Stillwater, Oklahoma from May 2011- Present.

Professional Memberships:

Oklahoma State Alumni Association,

National Association for the Education of Young Children,

- Early Childhood Association of Oklahoma,
- Southern Early Childhood Association