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EDUCATORS PERCEPTIONS OF EBD, INCLUSION, AND EVIDENCE-BASED PRACTICES

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EDUCATORS PERCEPTIONS OF EBD, INCLUSION, AND EVIDENCE-BASED PRACTICES

A Dissertation Presented

by

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DEDICATION

To my husband, children and parents for always supporting me in furthering my education, and achieving yet another degree.

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ABSTRACT

EDUCATORS PERCEPTIONS OF EBD, INCLUSION, AND EVIDENCE-BASED PRACTICES

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The field of education has been changing with regard to inclusion of students with disabilities in general education classrooms. Not only are we seeing more students with disabilities being educated in public schools, but we are seeing students with more significant special education needs. Although schools are expected to provide a Free and Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE), many of the staff within the school, such as special education teachers, general education teachers, related service providers, paraprofessionals, and even administrators, aren't sure how to provide the services and implement the strategies to allow the students to make effective progress in the LRE. A study of the International Survey of Inclusion was used to gather information from educators in a Northeast state about their knowledge and perceptions of inclusion, Emotional and Behavioral Disorders, and knowledge of Evidence Based Practices. This was the first study in the U.S. that investigated perceptions and knowledge in a single study, and the first to employ a design that collected educator initiated statements of EBP. There were 684 participants who responded to

the survey, of which 46% completed the section that included the Likert scale items only and 53% completed the short answer items that were asking for EBPs for working with students with described disability. The findings from this study have potentially revealed some major issues with respect to teacher perceptions and knowledge of students with disabilities and inclusion. he inconsistency of educator beliefs in their knowledge of characteristics of students with disabilities and the associated strategies to support student with disabilities in general education settings revealed a problem related to educator training, both at the pre-service level and at the professional development level. Second, the lack of adequate knowledge of EBP for students with EBD also has some implications for teacher training and professional development.

Keywords: Inclusion +students with disabilities, inclusion + special education, teacher attitudes, teacher knowledge, evidence based practices

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Inclusion is a controversial concept in education because it relates to educational and social values, as well as to our sense of individual worth. Two federal laws govern education of children with disabilities. Neither requires inclusion, but both require that a significant effort be made to find an inclusive placement. The Individuals with Disabilities Education Act (IDEA, 2004), as amended in 2004, does not require inclusion. Instead, the law requires that children with disabilities be educated in the least restrictive environment appropriate to meet their unique needs. Moreover, the IDEA contemplates that the "least restrictive environment" analysis will begin with placement in the regular education classroom. Section 504 requires that a recipient of federal funds provide for the education of each qualified handicapped person in its jurisdiction with persons who are not handicapped to the maximum extent appropriate to the needs of the handicapped person. A recipient is required to place a handicapped child in the regular educational environment unless the recipient demonstrates that the education in the regular environment with the use of supplementary aides and services cannot be achieved satisfactorily.

1.1 Brief History of Inclusion in America

Children and youth with disabilities and their parents have long fought for equal access to education. As late as the 1960s, it was standard for students with disabilities to be wholly excluded from the public education system. In the 1960s and 1970s,

parents began successfully asserting that their children could learn and demanded that their children's right to an education be codified into law. In 1975, the Education for All Handicapped Children Act was passed, which mandated free and appropriate public education for children with disabilities, and the provision of special education and related services designed to meet their unique needs and prepare them for further education, employment, and independent living. When Education for All Handicapped Children Act was amended as the Individuals with Disabilities Education Act (IDEA) in 1997 and 2004, each amendment required states that accepted IDEA funding to ensure that all students with disabilities receive a free and appropriate public education, and that they do so in the least restrictive environment (LRE).

In 1954, the Supreme Court ruled in *Brown v. Board of Education* that separate schooling for African American children was not an equal education because separate educational facilities were inherently unequal. Ten years later, Section 601 of the *Civil Rights Act of 1964* was passed, stating that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." As a result of these changes, advocates and parents of children with disabilities fought for the same kind of equal access to education. They sought not only for the right to attend school, but also the right to participate in and benefit from a quality education. Two landmark cases in this pursuit were brought in 1972: the *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania*, and *Mills v. Board of Education of District of Columbia*.

In both *PARC* and *Mills*, the judges agreed that local laws that excluded children with disabilities from public schools were a violation of the Constitution. These decisions laid the groundwork to establish the right of students with disabilities to access a public education.

One of the ways that the law fostered notions of inclusion was through the development of a continuum of placements for students with disabilities. Central to that process was the development of the Least Restrictive Environment (LRE), which required that students be placed in a setting most conducive to their needs. The least restrictive environment (LRE) requirements have existed since passage of the Education for all Handicapped Children Act (EHA) in 1975 and are a fundamental component of the nation's policy for educating students with disabilities. Education for all Handicapped Children Act was renamed the Individual's with Disabilities Education Act (IDEA) in October 1990 (US Department of Education, 2019). As educational systems became more responsive to the needs of students with disabilities, Individualized Education Program (IEP) teams began to place students in more inclusive settings with embedded supports. Over time, students with disabilities became more and more integrated and special education and general education became less segregated. Under section 612(a)(5) of the IDEA (IDEA 1997), to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, must be educated with children who are not disabled.

Further, special classes, separate schooling, or other removal of children with disabilities from the regular educational environment should occur only when the

nature or severity of the disability of a child is such that education in regular classes, with the use of supplementary aids and services, cannot be achieved satisfactorily. When it last reauthorized the IDEA in 2004, Congress continued to emphasize, consistent with the provisions in the Elementary and Secondary Education Act, the importance of “having high expectations for [children with disabilities] and ensuring their access to the general education curriculum in the regular classroom, to the maximum extent possible (US Department of Education, 2019).

1.2 Placement Decisions

The starting point for all placement decisions is intended to begin with the general education classes in the school the student would attend if they did not have a disability. IEP teams may consider removing a student to more restrictive placement if the nature or severity of a child’s disability is such that, even with the provision of supplementary aids and services in the general education setting, an education in the regular class will not be appropriate or successful. If the student does not participate in the general education setting, curriculum, or in nonacademic or extracurricular activities, then the Individualized Education Program (IEP) team must offer an explanation of the extent to which such removals will occur and are necessary. This is done through discussion at the student's IEP Team meeting and is further documented in the student's Individualized Education Program document, which is signed by both a school district administrator (as the local education authority) and the parent(s) or guardian(s). The regulations describe a "continuum of alternative placements" that

public agencies must be ready to provide if needed, including regular classes, special classes, special schools, home instruction, hospital settings, and private and public facilities, such as separate day schools or residential programs.

Several courts have addressed LRE, each setting forth a slightly different standard. In *Roncker v. Walter,* the court developed a two-part test to guide the appropriate placement for a student with a disability.

1. Could the educational services provided in the segregated setting be feasibly provided in a non-segregated setting? (If so, the segregated placement is inappropriate.)
2. Is the student being mainstreamed to the maximum extent appropriate?

Roncker became to stepping stone for students to gain access to general education classrooms, however, it set forth no criteria for schools to use with regards to true classroom participation and engagement. Students were gaining access to general education classrooms, but were not necessarily engaged in the learning that was expected of students in the classroom.

In *Daniel R.R. v. State Board of Education,* The Fifth Circuit Court of Appeals declined to follow the *Roncker* test and developed its own approach, asking the following questions:

1. Can education in the general education classroom be achieved satisfactorily with the use of supplementary aids and services and with modifications?
2. Will the student receive benefit from general education?
3. What is the students overall educational experience in the mainstreamed

environment, balancing the benefits of regular and special education for each individual student?

4. What effect does the student's presence have on the regular education environment that the other students are receiving?

Daniel R.R provided districts with more explicit parameters to follow with regards to student access and engagement by asking if the student was benefiting from their time in the general education classroom. It also stipulated that student access should be supported supplementary aids and related services to help ensure student access to the curriculum while presents in the general education classroom.

In Greer v. Rome, The Eleventh Circuit determined that the school had failed to consider less restrictive settings before placing the student in a self-contained classroom. The court went on that IDEA requires an IEP team to at least consider, discuss, and justify why they would recommend not placing a student in the general education classroom, and, only then, to systematically move to less restrictive placement options.

The term *inclusion* replaced the term *mainstreaming* in the case of *Oberti v. Clementon.* The Third Circuit court said that:

> A determination that a child with disabilities might make greater *academic* progress in a segregated, special education class may not warrant excluding that child from a regular classroom environment. We emphasize that the Act does *not* require states to offer *the same* educational experience to a child with disabilities as is generally provided for nondisabled children. To the contrary,

> states must address the unique needs of a disabled child, recognizing that that child may benefit differently from education in the regular classroom than other students. In short, the fact that a child with disabilities will learn differently from his or her education within a regular classroom does not justify exclusion from that environment.

By emphasizing that students did not need to access curriculum materials at the same level as their typical peers, Oberti charged schools with not only including students with disabilities in general education classrooms, but making sure that the curriculum was accommodated and modified to the student's cognitive ability level to ensure access.

1.3 Models of Inclusion

There are multiple levels of inclusion for students with disabilities, ranging from full inclusion, partial inclusion, substantially separate, out of district day program, out of district residential program, and community-based program. In a full inclusion program, the team has identified that IEP services are provided outside the general education classroom less than 21% of the time (80% inclusion). A partial inclusion program means the team has identified that IEP services are provided outside the general education classroom at least 21% of the time, but no more than 60% of the time. For placement to be deemed a substantially separate class, the team has identified that IEP services are provided outside the general education classroom for more than 60% of the time (IDEA, 2004). An out of district day program is the same as a substantially separate program, except the services are provided at a different school

than the student's home district public school. For a student to be identified as an out of district residential program student, the student receives their services at a school outside the student's home district public school and resides either at the out of district school or a local group home. Finally, for a student to receive services in a community-based program, the student spends some or all of their day based in their local community learning skills they will require when they graduate or age out of services from their public school.

1.4 Inclusion and students with behavior challenges

Inclusion is especially important for students with Emotional and Behavior Disorders (EBD) because they have the highest dropout rate which may be a result of lack of attachment to their schools, teachers, and classmates (Wilkins & Bost, 2014). Many students are drawn through the school doors, not by the academic content, but by the social interactions they will have access to once they arrive. Those social contacts are made through being included in general education classrooms, peer interactions in the lunchroom, on the playground, and during special classes such as art, music, and PE. In order to understand inclusion as it relates to students with Emotional Disturbance, it is important to understand the characteristics of EBD and how they may impact student access and engagement to academic instruction.

1.5 Description of students with ED

Students with ED display behaviors in two ways, externally or internally. Boys are most prone to externalizing behaviors, such as verbal and physical aggression, challenging authority, and impulsiveness (Young, 2010). Female students with ED are more prone to displaying internalizing behaviors, such as anxiety, depression, phobias, and shyness (Young, 2010). Characteristics of ED can vary student to student, but typical characteristics include: Noncompliance, Verbal and physical aggression, Challenging authority, Academic underachievement, Difficult to change behavior, Easily frustrated, Avoid social interactions, Negative self-image, Low self-confidence, Anxiousness, Excessive fears and phobias, Depression, Lack of social skills, Lack of problem-solving skills, Impulsiveness, Highly distractible, Inability to sit still, fidgety, may pace or be in and out of seat constantly, Inability to concentrate for long on one topic/subject.

The ED definition is not very clear and allows subjectivity in making the determination of ED (Simpson et. al., 2011). There are clear examples of ED, such as depression disorder, anxiety disorder, bipolar disorder, schizophrenia, and post-traumatic stress disorder. However, there are unclear examples such as conduct disorder, oppositional defiant disorder, anti-social personality disorder, and reactive attachment disorder. It can be argued that the unclear examples are the students who actually require the most extensive supports and interventions. It is not uncommon for there to be comorbid disabilities with ED such as the unclear examples above, as well as specific learning disabilities (Simpson et. al., 2011).

Inclusion is especially important for students with EBD, especially given the reluctance of districts to find students eligible for special education services through an Individualized Education Program, given the murkiness of the current criteria for eligibility. Inclusion can provide these students with a sense of belonging that they may be lacking. For many, relationship building and then maintenance of those relationships is a struggle. Being included in a general education class, with peers and staff who accept and embrace them may be imperative to their remaining in school and graduating with a diploma.

Students with Emotional Disturbance (ED) are the smallest population of students serviced through special education, at less than 1%. However, these students have among the highest academic, behavioral and social-emotional needs of all learners. (Bradley et al., 2004; Gage et al., 2010; Farley et al., 2012; Kauffman & Landrum, 2009; National Center for Education Statics, 2019; Young et al., 2010). There continue to be more males than females identified with ED, more African American's found eligible than any other ethnicity, and a high number of ED students come from low socioeconomic families and have alternative living arrangements (homeless, being raised by grandparents, aunts and uncles, foster families, etc.) (Bradley et al., 2004; Gage et al., 2010; Farley et al., 2012). Bradley et al. (2004) reported that there was a large focus on students with ED, due to the impact of their disability on academic, behavioral, and social outcomes. They found that this population was the largest underserved disability category, and this population of students is diagnosed later than any other disability category. As a result, this category of students is receiving needed

supports and services at an older age, which defeats the national push for early intervention and the research documenting the positive effects of early intervention on student outcomes. Sadly, Kauffman and Landrum (2009), Gage et al. (2010), Farley et al. (2012), and the National Center for Education Statistics (2019) reported the same statistics and educational outcomes years later. In fact, Gage et al. (2010) reported that at least 20% of school-aged children display some emotional or behavioral difficulty during their academic career, however, we continue to only service less than 1% of the population, a number that has not changed since the passage of P.L. 94-142 in 1975. The Center for Disease Control (2018) reported that 8.9 million parents of students aged 6-17 had contacted a health professional or school staff regarding their child's emotional or behavior problems. Given this information, it is shocking that we are only providing services .7% through special education (National Education Statics, 2014).

1.6 Interventions to Support Inclusion

Inclusion within general education settings can only be successful if the student is provided with the needed interventions and supports to ensure that the inclusion is meaningful, engaging, and appropriate for the student to learn. For many students, schools are failing in this task, as they are unclear about how to appropriately include students, and as a result, just place them in a classroom and hope for the best.

To enable and encourage students' access to their learning and social environments, schools should be implementing interventions and supports to improve student outcomes. When implementing interventions in an inclusive school, a 3-tiered

model is typically used. When used for addressing emotional and behavior deficits, the system is typically Positive Behavioral Interventions and Supports (PBIS) or another comprehensive schoolwide system of behavioral supports (Bradley et. al., 2004). Tier 1 encompasses what the entire class or school receives, such as schoolwide or classroom-wide PBIS. Tier 2 are services that are provided in a small group instruction model for students at risk of developing behavior problems or students at risk of having an emotional disturbance. Tier 3 services are typically provided in smaller groups or individually and are provided through special education services.

Within the tier 2 and tier 3, schools should implement evidence-based interventions designed for students with EBD, consistent with recommendations of the IDEA (2004) and Every Student Succeeds Act (2015). Evidence-based practices have been determined effective interventions through extensive research and can be effective interventions if used consistently and with fidelity. Unlike other disability categories, ED does not have a plethora of evidence-based practices. The practices that have been determined as Evidence-Based Practices (EBP) typically fall into the following categories behavioral, medical, cognitive behavioral, academic and instructional, and teacher training and professional development interventions.

1.6.1 Behavioral Interventions:

Applied Behavior Analysis is a scientifically based practice that looks at overt (observable) behavior to ascertain the antecedents and consequences that are maintaining behavior (Cooper, Heron, & Heward, 1987, 2007; O'Neil et al., 1997, 2014).

It was initially used in research labs to gain insight into human behavior, through the manipulation of stimuli, using rats and pigeons. In 1987, Dr. Lovaas, a professor at UCLA, published a study detailing the use of the principles of ABA with young children with Autism in his clinic. The results of his research promoted the use of ABA in school settings for students with ASD. The success of this evidence-based practice was then used more globally to work with all students with disabilities. With regards to students with ED, the most widely used components of ABA are reinforcement, punishment, token economies, extinction protocols in conjunction with differential reinforcement, and Functional Behavior Analysis (FBA) (Hollo & Burt, 2018).

In 2016, What Works Clearinghouse released an intervention report determining FBA a successful intervention for use with students with both externalizing and internalizing behaviors. FBAs use both direct and indirect measurements to determine functions of behavior as well as the reinforcement maintaining those behaviors. Functions of behavior typically fall into 4 categories; escape, avoidance, access to attention, and/or access to tangibles. This information is then used to develop Behavior Intervention Plans based on reinforcement of more adaptive behaviors while putting maladaptive behaviors on extinction. For a successful extinction procedure, the adaptive behavior needs to meet the same function as the maladaptive behavior met. Unless there is a significant safety issue or all reinforcement options have been exhausted, punishment procedures are typically avoided as an intervention. Punishment procedures can elicit behaviors that are aggressive and unsafe so should be used with extreme caution and should be faded out as soon as possible. They should

also be used in conjunction with a reinforcement procedure. (Cooper, Heron, & Heward, 1987, 2007; O'Neil et al., 1997, 2014). Most students with ED have been exposed repeatedly to punishment procedures, and research has shown that they do not work with this population of students (Kennedy & Jolivette, 2008). In order for punishment to have been successful, there needs to be a decrease in maladaptive behavior. Most school-based punishment procedures are actually reinforcement based, i.e., they do not reduce the behavior; they increase it. Such examples are detention, suspension, and expulsion. Most students with ED don't want to be at school in the first place, so using these "punishment" procedures are not effective in decreasing behavior, and typically reinforce escape-maintained and avoidance maintained behavior (Cooper, Heron, & Heward, 1987, 2007; Kennedy & Jolivette, 2008; O'Neil et al., 1997, 2014).

It should be noted that using ABA methods, though effective, can be time-consuming and overwhelming for teachers. They also require training and data collection, which can also impact the fidelity and consistency of use. Typically, these interventions will fail when they are not appropriately explained to teachers and staff, staff and teachers are not adequately trained on how to implement procedures and collect data, and/or they are not pre-warned, and an explanation of extinction bursts is not provided Cooper, Heron, & Heward, 1987, 2007; Kennedy & Jolivette, 2008; O'Neil et al., 1997, 2014). Anytime one is trying to put behavior on extinction; the behavior will increase in frequency and/or duration, and/or intensity before it begins to decrease. Many teachers see this as the intervention making the behavior worse and will discontinue the protocol (Cooper, Heron, & Heward, 1987, 2007; Kennedy & Jolivette,

2008; O'Neil et al., 1997, 2014). The problem with discontinuing, the behavior will remain at the level it was at just before discontinuation, which means the behavior is at a higher level than it was at before intervention.

1.6.2 Medication Interventions:

The Center for Disease Control (2014) reports that 2.9 million children are being medicated in conjunction with an emotional disturbance. Typical prescriptions used are antipsychotics, anti-depressants, anti-anxiety, or stimulant medications. Medical intervention can be used for both externalizing and internalizing behaviors and can make a marked improvement in behavior; however, they do not completely cure all of the characteristics and symptomology of ED. Students are more successful when they are exposed to a combination of interventions that have been specifically chosen for their particular symptomology. Medication can help to alleviate some of the symptomologies so that students are more available for explicit instruction in academics, social skills, problem-solving, and cognitive behavior therapy.

1.6.3 Cognitive Behavioral Therapy:

Cognitive Behavioral Therapy (CBT) is a short-term goal-oriented psychotherapy that targets behaviors and thinking. It delves into the feelings and behaviors behind the difficulties and attempts to change them so the client can be more successful in their responses and interactions moving forward. It can be provided in a small group setting or individually, dependent upon client need. It does require participant cooperation and

participation, as well as some higher cognitive functioning, so is typically more successful for clients who are teenagers or older.

1.6.4 Academic and Instructional Interventions

Lewis (2016) states that as an education system we have created the "perfect storm" for students with ED and we do this through one of two avenues. Using the first avenue, we pull them out of general education classrooms to educate them in a substantially separate environment. Most of these programs focus solely on behavior, and the academic component is significantly lacking if it even happens at all (Lewis, 2016). This leads to academic and social failure that then results in school dropout. The second avenue, we continue to educate them in the general education classroom. If we keep them in a general education classroom to attempt to ensure academic access, we do not provide the appropriate and necessary support to allow the student to be successful. We also do not train the teachers and staff on how to work with this population (Lewis, 2016).. The result, teachers, and administrators resort to exclusionary measures such as class removal, detention, suspension, and ultimately expulsion. Once again, ensuring academic and social failure (Lewis, 2016; Simpson et al., 2011). The National Center for Education Statics (2019) reports that 50% of students with ED dropout and do not complete secondary education.

Without intervention and support, students with ED face a bleak future. The number of students displaying ED characteristics is continuously growing (The National Center for Education Statistics, 2019), even if their access to services is not. If this

increasing number is not diverted, they will continue to struggle with building and maintaining relationships, finding, securing, and maintaining gainful employment, and finding, securing and maintaining adequate housing. They will have more contact with mental health professionals, unemployment offices, and juvenile correctional facilities. The need for increased research into evidence-based practices is essential, as well as the need for a clearer, more inclusive definition of Emotional Disturbance, one that guarantees all students receive the needed and necessary academic, behavioral, and social-emotional interventions and supports to change the current trajectory for students with Emotional Disturbance.

1.7 What does inclusion look like for students with EBD?

Students with certain disabilities are more likely to be educated in separate, segregated classes; and the most prevalent setting for students with intellectual and multiple disabilities is separate special education classrooms (The National Center for Education Statistics, 2019). While inclusive placements have increased over time, there is little to no change in placement practices for students with intellectual and multiple disabilities during the past 10 years (The National Center for Education Statistics, 2019). When a student attends a regular public school, their placement is recorded as follows: A delineation of Participation in general education classes 80 percent or more of the day on a student's placement page of their IEP means they spend the majority if not all of their school day participating within the general education classroom. They may be removed for special education services for no more than 20% of the day**.** A student

who's placement page of their IEP reflects participation in general education classes 40–79 percent of the day demonstrates a higher degree of removal from the general education classroom for special education service provision. When a student's placement page of their IEP reflects participation in general education classes less than 40 percent of the day, it is typically a result of the student being placed in a substantially separate program within the school building, where they spend a minimal amount of time, if any, within the general education classroom.

The Unites States Department of Education published placement practices data for students aged 6-21 years of age being service under IDEA for the 2015-2016 school year. Table 1.1 shows the data collected for Massachusetts in relation to the United States (US Department of Education, 2019). As you can see, Massachusetts' placement numbers are on par with the National levels of inclusion, but that does not mean that Massachusetts is doing an appropriate job with inclusion. The Unites States, as a whole, needs to be more calculated in making placement decisions for students. Inclusion decisions should be using individual, student specific information that allows for meaningful and appropriate inclusion for that student. Many districts make placement determinations based on disability, rather than individual student needs.

Table 1.1: Student IEP Placement Statistics

	Participation in General Education Classes at least 80% of the school day	Participation in General Education Classes 40%-70% of the school day	Participation in General Education Classes at less than 40% of the school day	Separate Day or Residential School Placement
United States	62.69	18.66	13.49	3.10
Massachusetts	63.34	15.93	14.05	6.68

1.8 Inclusion and Teacher Preparation

An increasing number of students require stronger supports around emotional issues such as significant trauma and abuse, as well as significant behavioral issues, which may be and often are a result of emotional issues (Bradley et al., 2004; Gage et al., 2010; Farley et al., 2012; Kauffman & Landrum, 2009; National Center for Education Statics, 2019; Young et al., 2010). Students with an Emotional Disturbance Diagnosis, or who present with significant emotional and behavior problems without a diagnosis are the most underserviced students, but the most in need of services to enable them to make academic and social-emotional progress (Bradley et al., 2004; Gage et al., 2010; Farley et al., 2012; Kauffman & Landrum, 2009; National Center for Education Statics, 2019; Young et al., 2010). Many students lack the social-emotional competencies

needed for success when they enter school, and without remediation, become less connected and engaged as they progress through the grades, ultimately impacting their likelihood of graduation and post-graduate success.

The field of education has been changing concerning the inclusion of students with disabilities in general education classrooms. Not only are we seeing more students with disabilities being educated in public schools, but we are seeing students with more significant special education needs. Although schools are expected to provide a Free and Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE), many of the staff within the school, such as special education teachers, general education teachers, related service providers, paraprofessionals, and even administrators, aren't sure how to provide the services and implement the strategies to allow the students to make effective progress in the LRE.

The inclusion movement began as an attempt to create equality in education for students with disabilities and integration into the school community. Inclusion in the general education classroom gained momentum during the 1980s and continued into the 2000s with passages of legislative mandates such as Individuals With Disabilities Education Improvement Act (IDEIA, 2004) and the No Child Left Behind Act (NCLB, 2001). Increases in the number of students with disabilities served in inclusive educational settings have placed pressure on teachers to meet the needs of a more diverse group of learners. Meeting the needs of diverse abilities requires teachers to have attitudes and skills that can lead to positive changes in students' academic and social behavior.

Allday, Neilsen-Gatti, and Hudson (2013) identified four global categories needed to prepare successful elementary education teachers to include children with disabilities in the general education environment. They selected a total of 109 colleges and universities offering initial certification in elementary education and evaluated their required course curriculum for preservice teachers. Universities from all 50 states within the United States and the District of Columbia were considered for inclusion in the review.

Allday, Neilsen-Gatti, and Hudson (2013) stated that teachers should possess a basic knowledge of the characteristics of students with disabilities and an understanding of their role and responsibility in the special education process. During their study, they found that general education teachers reported their preparation coursework to be lacking in information related to working with students with disabilities. Most of the courses related to students with disabilities included content on disability characteristics, but little on methodologies for inclusive practices. Two thirds (67%) of the reviewed Universities required at least 3 credit hours of a "Characteristics of Disabilities" type of course (Allday, Neilsen-Gatti, & Hudson, 2013).

Their second important characteristic is that teachers must understand how to differentiate instruction to meet the needs of students with various abilities (Allday, Neilsen-Gatti, & Hudson, 2013). To be effective educators, teachers need the ability to alter instruction to meet student needs, interests, and abilities. This means that every teacher should possess the ability to differentiate a lesson so that all students have access to the curriculum. Only 27% of the reviewed universities offered at least 3 credit

hours explicitly related to the inclusion of students with disabilities (Allday, Neilsen-Gatti, & Hudson, 2013). This is surprising given that differentiating instruction benefits all learners, not just students with disabilities.

A third global knowledge base states that teachers need to learn strategies to communicate and collaborate effectively with special education teachers (Allday, Neilsen-Gatti, & Hudson, 2013). Effective collaboration between general and special education teachers requires that all teachers work together to meet the diverse needs of students with and at risk of disabilities. Only 6% of the Universities in their sample required a course on collaboration, despite the growing popularity of co-teaching as a model for addressing the instructional and behavioral needs of a wide range of learners (Allday, Neilsen-Gatti, & Hudson, 2013).

Finally, to do this well, teachers need to learn effective classroom management strategies to promote academic engagement and pro-social behavior while minimizing disruptions to the learning environment (Allday, Neilsen-Gatti, & Hudson, 2013). Teachers report that issues related to challenging student behavior are the most stressful part of their professional lives. Teachers' understanding of effective management techniques, as well as with multi-tiered systems of support is vital to successful inclusion. Less than half (41%) of the Universities required a 3-credit course on classroom behavior management (Allday, Neilsen-Gatti, & Hudson, 2013). Managing disruptive and challenging behavior is one of the most stressful aspects of teaching. However, in many teacher preparation programs, students are not receiving training on classroom management, and there is little evidence to show that classroom behavior

management content has been given the same amount of contact time (i.e., 3 credit hours).

This leads us to see a possible disconnect between what pre-service teachers are taught and what they face as practicing teachers. If inclusion as a placement for students with various disabilities is to be carried out successfully, teacher preparation will have to change to meet the needs of their graduates. Students with emotional and behavioral difficulties present with the most challenging of needs, but pre-service teachers and veteran teachers receive the smallest amount of training and professional development around this needy and growing population of students.

Students with an Emotional Disturbance Classification, or who present with significant emotional and behavior problems without a diagnosis are the most underserviced students, but the most in need of services to enable them to make academic and social-emotional progress. Many students lack the social-emotional competencies needed for success when they enter school, and without remediation, become less connected and engaged as they progress through the grades, ultimately impacting their likelihood of graduation and post-graduate success (Lewis, 2016). Emotional Disturbance is one of the lowest diagnosed disabilities in American Schools, yet has the most significant impact on effective classroom teaching and function (Bradley et al., 2004; Gage et al., 2010; Farley et al., 2012; Kauffman & Landrum, 2009; National Center for Education Statics, 2019; Young et al., 2010). Children diagnosed with an emotional disturbance, and those who do not meet the IDEA or state criteria for the diagnosis, but still have significant needs are underserviced in public schools which

ultimately impacts their ability to complete school and graduate with a diploma or equivalent.

Westling (2010), Rose & Espelage (2012), and Simpson, Peterson, & Smith (2011) all found that schools are ill-equipped to work with students with behavioral issues. The staff is not adequately educated and trained on the skills and tools necessary to improve behavior and engagement. Programs and interventions for students with EBD are only as effective as the individuals who apply them, as well as the relationship built between the teacher and learner. In their research, Cheney, Osher, and Caesar (2002) found that the most successful programs were found in schools that included the superintendent, the building principal, and all of all building's employees working together, and whose administrators demonstrated their commitment by working with school staff and family members to share ownership of goals and visions. A program can only be successful when implemented with fidelity by everyone who is working with the students. In their meta-analysis of Social Emotional Learning intervention programs, Durlak et al. (2011) found that an essential aspect of successful programs were those that used a sequenced, step-by-step training approach, had an active learning component, had sufficient focused time on skill development, and explicit learning goals.

Given all of the deficits in teacher preparation programs and perceived deficits in current practicing teachers' professional development, the need for further investigation into what teachers believe they know in theory and what they would use in practice is a necessity. The purpose of this study is to collect quantitative and qualitative data using a survey through Survey Monkey regarding knowledge and

perceptions of inclusion and inclusionary practices in American schools. I are interested in obtaining information from school personnel regarding their past, and present experiences working with students with special education needs in public education settings. Prior research on inclusion has focused primarily on in school examinations, such as local, district-wide, and statewide test, and the staff's perceptions of students with disabilities performance and accommodation and modification needs. Loreman and colleagues (2014) and Kyriazopoulou and Weber (2009) surveyed personnel with respect to attitudes towards inclusion and competences regarding inclusion practices and the use of standardized testing. Prior research has examined school professional knowledge or skills with respect to working with students with disabilities, however, not on the knowledge and strategies needed to ensure these students are provided with a Free and Appropriate Education (FAPE) in the Least Restrictive Environment (LRE). These two concepts are mandated by The Individuals with Disabilities Act (IDEA), but without proper training and knowledge, most schools are not complying fully with IDEA.

1.9 **Problem Statement**

Prior research on inclusion has focused primarily on in school examinations of perceptions of students with disabilities. Loreman and colleagues (2014) and Kyriazopoulou and Weber (2009) surveyed personnel with respect to attitudes towards inclusion and competencies regarding inclusion practices and the use of standardized testing. At present, researchers have not examined school professional knowledge or skills with respect to working with students with disabilities.

Neuville (2017), stated that children benefit most when they remain in typical settings supported by teachers who know them and see the competence of each of them. When educated in general education classrooms, students with disabilities can learn academic content, improve adaptive behavior and functional skills, and build social competence and develop friendships with peers (Brock, 2018). With higher expectations placed upon educators to provide students with meaningful inclusion, comes the necessity of knowledge of modifications, accommodations, and evidence based practices to do so.

1.10 Purpose Statement and Research Questions

The proposed study looks at inclusion for students with various disabilities, but the focus is to understand educator perspectives and knowledge of students with Emotional And Behavior Disorders and inclusion of students with EBD in the context of the broader educator perspectives and knowledge. At present, there are no empirical studies that examine teacher perception and knowledge of students with Emotional Disturbance. Even more importantly, there are no studies that look at teacher knowledge of evidence based practices for students with EBD. This process will allow me to compare educator perceptions of students with EBD to perceptions of students with Learning Disabilities (LD), Intellectual Disabilities (ID), and Autism (ASD). This research was guided by five research questions:

1. Is the International Survey on Inclusion a reliable and valid tool to use with U.S. educators?

2. What were the perceptions of disability and inclusion of a sample of U.S. educators?
3. What were the perceptions of knowledge of U.S. educators with respect to supporting students with disabilities?
4. Did perceptions of students with disabilities differ by disability category?
5. What was the strategy knowledge of U.S. educators with respect to students with EBD?

CHAPTER 2

REVIEW OF THE LITERATURE

In order to understand the current research on teacher knowledge and perceptions of students with disabilities and inclusion, I conducted a methodological review of the existing research of teachers' knowledge and perceptions of working with students with disabilities. The purpose of a methodological review is to concentrate on research methods, rather than research results. If a researcher uses comprehensive research methods, and proceeds to report those methods in explicit detail in their article, the results can be more readily accepted. This systematic review allowed me to look at previous research conducted with regard to teachers' perceptions and knowledge of working with students with disabilities to ascertain what criteria should be included in a thorough study which in turn would present valid and reliable results. These criteria will then inform the development of a study that will provide robust, reliable and valid results.

2.1 Search procedure

My systematic review was limited to peer-reviewed research studies published between 2004 and 2017 containing surveys about inclusion practices for students with disabilities in the United States. A start date of 2004 was chosen because The Individuals with Disabilities Education Act (IDEA) was passed in 2004 with a focus on improving inclusionary practices through teaching students with disabilities in the least restrictive environment, i.e., the general education environment. The search was

conducted using four search tools (Academic Search Premier, PsychInfo, PsychArticles, and ERIC). The search terms inclusion + students were paired with teacher knowledge (63 articles), teacher attitudes (229 articles), and evidence-based practice (47 articles) and the search term inclusion + special education were paired with teacher knowledge (125 articles), teacher attitudes (598 articles), and evidence-based practice (88 articles) were used. A total of 1,150 articles were found to meet those search criteria.

2.2 Inclusion Criteria

Next, the abstracts of those articles were reviewed to determine if they met the following inclusion criteria: study includes a survey. Using this criteria 1,007 articles were eliminated leaving 143 articles to review. After this, I reviewed each of the articles using a set of four criteria: (1) included an empirical research study, (2) conducted in the United States, (3) participants included primary and/or secondary school staff (Preschool-Grade 12) and (4) were the participants' special education and general education staff. Using these criteria 129 articles were eliminated leaving 13 articles remaining. Finally, an ancestral search of the references of the 13 articles, as well as an archival search of the 12 journals in which those articles were published was conducted. Two articles were found in the reference sections for further review, but they did not meet the inclusion criteria. No further articles meeting the inclusion criteria were discovered during the journal archive search process.

During each step of the process, each article was reviewed independently by two doctoral candidates to determine if the article met the inclusion criteria. Each read the

abstract and entered a code of "1" or "0" for each criterion. A "0" indicated that there was language in the abstract that a criterion was not met. A "1" indicated that (a) there was language in the abstract that a criterion was met or (b) that there was insufficient information in the abstract to include or reject the article based on the respective criterion. This ensured that an article was not eliminated from consideration for inclusion because the abstract lacked sufficient detail. I then conducted a reliability analysis of the codes and found I had a 98% agreement on the codes. The author then identified every disagreement, and the author and two doctoral candidates involved in the review proceeded to review each of the disagreements together. They identified the correct code and changed the code accordingly until there was 100% agreement on the inclusion criteria coding.

2.3 Criteria for Indicators

Thirteen US survey studies were included in the literature review. All of these articles related to research on educators' attitudes and perceptions regarding inclusion of students with disabilities. A Methodological review was conducted for each article included within the literature review. Throughout the survey reports, data about general and special educators were provided across grade levels preschool through grade twelve.

2.4 Coding System

Eight indicators were developed using a process developed for systematic methodological reviews for survey research consistent with Mulcahy et al. (2016) and Krezmien et al. (2017) for the methodological review process. These eleven indicators helped to establish the methodological quality of the 13 research articles. The quality indicators were (1) Participants, (2) Context and Setting, (3) Research Design, (4) Sampling Procedures, (5) Materials, (6) Instrument, (7) Dependent Variables, (8) Independent Variables, (9) Reliability of the Data, (10) Data Analysis, and (11) Social Validity. For each indicator, there were a set of components associated that were used to determine if a study met the criteria for the indicator. The quality indicators were established before reading the included articles in the literature review. The quality indicators were developed using recommendations of Krezmien and colleagues (2017) and by incorporating quality indicators from Gersten and colleagues (Gersten et al., 2005), Thompson and colleagues (Thompson et al., 2015), and Mulcahy and colleagues (Mulcahy, Krezmien, & Travers, 2015). I created clearly described components for the indicators, consistent with those recommendations for quality indicators (see table 1). The eleven indicators were developed in order to ensure that they would adequately measure the methodological quality of quantitative survey research.

Table 2.1: Methodological Standards and Components

Standard	Components
Participants	Age, race, gender, employment position, grades taught, certification, years of experience, type of experience with SPED students, and years of experience with SPED students
Context and setting	All possible settings described, regional location described, setting of study adequately described
Research Design	Includes a clear rationale, includes clear questions/hypotheses, includes power analysis/rational for group size, employs a correlational design, selection procedures described and appropriate, selection described for all groups
Sampling procedures	Selection procedures for all groups reported, unit of participant described
Materials	Materials described, source of materials described, delivery of materials described
Instrument	Instrument source described, instrument validity described, instrument training described, instrument administration described
Dependent Variables	Dependent variable operationalized
Independent Variables	Independent variable operationalized
Reliability of the Data	Process for Collecting Data is Described, Process of Data Transfer from Survey to Database Described, Process for Reliability of Data Transfer is Described, Process for IRR of Data in Database Described, Accuracy of all Data is Confirmed (IRR is 100%)
Data analysis	Proper unit of analysis, Assumptions of Analysis Described, Assumptions of Analysis Met, Statistical Analysis Described, Statistical Analysis Appropriate, Alpha Reported, Significance Reported, Effect Sizes Reported, Confidence Intervals of Effect Sizes Reported, Appropriate Multivariate Statistics, Multivariate PostHoc Tests Applied, Univariate Follow-ups Explained, Type I Error Controlled
Social Validity	DV is socially important, Magnitude of change in the DV is socially important

I then created a spreadsheet that included each of the indicators and the associated criteria. I copied and pasted language from each article into the associated section of the article. For example, for the Participant Indicator, I copied all of the language from each article that was associated with the participant description into the

"Participant" cell for each respective article. This was completed for every indicator. Then, the completed spreadsheet was used by the reviewers to rate the criteria for all of the Indicators.

There were two reviewers who independently reviewed each article using the criteria for each indicator. Each reviewer read each article and then used the criteria in the spreadsheet to rate each indicator. An indicator was given a zero, if it did not meet the criteria, and a one if it met the criteria. Once both reviewers had read and coded all 13 articles, inter-rater reliably was run to ascertain any disagreements in coding between the two reviewers. The two reviewers then discussed the differences in coding and came to a consensus on the correct code leading to 100% reliability.

2.5.1 Indicator 1: Participants.

Indicator 1 was the Participant Indicator. Quality survey research relies upon a robust description of the participants. In order to be able to replicate studies or to adequately interpret the findings of existing survey research, it is critical to know as much information as possible about the sample. For example, surveys on attitudes about inclusion are enhanced when they include information about the teacher experience, training, and grade(s) taught. Participant is the first quality indicator that was selected for the methodological review process. This indicator consists of nine components: (1) Age, (2) Race, (3) Gender, (4) Employment Position, (5) Grades Taught (6) Certification, (7) Years of Experience, (8) Experience with Special Education Students, and (9) Years of Experience with Special Education Students. These criteria were

consistent with Mulcahy et al. (2016) and Krezmien et al., 2017. These criteria ensure that the findings from the studies can be generalized to the broader population.

Table 2.2: Participant Descriptions

Main Author	Age	Race	Gender	Position	Grades Taught	Certif.	Years Exp.	Exp. with SPED	Years Exp with SPED	SUM	Met Criteria
Bosch (2016)	0	0	0	0	1	0	0	1	0	2	0
Chung (2015)	1	0	1	1	1	1	1	0	0	6	0
Conderman (2009)	0	1	1	1	0	0	1	0	0	4	0
Damore (2009)	0	0	0	0	0	0	0	0	0	0	0
Gable (2012).	0	0	0	0	0	0	0	0	0	0	0
Hernandez (2016)	0	0	0	0	0	0	0	0	0	0	0
Jenkins (2009)	0	0	0	1	0	0	1	0	0	2	0
Kirch (2005)	0	0	0	1	0	0	1	1	1	4	0
Kurth (2012)	0	0	0	0	1	0	0	1	0	0	0
Santoli (2008).	0	0	0	1	0	1	0	0	0	2	0
Ware (2016).	0	0	0	1	1	1	0	0	0	3	0
Wilkins (2004)	0	0	1	1	1	1	1	0	0	6	0
Yang (2012)	0	0	0	1	1	1	1	1	1	6	0
Sum	1	1	3	8	6	5	6	4	2		0

Rigorous participant descriptions that are operationally defined are critical for ensuring that studies can be replicated (Mulcahy, Krezmien, & Travers, 2016). Rigorous and comprehensive participant descriptions are required to replicate studies, a critical element of high quality research. Table 1 displays the indicators for Standard 1, Participants. None of the authors of the 13 studies met the criteria for all 9 indicators of

the Standard. Authors of three of the studies (Wilkins et. al., 2004; Yang et. al., 2012; Chung, et. al., 2015) met the criteria for six of the 9 indicators. Wilkenson et.al (2004) provided a relatively good example of participant description. They reported the participants were 89 middle school teachers who taught grades six, seven, and eight from four schools participated in the study. Sixty-nine respondents were female and 20 participants were male. All participants were teachers with 6% receiving a certificate through an alternate route and 94% having a traditional route of a college or university. The authors reported that the majority of the participants had 10 or fewer years of classroom experience and subjects taught were ELA, Math, Science, Social Studies, and Special Education. Wilkins et al. (2004) met a number of the criteria, but failed to describe the teachers age, race, or special education teaching experience.

Authors of three of the studies (Damore et. al., 2009, Gable et. al., 2012, and Hernandez et. al., 2016) failed to meet the criteria for any of the indicators. These studies lacked any specific information about the participants. This failure to include information about the participants severely limited the reliability of information and the ability to replicate the study in the future.

Authors of eight of the thirteen studies (Chung, et. al., 2015, Conderman et. al., 2009, Jenkins et. al., 2009, Kirch et. al., 2005, Santoli et. al., 2008, Ware, S. 2016, Wilkins et. al., 2004, and Yang et. al., 2012) included information about the participants' position or job. A particularly effective example of the position description was provided by Wilkenson et.al (2004). They reported, that 21 teachers taught English, 18 taught Math, 14 taught Science, 17 taught Special Education, and 15 taught Social Studies. This

specificity of this description allowed the reader to understand the positions of the participants, which supported their understanding of the people responding to the survey, and promotes replicability of the procedures. Authors of six or fewer authors included information on the remaining eight indicators. Only one author met the criteria for indicator age, and only one author met the criteria for race. Failure to provide information about these indicators limits the interpretability of the findings because it makes it difficult for replication as well as targeted intervention to promote teacher knowledge. If we don't know the age of the teachers, it can impact understanding their level of experience and knowledge of working with students with special needs.

In Summary, most of the articles looked at failed to provide adequate participant descriptions. These methodological shortcomings limit the readers capacity to fully understand the method. Additionally, they also limit the confidence in the findings. Future research should develop robust participant descriptions to support a rigorous body of research.

2.5.2 Indicator 2: Context and Setting.

Context and Setting was the second quality indicator examined. This indicator consists of three components: (1) Description of the Setting, (2) Description of the Local, and (3) Description of the Location which were developed using criteria from Gersten et al., 2005; Mulcahy et al., 2016, and Kremien et al., (2017). These three components were created to ensure that the researcher could obtain precise information about where the study was conducted.

T**able 2.3: Context and setting**

Main Author	All possible settings are described	Locale (regional location) described	Location (setting of study) adequately described	Sum	Met Criteria
Bosch, M. E. (2016)	0	1	0	1	0
Chung, et. al., (2015)	0	0	0	0	0
Conderman et. al., (2009)	0	1	0	1	0
Damore et. al., (2009).	1	1	1	3	1
Gable et. al., (2012).	0	1	0	1	0
Hernandez et. al., (2016)	0	1	0	1	0
Jenkins et. al., (2009)	1	1	0	2	0
Kirch et. al., (2005)	0	0	0	0	0
Kurth et. al., (2012)	0	1	0	1	0
Santoli et. al., (2008).	1	1	0	2	0
Ware, S. (2016).	0	0	0	0	0
Wilkins et. al., (2004)	1	0	1	2	0
Yang et. al., (2012)	0	1	0	1	0
Sum	4	9	2		1

Replicable research studies require settings that are clearly described and that include sufficient detail for a researcher to replicate the study. Rigorous survey studies should include clear and concise descriptions of all settings that the study included, as well as the locale or region from which the sample was drawn. Only one of the studies (Damore et al., 2009) met all of the criteria for the Context and Setting Standard. Damore and colleagues included a concise description of the setting,

> 20 Chicago schools were selected that represent different geographical locations throughout the city and because the student populations in these elementary schools are representative of the ethnic and socioeconomic diversity found within the district. The overall racial composition of students attending these schools, the proportion of students from low-income backgrounds, and the

proportion of students who were receiving special education services generally matched the overall demographic makeup of the larger school district.

Authors of three studies (Jenkins et. al., 2009, Kurth et. al., 2012, and Wilkins et. al., 2004) met criteria for two of the three indicators. Jenkins et al. (2009) and Santolli et al. (2008) included all settings and adequately described the locale, but failed to provide adequate descriptions of the study location, which limited to replicability of the studies. Wilkins (2004) failed to provide a description of the locale, making replication difficult. Three of the studies (Chung, et. al., 2015, Kirch et. al., 2005, and Ware, S. 2016) failed to include any sufficient information about the setting or locale, substantially limiting the replicability of the findings, and making generalizations difficult.

Most of the authors did include descriptions of the locale, which is essential for conducting survey research. However, authors of just two of the studies (Damore et. al., 2009 and Wilkins et. al., 2004) included adequate descriptions of the settings. This is a major limitation of the research, as the readers are unable to understand where the participants who completed the surveys came from, limiting the interpretability of the findings with respect to generalizing the findings to settings that were potentially similar.

In summary, most of the articles looked at failed to provide adequately described settings for their participants. This lack of explicit reporting of criteria associated with setting impacts the readers' confidence in the findings as well as researcher's ability to replicate these studies in the future.

2.5.3 Indicator 3: Research Design

Research design consists of seven components: (1) Includes a clear rationale, (2) Includes clearly questions and / or hypotheses, (3) Includes Power Analysis or Rationale for Group Size, (4) Employs a Correlational Design, (5) Selection Procedures Described, (6) Selection Procedures Appropriate, and (7) Selection Described for All Groups. Criteria for this indicator were developed from the works of Gersten et al., (2005) and Krezmien et al., (2017). Research questions and hypotheses need to be clearly expressed to ensure the reader, as they proceed through the article, that the researcher is addressing what they originally intended to study. This cohesiveness lends itself to assisting the reader to make an informed decision on the reliability and validity of the study.

Table 2.4: Research Design

Main Author	Includes a clear rationale	Includes clearly questions and / or hypotheses	Includes Power Analysis or Rationale for Group Size	Employs a Correlational Design (Not Causal)	Selection Procedures Described	Selection Procedures Appropriate	Selection Described for All Groups	Sum	Met Criteria
Bosch, M. E. (2016)	0	1	0	0	0	0	0	1	0
Chung, et. al., (2015)	0	0	0	1	0	0	0	1	0
Conderman et. al., (2009)	1	0	0	1	0	0	0	2	0
Damore et. al., (2009).	1	1	0	0	1	1	1	5	0
Gable et. al., (2012).	1	0	0	0	0	0	0	1	0
Hernandez et. al., (2016)	1	1	1	1	0	0	0	4	0
Jenkins et. al., (2009)	1	1	0	1	0	0	0	3	0

Kirch et. al., (2005)	1	1	0	1	0	0	0	3	0
Kurth et. al., (2012)	1	1	1	1	0	0	0	4	0
Santoli et. al., (2008).	1	0	0	1	0	0	0	2	0
Ware, S. (2016).	1	1	0	1	0	1	0	4	0
Wilkins et. al., (2004)	0	0	0	0	0	0	0	0	0
Yang et. al., (2012)	1	1	0	1	0	0	0	3	0
Sum	10	8	2	9	1	2	1		0

The function of a research design is to ensure that the evidence obtained enables you to effectively address the research problem through specifying the type of evidence needed to test your hypothesis. None of the studies met all of the criteria for the Research Design Standard. Only one of the studies (Damore et al., 2009) met five of the seven criteria. Authors of two studies (Hernandez et. al., 2016 and Kurth et. al., 2012) met criteria for four of the seven indicators.

Ten of the thirteen authors included descriptions of the rationale, and eight authors included clear research questions or hypotheses, which are essential for conducting research. However, just one study (Damore et. al., 2009) included adequate descriptions of the appropriate selection procedures described for all groups. They stated that "Surveys were distributed to 200 elementary school teachers through a random process. Before distributing surveys, I requested permission from the principal at each school. Principals were provided with a letter from the district approving the study."

In summary, although the majority of the authors provided clear rational for their studies, and clearly described their research questions and hypotheses, they were significantly lacking in detailed description in any other component of the criteria for research design. Without attending to these design issues beforehand, the conclusions drawn risk being weak and unconvincing and, consequently, will fail to adequate address the overall research problem.

2.5.4 Indicator 4: Sampling procedures.

Sampling procedures consists of three components: (1) Clear Description of The Selection Procedures, (2) Selection Procedures for all Groups Reported, and (3) Clear Description of Unit of Participant. Gersten et.al., (2005) states that sample procedures about population should be described and the researcher should provide sufficient information about participants from which sample was drawn so that the results can be generalized. Criteria for this indicator were developed from the works of Gersten et al., (2005) and Krezmien et al., (2017).

Table 2.5: Sampling procedures

Main Author	Selection Procedures for All Groups Reported	Unit of participant described	Sum	Met Criteria
Bosch, M. E. (2016)	0	0	0	0
Chung, et. al., (2015)	1	1	2	1
Conderman et. al., (2009)	1	1	2	1
Damore et. al., (2009).	1	1	2	1
Gable et. al., (2012).	1	1	2	1
Hernandez et. al., (2016)	1	1	2	1
Jenkins et. al., (2009)	1	1	2	1
Kirch et. al., (2005)	1	1	2	1
Kurth et. al., (2012)	1	1	2	1
Santoli et. al., (2008).	1	0	1	0
Ware, S. (2016).	1	1	2	1
Wilkins et. al., (2004)	1	1	2	1
Yang et. al., (2012)	1	1	2	1
Sum	12	11		11

Clear and replicable descriptions of sampling procedures are crucial for research fidelity and replication. Table 2.5 displays the indicators for Indicator 4. All but two of the authors of the 13 studies met both criteria for the indicators of the Standard. Twelve out of thirteen meet criteria for reporting selection criteria, and eleven out of thirteen studies met criteria for adequately describing the participants There were several examples of well described sampling procedures. Conderman et. al., (2009) reported, “We mailed surveys to 25 secondary school general education teachers, elementary school general education teachers, secondary school special education teachers, and elementary school special education teachers with 6 or fewer years of teaching experience. These teachers’ names were randomly selected from the State of Illinois teacher directory. Our sample size was determined on the basis that we

considered this a pilot study. We distributed follow-up postcards to nonresponders 2 months after the initial survey distribution.". Likewise, Kurth et. al., (2012) reported, "An on-line, anonymous survey was constructed based on the existing literature on grading practices and sent to 270 teachers in seven school districts who practice inclusive education for students with significant disabilities. Schools that practice inclusive education within the school district were emailed the surveys. Schools were determined to practice inclusive education based on input from a teacher contact known to at least one of the authors. The teacher contact was either a current or completed graduate student in special education from an accredited university that teaches and promotes inclusive practices. Upon input from the special education teacher contact, the schools were visited by the first two authors to determine that in fact students with significant disabilities participated in general education for at least 80% of the school day. "These descriptions ensure that the reader understands the sampling procedures, and that they can trust in the rigor of the research. Only one study (Bosch, M. E. 2016) failed to meet either of the criteria, which severely limited the interpretability of the findings.

In summary, the body of studies were generally strong with respect to sampling procedures. Nearly all of the studies provided adequate descriptions of the sampling procedures, which limited the confidence in the findings.

2.5.5 Indicator 5: Materials.

The Materials Indicator consists of three components: (1) Clear Description of Materials, (2) Clear Description of Source of Materials, and (3) Clear Description of the Delivery of Materials. The materials used in a study are critical for the completion of a study, especially in a survey study where the materials are often the only interaction between the researcher and the participants. So, it is critical that the researcher clearly describes the survey and the sources used in the development of the survey, or the source of the survey if it was a survey already in use. Additionally, it is critical for the reader to understand how the materials were delivered to the participants, as that will help the reader to interpret the findings and will support replications. The descriptors for materials were developed using the Council for Exceptional Children: Standards for Evidence-Based Practices in Special Education (2014).

Table 2.6: Materials

Main Author	Materials Described	Source of Materials Described	Delivery of Materials Described	Sum	Met Criteria
Bosch, M. E. (2016)	0	0	0	0	0
Chung, et. al., (2015)	1	1	0	2	0
Conderman et. al., (2009)	0	1	1	2	0
Damore et. al., (2009).	0	0	1	1	0
Gable et. al., (2012).	0	0	1	1	0
Hernandez et. al., (2016)	1	1	1	3	1
Jenkins et. al., (2009)	1	0	1	2	0
Kirch et. al., (2005)	1	1	1	3	1
Kurth et. al., (2012)	1	1	1	3	1
Santoli et. al., (2008).	1	1	0	2	0
Ware, S. (2016).	1	1	1	3	1
Wilkins et. al., (2004)	1	1	1	3	0
Yang et. al., (2012)	0	0	1	1	0
Sum	8	8	10		4

Clear and specific descriptions of the materials, the source of the materials, and the delivery of the materials is essential for rigorous survey research. Authors of four of the studies (Hernandez et. al., 2016, Kirch et. al., 2005, Kurth et. al., 2012, and Ware, S. 2016) met all three criteria for the indicators. These authors provided thorough descriptions of materials. For example, Chung, et. al., (2015) reported “Participants in the study completed a demographic questionnaire on age, educational level, ethnicity,

annual income level, gender, teaching certifications, and number of years of teaching experience. To indicate their attitudes toward a student with ASD, participants completed a minimally revised instrument published in Harnum, Duffy, and Ferguson's (2007) study. The instrument presented two scenarios to the participants. The first scenario described the behaviors of a student with ASD such as playing alone, not interacting with other students, having flat facial expressions, repeating words or phrases over and over, obsessing with a silver ball, and rocking his body in a chair. The second scenario described the behaviors of a typical student such as listening to and respecting people in class, sharing things with classmates, and talking and engaging in different activities with other students. student in each scenario and indicated agreement or disagreement with each statement using a five-point Likert scale (1= strongly agree, 3 = don't know, 5 = strongly disagree).". This description provided the reader with a clear understanding of the survey and survey source, enhancing their acceptance of the findings.

Damore et. al., (2009) provided a detailed description of the delivery of the materials. They reported,

> The surveys were directly placed into teachers' mailboxes (i.e., each of us did so at 10 schools). To make this process as random as possible, the total number of mailboxes at each school was counted and then divided by 10 (i.e., number of surveys distributed per school). Surveys were then placed into mailboxes according to a pattern that would provide approximately all teachers within each school with an equal opportunity to receive a survey. For example, in a school

containing 40 teachers, every fourth mailbox received a survey. In a school that contained 20 teachers, every other mailbox received a survey. Although this process ensured an efficient and relatively random process of survey distribution within each school, teachers in schools that contained fewer teachers were more likely to receive a survey than were teachers in larger schools. Each survey contained a letter describing the study, a postage-paid envelope to return the survey, and a $3 Starbucks gift card.

This description was important for the reader to understand how the surveys were administered, and helped the reader to understand how the participants were engaged in the survey process.

Authors of four of the thirteen studies (Chung, et. al., 2015, Conderman et. al., 2009, Jenkins et. al., 2009, and Santoli et. al., 2008) met two of the three criteria for materials, which was acceptable but not desirable. Authors of eight out of thirteen studies met criteria for description of materials and source of materials.

In summary, the fact that more than a third of the articles didn't include adequate descriptions of the materials or the source of the materials does limit the rigor of those studies. Ten out of thirteen met criteria for delivery of materials described, which was important as how the survey is administered is critical for replication and for increasing the confidence in the findings.

2.5.6 Indicator 6: Instrument.

The Instrument Indicator consists of five components: (1) Clear Description of Instrument Source, (2) Instrument Reliability Reported, (3) Instrument Validity Reported, (4) Instrument Training Reported, and (5) Instrument Administration Described. Information about the instrument is vital when determining the reliability of the findings. If the reader can't identify the instrument used to collect the data, or if the people responsible for collecting the data have been trained on the use of the instrument, it may sway their confidence in the findings. The quality indicators for instrument were developed from Gersten et al., (2005) and the Council for Exceptional Children: Standards for Evidence-Based Practices in Special Education (2014)

Table 2.7: Instrument

Main Author	Instrument Source Described	Instrument Reliability Reported	Instrument Validity Reported	Instrument Training Described	Instrument Administration Described	Sum	Met Criteria
Bosch, M. E. (2016)	1	0	0	0	0	1	0
Chung, et. al., (2015)	1	1	1	1	1	5	1
Conderman et. al., (2009)	1	0	1	0	1	3	0
Damore et. al., (2009).	1	0	0	0	1	2	0
Gable et. al., (2012).	1	0	0	0	1	2	0
Hernandez et. al., (2016)	1	0	1	0	0	2	0
Jenkins et. al., (2009)	1	0	0	0	0	1	0
Kirch et. al., (2005)	1	0	0	0	1	2	0
Kurth et. al., (2012)	0	1	1	0	1	3	0
Santoli et. al., (2008).	1	1	0	0	1	3	0
Ware, S. (2016).	0	0	0	0	0	0	0
Wilkins et. al., (2004)	1	0	1	0	1	3	0
Yang et. al., (2012)	0	0	0	0	1	1	0
Sum	10	3	5	1	9		1

To increase the likelihood of study replication, it is imperative that the original source for all instruments are described. For instance, if commercially available, or

author developed. If author developed, is the development process completely described with replicable precision. And lastly, if the instrument was obtained from another source, is the instrument is described sufficiently to understand its development and include a reference to original source of the instrument.

Only one author (Chung, et. al., 2015) reported information about their instrument that met all five criteria and four studies met three criteria (Conderman et. al., 2009, Kurth et. al., 2012, Santoli et. al., 2008, and Wilkins et. al., 2004). For the Instrument source described, ten out of thirteen studies met criteria. These authors provided thorough descriptions of materials. For example, Chung, et. al., (2015) reported

> To indicate their attitudes toward a student with ASD, participants completed a minimally revised instrument published in Harnum, Duffy, and Ferguson's (2007) study. The instrument presented two scenarios to the participants. The first scenario described the behaviors of a student with ASD such as playing alone, not interacting with other students, having flat facial expressions, repeating words or phrases over and over, obsessing with a silver ball, and rocking his body in a chair. The second scenario described the behaviors of a typical student such as listening to and respecting people in class, sharing things with classmates, and talking and engaging in different activities with other students. Participants subsequently read seven statements about the student in each scenario and indicated agreement or disagreement with each statement using a five-point Likert scale (1= strongly agree, 3 = don't know, 5 = strongly disagree). Graduate

students trained in research administered and collected the questionnaires. Data analysis was then conducted via computerized statistical software. The instrument was reviewed and published in a prestigious journal and had established reasonable content validity. the Cronbach alpha determined from the data collected from the 234 participants in this study was .77. This established the internal consistency of the revised instrument.

This robust description provides the reader with the necessary information needed to replicate the instrument in future studies. Gable et. al., (2012) reported with regards to instrument administration, "In completing part two of the survey, respondents were asked to circle the most appropriate answer on a five-point Likert scale (i.e., most = 5, least = 1) concerning perceived level of (a) importance, (b) usage, and (c) level of preparation to implement each of 20 evidence based practices.".

In summary, reports of instrument validity and reliability were significantly lacking in most of the studies, which impacts the reliability of the findings of these studies. If their instruments are reliable or valid, how can the results from their studies be interpreted with fidelity. However, some of the studies provided robust descriptions of the instrument, which increased the confidence of the respective findings.

2.5.7 Indicator 7: Variables.

Variables consists of two components: (1) Independent Variable is Operationalized and (2) Dependent Variable is Operationalized. Mulcahy et al. (2016), states that high quality studies require independent and dependent variables that are

clearly described, operational, and measurable. These quality indicators were developed from the works of Gersten et al., (2005), Horner et al., (2005), Krezmien et al., (2017), Mulcahy et al. (2016), Thompson, (2005).

Table 2.8: Dependent and Independent Variables

Main Author	Dependent Variable Operationalized	Independent Variable Operationalized	Sum	Met Criteria
Bosch, M. E. (2016)	1	1	2	2
Chung, et. al., (2015)	0	1	1	1
Conderman et. al., (2009)	1	1	2	2
Damore et. al., (2009).	1	1	2	2
Gable et. al., (2012).	1	1	2	2
Hernandez et. al., (2016)	1	1	2	2
Jenkins et. al., (2009)	0	1	1	1
Kirch et. al., (2005)	1	1	2	2
Kurth et. al., (2012)	0	1	1	1
Santoli et. al., (2008).	0	1	1	1
Ware, S. (2016).	0	1	1	1
Wilkins et. al., (2004)	1	1	2	2
Yang et. al., (2012)	1	1	2	2
Sum	8	13		8

A study should explain why the Dependent Variable is meaningful and socially important, and the Independent Variables need to be operationalized, meaning they

must be observable and measurable. Providing enough and accurate details about both independent and dependent variables influence the outcome of the study. Without robust and concise descriptions of the variables, the study is difficult to replicate. If the author reports significant findings from their study, it would be useless to future research, as there would be no way to replicate those findings without solid, operationally defined variables. The process of defining variables allows them to be measured, empirically and quantitatively.

All thirteen studies met criteria for operationally defining their independent variables, however, only eight of the thirteen studies met criteria for explaining the significance of their dependent variables. Kirch et al., (2005) provided a very robust description of their dependent variable. They reported that there were three sets of dependent variables. The First set of dependent variables were teacher ratings on preparedness to teach science for each of the 13 disability categories. There were 13 dependent variables, one for each Disability category. The second set of dependent variables were teacher ratings on preparedness in topic areas across 4 items. There were 4 dependent variables, one for each topic area. The Third set of dependent variables were teacher ratings of preparedness for performing tasks across 6 tasks. There were 6 dependent variables, one for each task. Yang et. al., (2012) reported using the following peer mediated strategies:

> Make Interpretation, Prompt for Direct Communication, Invite Participation, Follow Through, Answer Peers' Questions, Prompt for identifying peers/activities, Help with Movement, Provide Acknowledgement , Add

Information into Conversation Environmental, Arrangement Fade from Interactions, Inform of Physical Assistance, and Provide sensory input.

In their first analysis the dependent variables were summed up and an average score was calculated obtaining the mean rating of perceived usefulness and observed frequency for each strategy. Then using mean ratings, each strategy was rearranged in rank order and they assigned a rank for usefulness and a rank for frequency of occurrence. In their second analysis they assigned three points to a strategy receiving a rank of 1, two points for a rank of 2 and one point for a rank of 3. Then a total score for each strategy was calculated and the strategies were rearranged in rank order with the highest score receiving a rank of 1. This demonstrates a good description of the dependent variable as it is a clear demonstration of the steps the authors took to ensure the reader understood the processes they undertook to create the different peer mediated strategy categories.

All thirteen articles provided an adequate description of the independent variables. Santoli, et.al., ((2008) provided a thorough description when operationally defining their independent variables. They stated that they used teachers with experience teaching special education students and teachers without special education teaching experience. Jenkins et al., (2009) also provided a vigorous description of their independent variables in reporting two different analysis. The first analysis was conducted examining differences by Teacher Type (General Education and Special

Education). A second analysis examined differences in teaching experience with regards to years of teaching.

In summary, all thirteen articles included an adequate, operationally defined independent variable, however only eight of the thirteen articles included an acceptable operational definition of the dependent variable. This lack of information will impact the readers' interpretation of the findings. Without a solid description of the dependent variable, the reader cannot rely on the reliability or validity of the findings from the study.

CHAPTER 3

METHOD

The purpose of this study was to conduct a large survey administration in a Northeast State consistent with surveys in Turkey, Germany and Saudi Arabia. I was interested in understanding teachers' perceptions and attitudes towards inclusion and students with disabilities. Additionally, I was specifically interested in the knowledge and perceptions of students with Emotional and behavioral disorders (EBD). Of paramount importance was understanding the knowledge of effective strategies to support students with EBD in inclusive settings.

3.1 Research Questions.

Five research questions guided this study:

1. Is the International Survey on Inclusion a reliable and valid tool to use with U.S. educators?
2. What are the perceptions of disability and inclusion of a sample of U.S. educators?
3. What is the knowledge of disability and inclusion of a sample of U.S. educators?
4. Do perceptions of students with disabilities differ by disability category?
5. What is the strategy knowledge of a sample of U.S. educators with respect to students with EBD?

3.2 Research Design

This study involved a survey that employed both quantitative and qualitative analyses. The survey was the International Survey on Inclusion. For the study, I employed descriptive and inferential statistics to understand educator knowledge and perceptions of students with disabilities and inclusion. I also employed qualitative analyses to understand educator strategy knowledge of effective interventions for students with EBD.

3.3 Instrument

The instrument used in this study was the International Survey on Inclusion (copyright 2017, Krezmien, M., Linderkamp, F., Przbilla, B.). The survey is composed of three parts and measures attitudes toward inclusion and students with disabilities, teachers' perception of their knowledge regarding inclusion, and their knowledge of evidence based practices to support students with disabilities in inclusive settings. The first part is comprised of 45 Likert type items presented in three sets as shown in Table 3.1. The second and third parts are comprised of six open-ended items that present vignettes of students with specific disabilities presented in a typical inclusion setting. Each scenario included a short answer item ask the respondents to state what strategy or strategies he or she would use in his or her classroom to meet the needs of the student with the disability. The second item asked the respondents to state what strategy or strategies he or she would use to ensure that the other students in the class

were making progress while they were intervening with the student with the disability. Each part of the survey is designed to take approximately 15 minutes to complete, for a total of 30 minutes. The survey is designed to be confidential and does not include identifying information that could be linked to the participant.

Table 3.1: Item Categorization

Sets of Items	Items
Set 1	
Items organized by item types across vignette description of four disability categories.	1: 11a, 12a, 13a, 14a (Ability to Teach in GenEd) 2: 11b, 12b, 13b, 14b (Administrative Support) 3: 11c, 12c, 13c, 14c (Sufficient Time to Plan and Prepare) 4: 11d, 12d, 13d, 14d (Students will be Successful in GenEd) 5: 11e, 12e, 13e, 14e (Student Time in GenEd)
Set 2	
Items organized by item types across disability category names	6: 15a,15b,15c,15d (Know and Understand Instructional Strategies) 7: 16a,16b,16c,16d (Know and Understand Characteristics) 8: 17a,17b,17c,17d (Prepare for Adults with Job) 9: 18a,18b,18c, 18d, (Prepare for Independent Adults) 10: 19a,19b,19c,19d (Students should be able to Obtain Job)
Set 3	
Discrete items that measure broad perceptions about all kids with disabilities or inclusion generally.	11: 20a Accommodation of Needs 12: 20b Inclusion as Placement 13: 20c Inclusion as Pushed in Supports 14: 20d Inclusion Requires SPED Teacher 15: 20e Students should be in all activities with peers WOD 16: 20f Need for SPED / GenEd Collaboration 17: 20g Need of Additional Training

3.4 Survey Administration Procedures

After the study was approved by the Institutional Review Board at the researchers' institution, a recruitment email was sent through Qualtrics to potential participants using an email contact list that was created from school district websites. The email contained information about the contents of the survey as well as a link to the survey, which was hosted by Qualtrics. A second, reminder email was sent one week after the original email; and a second email was sent two weeks after the original email. I closed access to the survey one week after the third email was sent. After the first round of emails were sent, one urban school district contacted us and asked that I use a separate process to receive approval to use their districts data. Their email information was removed from the database prior to the follow up emails being sent. Although the required forms were submitted, they have yet to be approved, therefore their data was not available for use.

Respondents were informed that completing the survey constituted their consent to participate in the study. For each section of the survey completed, participants were invited to submit their email address to be entered into a drawing for an iPad mini.

Once the responses from the third email were received, I transferred the data from Qualtrics to SPSS to analyzed the data with regards to participant attitudes and professional knowledge of inclusion practices in general, as well as knowledge shared by specific teaching role (general education, special education, related services,

paraprofessionals. The Likert Scale items were scored as 0 for Strongly Disagree, 1 for Disagree, 2 for Agree and 3 for Strongly Agree.

For this study, I recruited participants from 20 school districts of a Northeastern state. An email containing a letter detailing the purpose of the study, a description of what was being asked of the participants, and a link to the survey on Qualtrics was disseminated to each email on the email contact list. A second reminder email was sent one week after the original email, and a third reminder email was sent two weeks after the original email.

In the smallest district, the survey was sent to 28 staff members; in the largest district, it was sent to 888 staff members. Recruited respondents included teachers (general and special education), special education service providers (such as speech pathologist, occupational therapist, physical therapist), paraprofessionals, and administrators. I administered the survey to a total 4149 individuals. A total of 713 individuals completed the survey, a response rate. A total of 17.2%. Three hundred eighty-four of the participants completed part 2 which contained vignettes regarding teacher knowledge of practices to support students in inclusive classrooms (3 open response items). Two hundred ninety-nine respondents completed part 3 which contained vignettes regarding teacher knowledge of practices to support students in inclusive classrooms (3 open response items).

Information with regards to participants' gender, age, grades taught, position type, school type, years of teaching experience, experience of working with students with disabilities, and the percentage of students they were working with who had

special needs were collected through the survey. Table 3.2 gives a visual representation of the data collected with regards to participants.

Table 3.2: Participant Gender, Age, and Ethnicity: (N 684)

Demographic Variables	Sample %
Gender	
Male	103 (15%)
Female	579 (84.5%)
Other	3 (.4%)
Age	
20-30	117 (17.64%)
31-40	149 (22.47%)
41-50	172 (25.94%)
51 or >	225 (33.93%)
Race/Ethnicity	
Asian	1 (.01%)
American Indian/Native Alaskan	2 (.02%)
African America	19 (2.7%)
LatinX	22 (3.1%)
White/Caucasian	621(87.5%)
Hawaiian/Pacific Islander	0 (0%)
Middle Eastern	10 (1.4%)
2 or more Races	5 (.07%)
Other	3 (.04%)

Table 3.3: Participant Characteristics - School-related: (N 684)

Grade Taught	
Pre K-5	308 (41.2%)
6-8	192 (25.7%)
9-12	185 (24.7%)
Multiple	63 (8.4%)
Position Type	
General Education Teacher	305 (43.9%)
Special Education Teacher	123 (17.7%)
School Psychologist	12 (1.7%)
School Counselor	22 (3.2%)
School Administrator	33 (4.7%)
Paraprofessional	85 (12.2%)
Related Service Provider	52 (7.5%)
School Nurse	14 (2%)
Vocational Teacher	10 (1.4%)
Other	11 (1.6%)
Percentage of Students with Disabilities in Class	
0-10%	96 (15.1%)
11-40%	297 (46.8%)
41-60%	59 (9.3%)
61-90%	40 (6.3%)
91-100%	142 (22.4%)
Years of Experience	
1-5 years	123 (19.2%)
6-15 years	246 (38.5%)
16-25 years	180 (28.2%)
26-35 years	72 (11.3%)
36 or >	18 (2.8%)
Experience Teaching Students with Disabilities	
<1 year	10 (1.6%)
1-5 years	129 (20.4%)
6-15 years	223(35.2%)
16-25 years	180 (28.4%)
26 or >	81 (14.4%)
School Type	
Elementary School	298 (42%)
Intermediate School	11(1.5%)
Middle School	123 (17.3%)
High School	142 (20%)
Vocational/Technical School	25 (3.5%)
Public Alternative School	2 (.3%)

Day School for Students with Special Needs	2 (.3%)
Other	42 (5.9%)

The respondents ranged in age from 20 years to 74 years old. The majority of the respondents were elementary school teachers. Most of the respondents taught in general education classrooms, with a sizable percentage teaching special education. The remaining participants were paraprofessionals, school administrators, school psychologist, school counselors, related service providers, school nurses, and vocational teachers. All of the respondents reporting having students with disabilities in their classrooms and were grouped with regards to IDEA Placement percentages. Ninety-six reported that less than 10% of their student population were students with disabilities, but more than 45% reported that 11-40% of their students had disabilities. Most of the participants had six or more years of teaching experience, with most participants reporting that they had more than six years teaching experience with students with disabilities.

3.5 Setting

Participants were a sampling from 20 public rural, urban, and suburban school districts in a Northeastern State with a total of 68 schools. I recruited from more rural schools in order to ensure there were adequate numbers of educators from the different locales. 19 of the schools were in Rural, Fringe (41) areas, 19 of the schools were in City, Small (13), 15 of the schools were in Suburban, Large (21), of the schools were in Rural, Fringe (41), 8 of the schools were in Rural, Distant (42), 6 of the schools were in Town, Fringe

(31), and 1 of the schools were in Suburban, Small (23). Table 4.3 shows the National Center for Education Statistics classification codes. The school enrollment varied ranged from 105-5,26 students.

Table 3.4: Locale of Participant Schools

Code and Number	Description of Code
City, Large (11)	Territory inside an urbanized area and inside a principal city with population of 250,000 or more.
City, Midsize (12)	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000.
City, Small (13)	Territory inside an urbanized area and inside a principal city with population less than 100,000.
Suburban, Large (21)	Territory outside a principal city and inside an urbanized area with population of 250,000 or more.
Suburban, Midsize (22)	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000.
Suburban, Small (23)	Territory outside a principal city and inside an urbanized area with population less than 100,000.
Town, Fringe (31)	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area.
Town, Distant (32)	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area.
Town, Remote (33)	Territory inside an urban cluster that is more than 35 miles from an urbanized area.
Rural, Fringe (41)	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster.
Rural, Distant (42)	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster.
Rural, Remote (43)	Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

CHAPTER 4

RESULTS

4.1 Reliability.

Cronbach's Alpha was used to establish the reliability of the survey. Cronbach's Alpha is the appropriate measure of internal consistency for Likert type surveys. For this analysis, the sum scores for each item set was entered as items in the reliability analysis. The Cronbach's Alpha was 0.94, a robust reliability.

4.2 Factor Structures.

I utilized Principal Components Analysis to understand the factor structure of the survey. Specifically, I used Principal Component Analysis to understand how the sets of items held together into more discrete factors. The PCA yielded nine factors; Admin Support for Inclusion, Characteristics and Strategies, Independence Low Incidence, Independence High Incidence, Work at Typical Employer, EBD Support, ID Support, LD Support, and Perceptions of Inclusion. The PCA explained 68.6% of the variance.

Table 4.1: Factor Loadings Findings from Principal Components Analysis

	Factor Loadings								
Items	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**	**F7**	**F8**	**F9**
F1. Admin Support for Inclusion									
LD: Time to Prepare	0.85								
ID: Time to Prepare	0.82								
EBD: Time to Prepare	0.75								
LD: Admin Support	0.73								
ID: Admin Support	0.66								
EBD: Admin Support	0.61								
F2. Characteristics and Strategies									
Char: EBD		0.81							
Char: SLD		0.74							
Char: ID		0.73							
Char: AUTISM		0.69							
Instruct. Strat: SLD		0.63							
Instruct. Strat: EBD		0.58							
Instruct. Strat: Autism		0.50							
F3. Independence Low Incidence Disabilities									
Job: ID			0.84						
Independ: ID			0.75						
Job: Autism			0.69						
Instruct. Strat: ID			0.64						
Independ: Autism			0.64						
Instruct. Strat: Autism			0.52						
F4. Independence High Incidence Disabilities									
Independ: EBD				0.83					
Independ: SLD				0.77					
Job: EBD				0.75					
Job: SLD				0.70					
F5. Work at Typical Company									
Work / Company: Autism					0.83				
Work / Company: ID					0.83				
Work / Company: EBD					0.80				
Work / Company: SLD					0.75				
F6. EBD Support									
EBD: Able to Teach						0.78			
EBD: Acad. / Social						0.75			
EBD: Time in SPED						0.73			

F7. ID Support			
ID: Acad. / Social	0.87		
ID: Time in SPED	0.85		
ID: Able to Teach	0.82		
F8. LD Support			
LD: Acad. / Social		0.82	
LD: Time in SPED		0.81	
LD: Able to Teach		0.74	
F9. Perceptions of Inclusion			
Inclusion = Placement			0.82
Inclusion = specialized			0.81
SWD in all activities			0.74
Inclusion = Collaboration			0.65

I then created sum scores for each of the nine factors. I combined the response scores from the Likert ratings (0,1,2,3) for each item in the respective factor for each individual included in the factor analysis. I then examined the distributions of sums of scores for each of the factors. In SPSS we conducted a test of skewness. A determination of skewness is made when the skewness statistic is greater than 1.0 or less than -1.0.

Admin Support for Inclusion Items. I examined the distributions of the sums of scores for the six items that loaded onto the Support for Inclusion Factor. The distribution for participant responses for characteristic items showed total range of scores of 0 through 18 with a mean of 8.1, and a standard deviation of 3.61, which is slightly negative. While 56 participants had mean sum scores that were equivalent to agreeing and strongly agreeing about the level of administrative support, 182 participants had mean sum scores were equivalent to disagreeing and strongly disagreeing about the level of support. Overall, there was a broad distribution that was

relatively normally distributed (skew of .045), with a majority in the agree / disagree range.

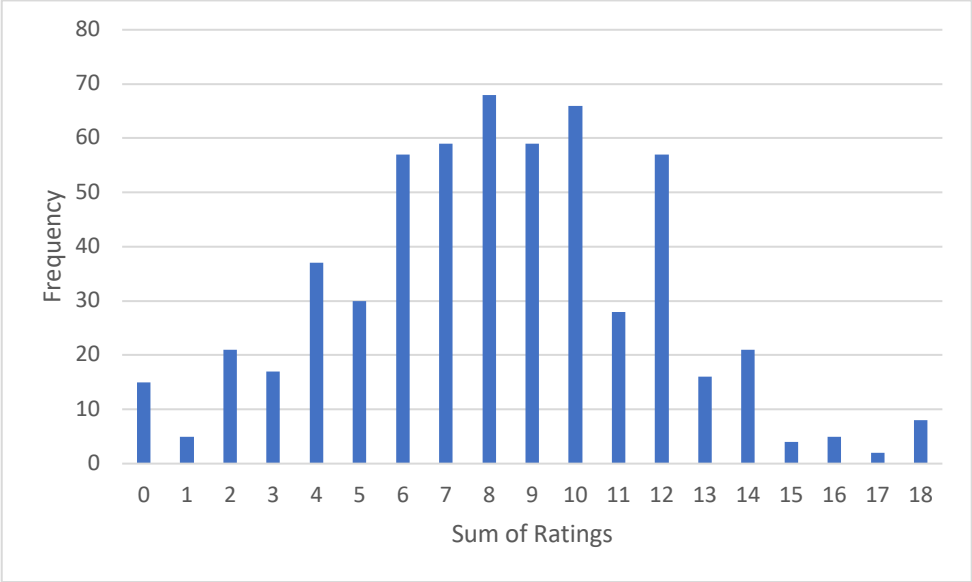

Figure 4.1: Distribution of scores for Admin Support for Inclusion

Characteristics and Strategies Items. I examined the distributions of the sums of scores for the seven items that loaded onto the Characteristics and Strategies Inclusion Factor. The distribution had a range of scores of 0 through 21 with a mean of 14 and a standard deviation of 3.68, which was equivalent to agreeing about their knowledge of characteristics and strategies to support students with disabilities. Of particular note, 108 of the participants had sums scores of 18 or higher, indicating a strong agreement. The distribution was slightly skewed to the left, a negative skew (-.467) This indicates that the majority of the participants had a positive orientation toward the statements.

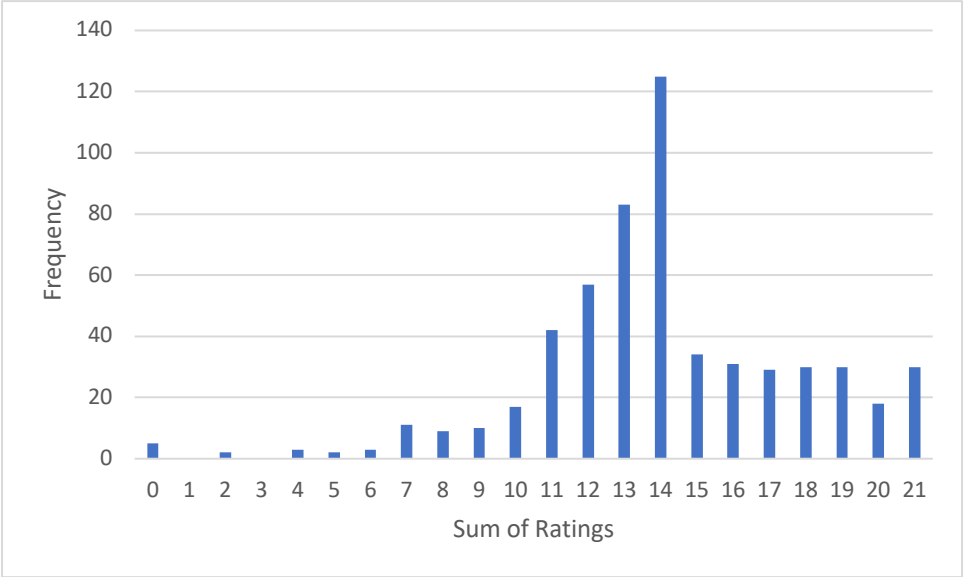

Figure 4.2: Distribution of scores for Characteristics and Strategies

Independence Low Incidence Disabilities Items. I examined the distributions of scores for the six items that loaded onto the Independence Low Incidence Factor. The distribution for participant responses for characteristic items showed total range of scores of 0 through 18 with a mean of 9, and a standard deviation of 3.65, equivalent to agreement about Independence statement for students with low incidence disabilities. While 92 participants had mean sum scores that were equivalent to agreeing and strongly agreeing about the level of administrative support, 109 participants had mean sum scores were equivalent to disagreeing and strongly disagreeing about the level of support. Overall, there was a broad distribution that was relatively normally distributed (skew of-.082), with a majority in the agree / disagree range.

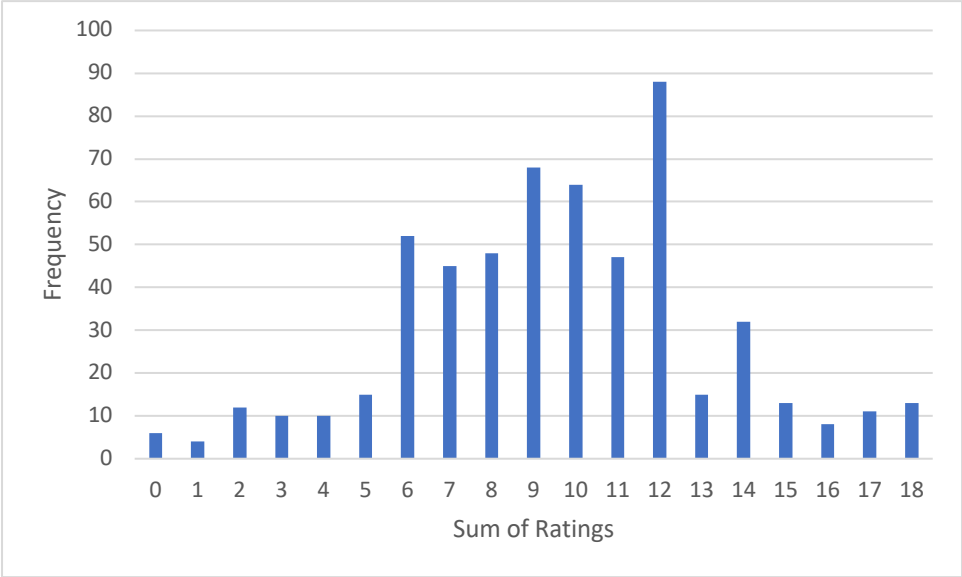

Figure 4.3: Distribution of scores for Independence Low Incidence Items

Independence High Incidence Disabilities Items. I examined the distributions of scores for the four items that loaded onto the Independence High Incidence Factor. The distribution for participant responses for characteristic items showed total range of scores of 0 through 12 with a mean of 7.6 and a standard deviation of 2.44. Of particular note, the majority of the participants rated this Factor as 8, indicating that respondents generally agreed to the statement about independence of student with high incidence disabilities and their capacity to support and prepare that independence. The distribution was skewed slightly to the left, a negative skew (-.481).

Work at Typical Employer Items. I examined the distributions of scores for the four items that loaded onto the Typical Employer Factor. The distribution for participant responses for characteristic items showed total range of scores of 1 through 11 with a mean of 7 and a standard deviation of 2.27, indicating a lack of agreement or

disagreement about the statements. The highest number of participants had a sum of 7, also indicating a general lack of agreement or disagreement about the students with disabilities capacity to get and maintain a job at a typical employer. There was no skewness, (skew of .096).

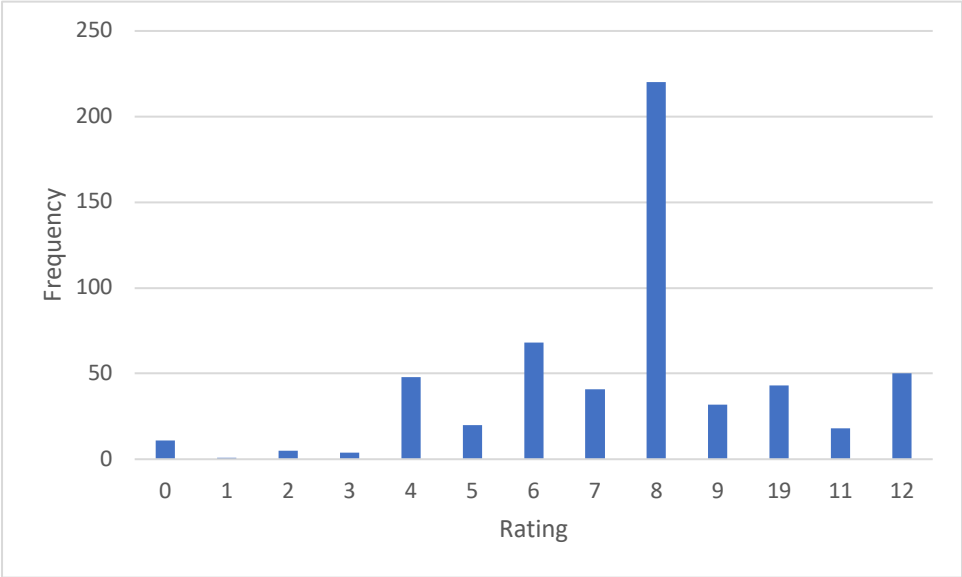

Figure 4.4: Distribution of scores for Independence High Incidence Items

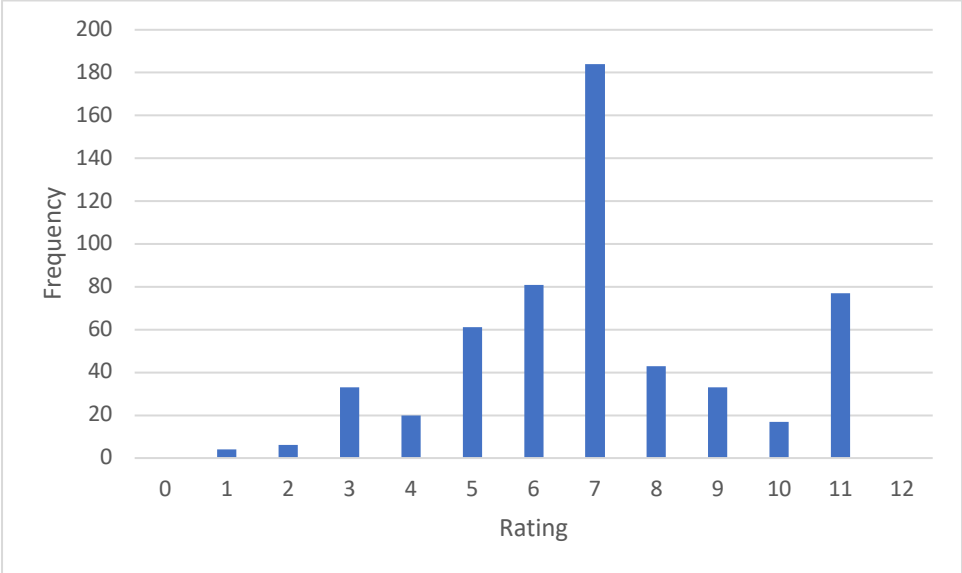

Figure 4.5: Distribution of scores for Work at Typical Employer Items

EBD Support Items. I examined the distributions of scores for the three items that loaded onto the EBD Support Factor. The distribution for participant responses for characteristic items showed total range scores of 0 through 9 with a mean of 4.1 and a standard deviation of 1.97, which is equivalent with the slightly disagree category. Of particular note, 108 of the participants had a sum score of 2 or less, indicating that they strongly disagreed with their ability to support students with EBD. Another 212 scored as a 3 or 4, which is disagreement with their ability to support. At the same time, just 50 participants had a sum score of 7 or higher, indicating a small percentage who strongly agreed with the statements. There was no skewness, (skew of -.190).

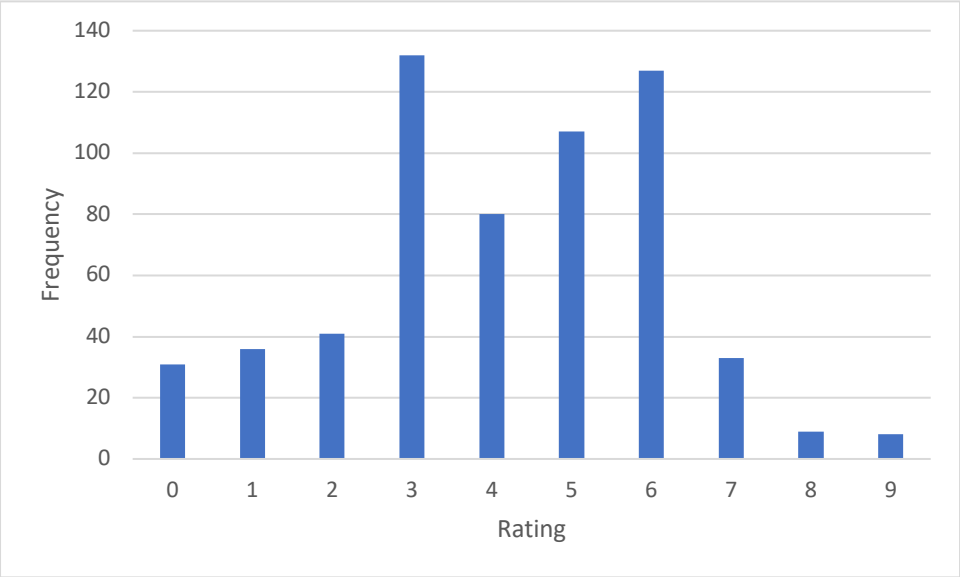

Figure 4.6: Distribution of scores for EBD Support Items

ID Support Items. I examined the distributions of scores for the three items that loaded onto the ID Support Factor. The distribution for participant responses for

characteristic items showed total range of scores of 0 through 9 with a mean of 3.7 and a standard deviation of 2.15. Of particular note, 171 of the participants had a sum score of 3 or less, indicating that they strongly disagreed with their ability to support students with ID. Another 243 scored as a 3 or 4, which is disagreement with their ability to support. At the same time, just 47 participants had a sum score of 7 or higher, indicating a small percentage who strongly agreed with the statements.

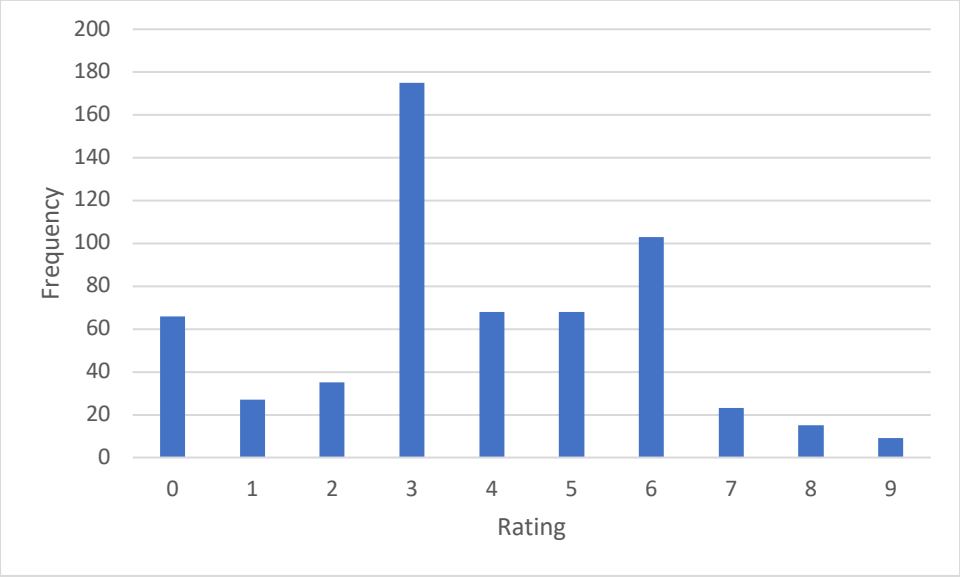

Figure 4.7: Distribution of scores for ID Support Items

LD Support Items. I examined the distributions of scores for the three items that loaded onto the LD Support Factor. The distribution for participant responses for LD items showed total range of scores of 0 through 9 with a mean of 5.5 and a standard deviation of 1.86, indicating a lack of agreement or disagreement about the statements. The highest number of participants had a sum of 6, also indicating a general lack of agreement or disagreement about their ability to support students with Learning

Disabilities. The distribution was slightly skewed slightly to the left, a negative skew (-.443), but doesn't meet the requirement of skewness of -1.

Perceptions of Inclusion Items. I examined the distributions of scores for the four items that loaded onto the Perceptions of Inclusion Factor. The distribution for participant responses for characteristic items showed total range scores of 1 through 12 with a mean of 9.6, equivalent to agreeing about their perceptions of inclusion of students with disabilities. Of particular note, 504 of the participants had sums scores of 8 or higher, indicating a strong agreement. The distribution was skewed to the left, a negative skew (-.819) This indicates that the majority of the participants had a positive orientation toward the statements.

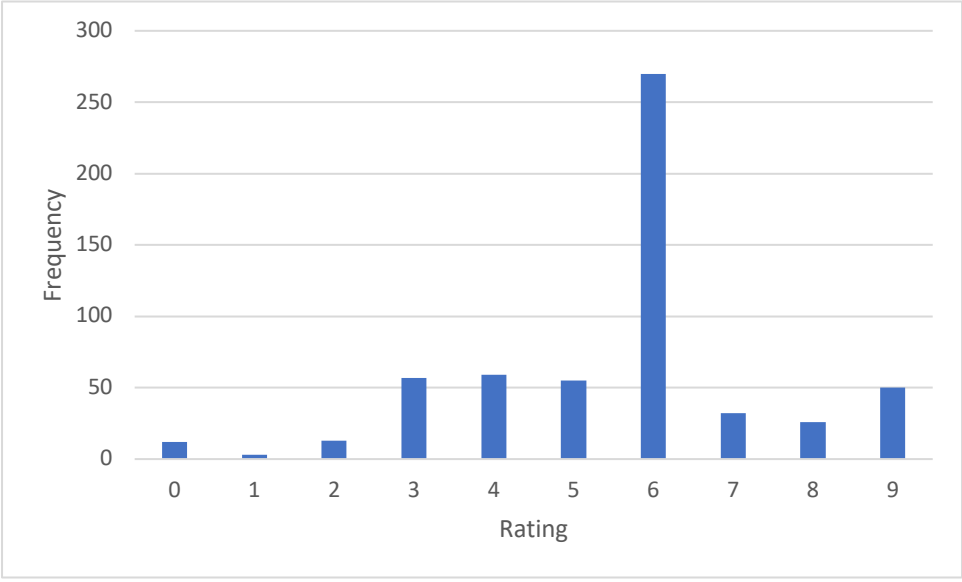

Figure 4.8: Distribution of scores for LD Support Items

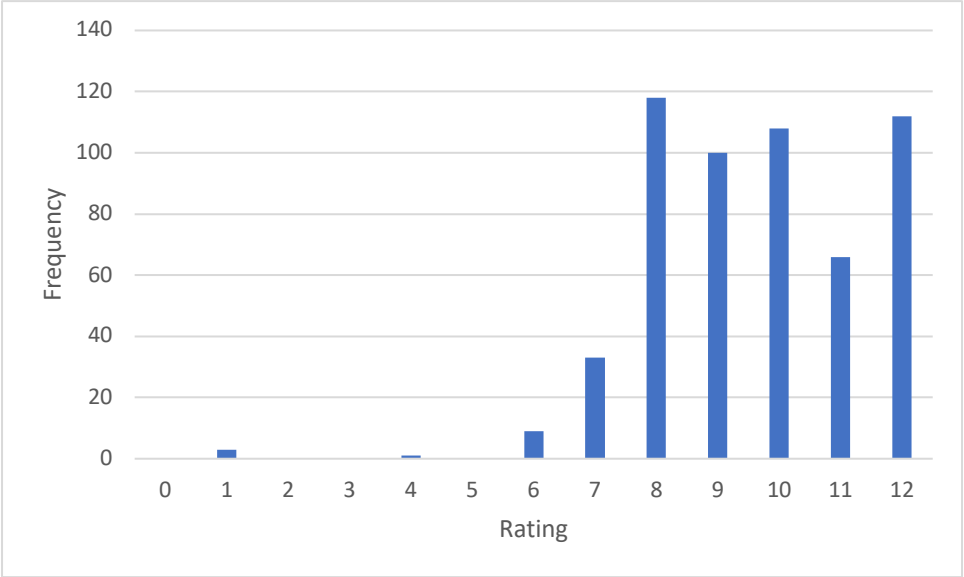

Figure 4.9: Distribution of scores for Perceptions of Inclusion Items

4.3 Comparisons by Disability Category

I examined the differences in perceptions by disability category. I created sums of scores on all items associated with each discrete disability category (ID, SLD, EBD). I examined the distribution of scores of the participants for the disability categories for EBD, LD, and ID.

Emotional Behavioral Disabilities Items

The distribution for participant responses for EBD disability items showed total range of scores of 0 through 30 with a mean of 16.3 (Standard Deviation of 4.6). The distribution shows that participants had a range of their perceptions about students with EBD. The mean perception was close to neither agree nor disagree, indicating participants had mixed perceptions about students with EBD.

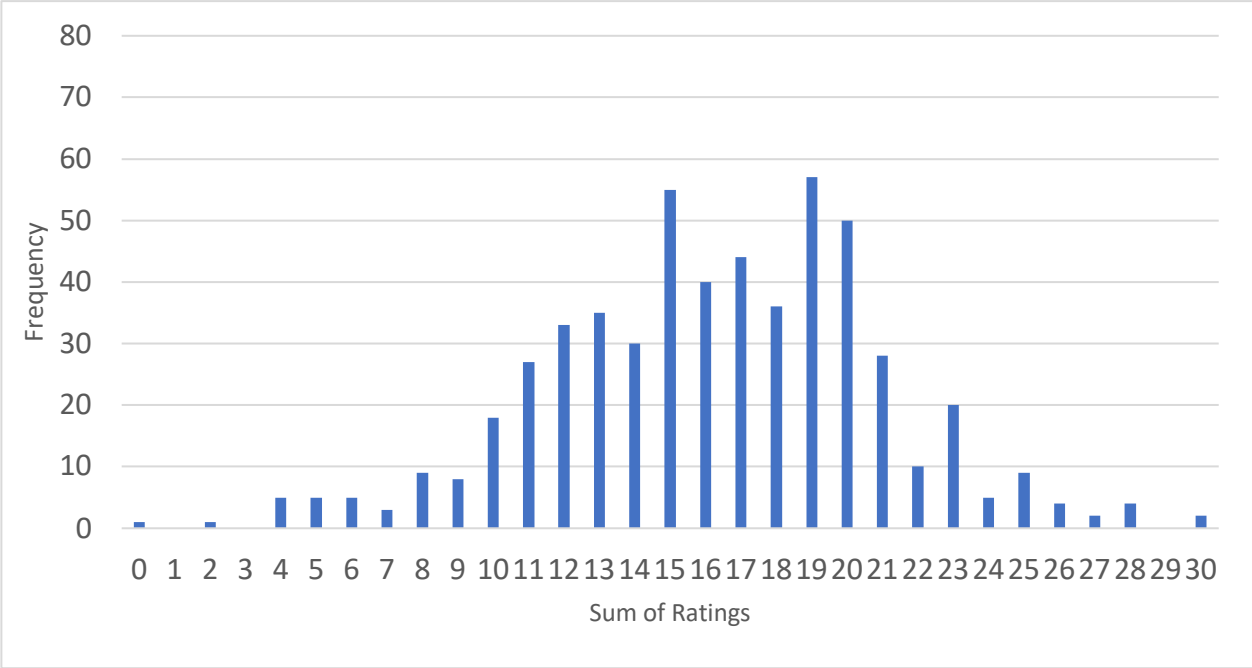

Figure 4.10: Distribution of scores for EBD Items

Intellectual Disability Items

The distribution for participant responses for ID disability items showed total range of scores of 0 through 28 with a mean of 14.1 (Standard Deviation of 4.8). The distribution shows that participants had a range of their perceptions about students with ID. The mean is in the disagree range, indicating a slight general negative perception about students with ID.

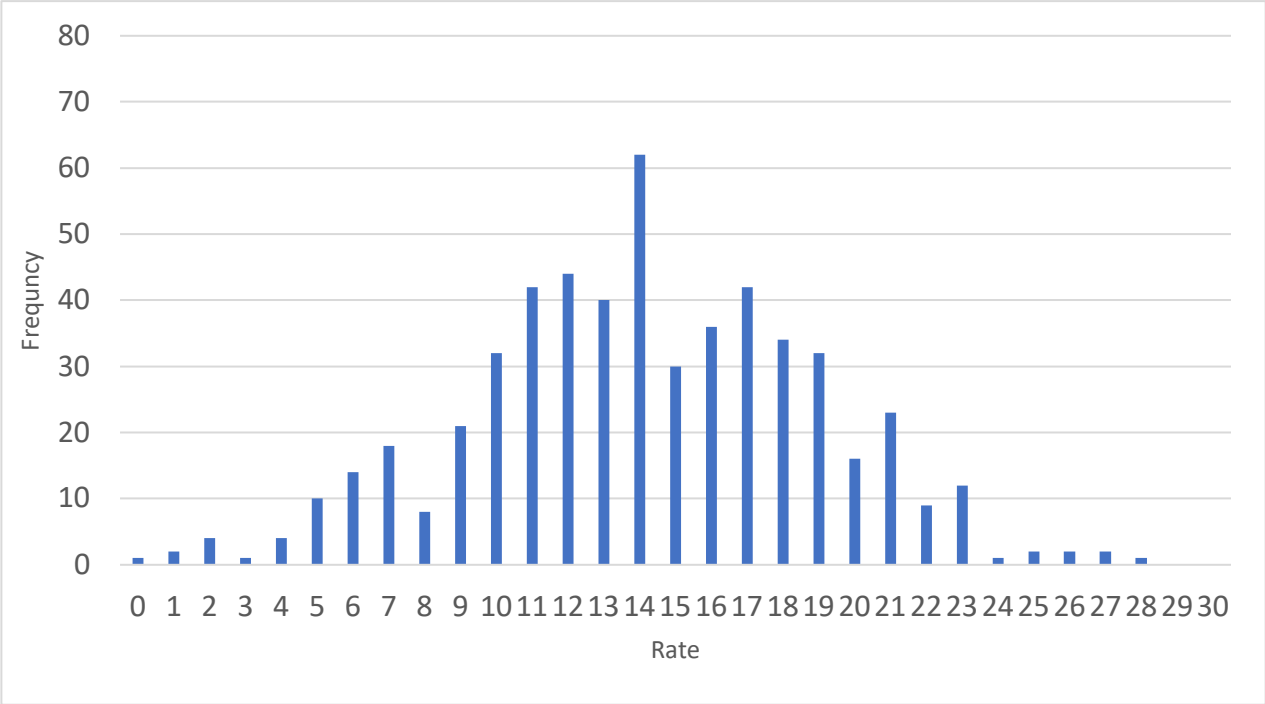

Figure 4.11: Distribution of scores for ID Items

Learning Disability Items

The distribution for participant responses for LD disability items showed total range of scores of 2 through 30 with a mean of 19.2 (Standard Deviation of 4.3). The distribution shows that participants had a range of their perceptions about students with LD, but that there were substantially more participants with positive perceptions than negative perceptions, supported by the relatively high mean rating.

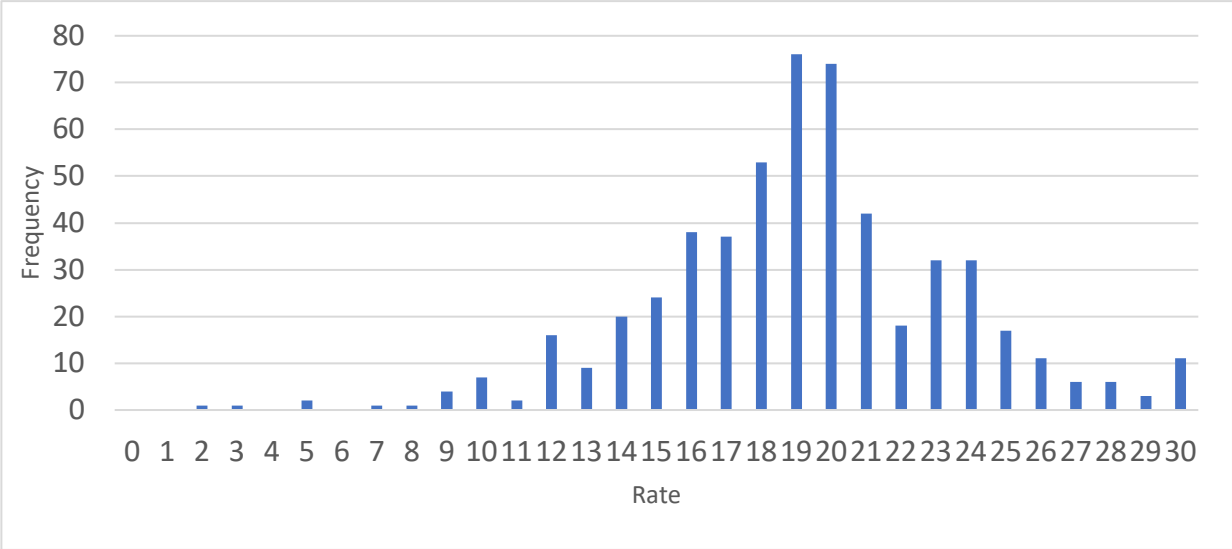

Figure 4.12: Distribution of scores for LD Items

4.4 Differences in Perception by Participant Characteristic

I used the generalized linear model (GLM) in SPSS to examine relationships between participant characteristics and responding on the items associated with each factor. I conducted a separate multiple regression for each factor. All variables were entered in a single step, and a posthoc analysis was conducted for analyses that found that position was significant to understand differences by position.

The sum of scores for each factor was the criterion variable and (1) School Level, (2) Age, (3) Race, (4) Position, (5) % SPED in Classes, (6) Years Experience, and (7) Years Experience with SPED were the predictors for each of the analyses. Because of the multiple comparisons, I used Bonferroni's correction to limit Type 1 error. I set the alpha at 0.05 / 9 = 0.006.

Table 4.2 displays the findings from the GLM analysis for Factor 1, Administrative Support. The overall model was significant. Age and position were significant predictors

of Factor 1. Higher age was associated with more positive perceptions of administrative support. The only position comparison that was significant was that Administrators were more positively oriented to the level of administrative support for inclusion than vocational educators.

Table 4.2: Findings from GLM Analysis of Factor 1 Admin Support

Variables	df	F	Sig.
Overall Model	210	1.59	0.00
School Level	3	2.30	0.077
Age	48	1.93	0.001
Race	6	0.70	0.652
Position	9	3.00	0.002
% SPED	65	1.39	0.035
Years Experience	38	0.93	0.59
Years SPED	36	1.41	0.065

Table 4.3 displays the findings from the GLM analysis for Factor 2, Characteristics and Strategies. The overall model was significant. Position was a significant predictor of Factor 2. There were multiple significant differences by position type. First, special education teachers had higher ratings of their knowledge of characteristics and strategies than general educators, paraprofessionals, and vocational educators. School Psychologists had higher ratings than general education teachers, paraprofessionals, related service providers, school nurses, and vocational educators.

Table 4.3: Findings from GLM Analysis of Factor 2 Characteristics and Strategies

Variables	df	F	Sig.
Overall Model	210	1.52	0.00
School Level	3	1.01	0.387
Age	48	1.28	0.11
Race	7	0.79	0.593
Position	9	3.17	0.001
% SPED	65	1.11	0.285
Years Experience	38	1.43	0.054
Years SPED	36	1.38	0.081

Table 4.4 displays the findings from the GLM analysis for Factor 3, Independence for Low Incidence Students. The overall model was significant. Age was a significant predictor of Factor 3. Higher age was associated with more negative perceptions of the independence of students with low incidence disabilities.

Table 4.4: Findings from GLM Analysis of Factor 3 Independence Low Incidence

Variables	df	F	Sig.
Overall Model	207	1.41	0.003
School Level	3	1.21	0.307
Age	48	1.74	0.003
Race	6	1.61	0.145
Position	9	1.52	0.14
% SPED	64	1.33	0.06
Years Experience	37	1.04	0.412
Years SPED	36	1.01	0.467

Table 4.5 displays the findings from the GLM analysis for Factor 4, Independence for High Incidence Students. The overall model was not significant.

Table 4.5: Findings from GLM Analysis of Factor 4 Independence High Incidence

Variables	df	F	Sig.
Overall Model	207	1.05	0.341
School Level	3	0.51	0.678
Age	48	1.22	0.161
Race	6	0.33	0.921
Position	9	1.44	0.17
% SPED	64	0.99	0.506
Years Experience	37	1.18	0.224
Years SPED	36	0.97	0.529

Table 4.6 displays the findings from the GLM analysis for Factor 5, Work at a Typical Company. The overall model was not significant.

Table 4.6: Findings from GLM Analysis of Factor 5 Work at Typical Company

Variables	df	F	Sig.
Overall Model	207	1.13	0.158
School Level	3	0.37	0.778
Age	48	1.34	0.078
Race	6	0.18	0.981
Position	9	1.29	0.243
% SPED	64	1.09	0.318
Years Experience	37	1.19	0.219
Years SPED	36	0.84	0.736

Table 4.7 displays the findings from the GLM analysis for Factor 6, Support of EBD students. The overall model was significant. Position was a significant predictor of Factor 6. There were multiple significant differences by position type. General educators had more positive perceptions of their ability to support students with EBD. School Psychologists had more positive perceptions than general education teachers, special

education teachers, and paraprofessionals. Administrators had more positive perceptions than special educators and paraprofessionals.

Table 4.7: Findings from GLM Analysis of Factor 6 EBD Support

Variables	df	F	Sig.
Overall Model	210	1.42	0.002
School Level	3	2.12	0.097
Age	48	1.34	0.073
Race	6	1.45	0.194
Position	9	3.46	<0.001
% SPED	66	1.52	0.009
Years Experience	38	1.43	0.052
Years SPED	36	1.11	0.306

Table 4.8 displays the findings from the GLM for Factor 7, Support of ID students. The overall model was not significant.

Table 4.8: Findings from GLM Analysis of Factor 7 ID Support

Variables	df	F	Sig.
Overall Model	209	1.13	0.168
School Level	3	2.00	0.114
Age	48	1.54	0.017
Race	6	0.72	0.63
Position	9	2.00	0.038
% SPED	65	0.73	0.939
Years Experience	38	1.08	0.353
Years SPED	36	1.09	0.34

Table 4.9 displays the findings from the GLM analysis for Factor 8, Support of EBD students. The overall model was significant. Position was a significant predictor of

Factor 8. Special educators, general educators, School psychologists, and administrators had more positive perceptions of their ability to support students with SLD than paraprofessionals. School counselors had higher perceptions than administrators.

Table 4.9: Findings from GLM Analysis of Factor 8 SLD Support

Variables	df	F	Sig.
Overall Model	209	1.39	0.004
School Level	3	0.47	0.703
Age	48	1.08	0.347
Race	6	1.34	0.238
Position	9	3.60	<0.001
% SPED	65	1.13	0.246
Years Experience	38	1.31	0.114
Years SPED	36	1.44	0.054

Table 4.10 displays the findings from the GLM analysis for Factor 9, Perceptions of Inclusion. The overall model was significant. Age was a significant predictor of Factor 9. Higher age was associated with lower ratings of inclusion.

Table 4.10: Findings from GLM Analysis of Factor 9 Perceptions of Inclusion

Variables	df	F	Sig.
Overall Model	207	1.74	<0.001
School Level	3	3.72	0.012
Age	48	1.74	0.003
Race	6	1.00	0.424
Position	9	0.59	0.806
% SPED	64	1.20	0.165
Years Experience	37	1.48	0.043
Years SPED	36	1.46	0.049

4.5 Paired Sample t-test

I conducted a series of three paired sample t-tests to determine if there were differences in the ratings by disability category. This allowed me to examine if the participants had more positive ratings of one of the disability categories than other disability categories. Table 4.11 displays the findings from the paired sample t-tests. Each finding was significant. Table 4.11 shows that the Intellectual Disability (ID) category had the lowest overall rating, and were significantly less positively viewed by participants than any other category. The Specific Learning Disability (SLD) category was the most highly rated, and was significantly more highly rated than any other category. The Emotional Behavioral Disability (EBD) category was significantly more positively rated than the Intellectual Disability (ID) category.

Table 4.11: Results from paired sample t-tests

Category	Mean	N	SD	Mean Difference	t stat	p value
EBD	16.3	546	4.6	2.2	2.6	0.001
ID	14.1	545	4.8			
EBD	16.3	546	4.6	2.9	-2.6	< 0.001
SLD	19.2	544	4.3			
SLD	19.2	544	4.3	5.1	-4.6	< 0.001
ID	14.1	545	4.8			

4.6 Comparisons of Mean Item Ratings for EBD and SLD

Given the results of the Paired Sample t-tests, which showed that participants responses were more highly rated for students with SLD, I looked at the means and standard deviations from the 10 EBD items and the means and standard deviations of

the 10 Specific Learning Disabilities items. Because my primary focus was on students with EBD and students with moderate disabilities more broadly, I only compared the items for these two disability categories. The means were higher for students with LD than the means for the students with EBD for each of the items.

Table 4.12: Means and standard deviations of items for students with EBD and SLD

	EBD		SLD	
	Mean	SD	Mean	SD
Ability to teach in GenEd	2.60	0.70	3.17	0.54
Administrative Support	2.62	0.75	2.88	0.60
Sufficient Time	2.47	0.70	2.60	0.66
Academic and Socially Successful	2.49	0.64	2.87	0.59
Time in GenEd	2.53	0.76	2.93	0.59
Know and Understand Instructional Strategies	2.85	0.69	3.14	0.65
Know and Understand Characteristics	3.07	0.63	3.19	0.55
Prepare to Keep a Job	2.88	0.65	3.09	0.65
Live independently	2.90	0.68	3.09	0.70
Should be able to get and keep job	2.87	0.66	3.20	0.54

4.7 Open Ended Items

I conducted an analysis of 366 participant responses to item number 21, the vignette about working with a student with a behavioral disability. First, I developed a

list of 48 practices that had evidence for being effective or efficacious for students with EBD. The list was developed from four sources: *Importance, Usage, and Preparedness to Implement Evidence-based Practices for Students with Emotional Disabilities: A Comparison of Knowledge and Skills of Special Education and General Education Teachers* (Gable et.al., 2012), *Classroom Organization and Behavior Management Innovation Configuration,*, by the National Comprehensive Center for Teacher Quality (2011), *Classroom Organization and Behavior Management: Tier 2 and Tier 3 Strategies,* (Gage, 2015), and the What Works Clearinghouse (2020). The list of practices is displayed in Appendix 1. I was liberal with the criteria used for this list. For example, the vignette describes a particular student within a specific context. However, I wanted to ensure that I was not excluding practices from participants that could have been effective or efficacious for a student with similar characteristics and similar or reasonably similar contexts.

Then, two researchers, (a doctoral level professor and a doctoral candidate with extensive knowledge of EBD) independently read each response and recorded any of the EBPs that the researcher found was included in the response. If the researcher found more than one EBP, each discrete EBP was recorded. Each researcher used an Excel spreadsheet to record their responses. If the researcher found an EBP from the list, he or she coded the response with a "1" (for Yes an EBP) and with the number that corresponded to the EBP from the list. If they did not demonstrate an evidence based practice from the list, he or she coded the response with a "0" (for No EBP). as a zero. Additional EBPs from a single response were coded in new columns.

After the researchers independently completed the review of each, they completed a reliability analysis. This was done by reviewing each response and comparing the codes from each researcher. Based on this process, there were a total of 392 identified codes. The reliability (calculated as the number of agreements divided by the number of disagreements) was 94%. Then, the two researchers discussed each of the differences in codes from the reliability analysis. They conducted this process online using Zoom. They independently read the response and reviewed the two codes. Then each researcher discussed whether they thought the code they recorded was accurate or not. In both cases, they then verbalized their rationale for their determination (whether it was a revision to their original code or if it was still the original code). In every case, the researchers agreed on a revised code after the item was read and reviewed. After this step, the reliability was 100%. Because some of the disagreements resulted in a change from a code of "1" (as a second or third EBP within a single response) to a "0", there was a reduction in the total number of identified codes. After the reliability, there was a total of 305 EBP responses (wither an EBP or No EBP). Table 4.13 shows the codes of the responses of the participants.

Table 4.13: Evidence Based Practices Analysis

Description of EBP	# of responses	% of responses
No EBP Found	195	63.9%
Positive reinforcement	37	12.1%
Clear rules/expectations	12	3.9%
Academic supports and curricular/instructional modifications	11	3.6%
System of positive behavior intervention and support	9	3.0%
A behavior support/intervention plan	9	3.0%
Teach replacement behaviors	6	2.0%
Functional Behavior Assessment Based Interventions	5	1.6%
Planned ignoring	4	1.3%
Structured environment	4	1.3%
Choice making opportunities for students	3	1.0%
The Behavior Intervention Program/Check in, Check out	3	1.0%
Antecedent strategies	3	1.0%
Instruction in self-monitoring of nonacademic behavior	2	0.7%
Pre-correction instructional strategies	1	0.3%
The use of peer-reinforcement to promote appropriate student behavior	1	0.3%
Total	305	

4.8 Responses Coded as No EBP

The majority of respondents did not identify an EBP in their responses. Table 4.13 shows the majority (63.92%) of the responses also failed to include an EBP. The disparity in the percentages is due to the fact that 16 of the participants reported more than 1 EBP. There were a number of reasons that responses were coded as “0” For

example; the response did not name an EBP, the response did not include sufficient detail in order to demonstrate which EBP the response was referring to, or the response failed to include any information that was related to anything resembling an EBP (and in some cases was a practice that was counter to a known EBP).

An example of a response that was not an EBP and not consistent with an EBP was, "I don't believe this type of behavior should be handled by the classroom teacher. I believe I should be providing specialist in schools to assist with this type of behavior when is arises." This response indicated that the respondent was not in favor of inclusion of students with EBD, in fact they appear to be advocating against it. This shows that the respondent did not support a student with EBD being in an inclusive setting. Rather than stating an interventions and accommodations for the student to be in the LRE, the respondent reported that students with EBD did not belong in a general education setting.

Another response indicated that the respondent didn't have an understanding of EBPs that could be effective for the student described in the scenario. The respondent stated, "Accountable Talk sentence starters to help structure interactions." While this intervention may be something the respondent has used with students, it is not an EBP and is not consistent with any EBP associated with the scenario in the item. A stronger response would have been to provide an EBP that supports student interactions. A third respondent disclosed that "I have no training to deal with this situation. I would be paralyzed." The respondent was honest in their lack of capacity to provide support for this student. However, this means this student would be left with no support to

manage the challenging behaviors from the scenario. This response did not reveal any capacity of the respondent knowledge of behavior management techniques. Interestingly, the response highlights the lack of training and skills school staff possess to enable them to work with and best support a student with an emotional or behavioral disability.

The following response provided an extensive description, but again, not one that demonstrated EBPs for the student described in the scenario.

> "Assign a creative project, in accordance with her brain function learning style, reinforcing curricula. Assign peer mentoring for the girl to help her with said project. Pair the girl with other students who are natural leaders…there are always a few in every class. and who have a calming impact on the girl. That being said, this girl should be provided with a learning environment designed specifically to accommodate her needs: small sized, low stimulation classroom, regular access to trauma specialists, curricula that meets her as her academic level, one-on-one with appropriate paraprofessional. By providing her with a separate learning environment specific to her needs — rather than forcing her into environments that further traumatize her, hence her acting out. — the unfair, chronic, unconscionable disruption of other students' learning time is remedied. Stop asking classroom teachers to teach four different curricula at once! Stop asking teachers to be multi curricula teachers as well as doctors, trauma therapists, social workers, and police all at the same time. Based on my experience as an educator, in many, many educational environments, I can say

with absolute certainty that full academic INCLUSION DOES NOT WORK for most special needs students. There are many ways to bring special students together with regular education students. However, the academic classroom, without appropriate support, is not the place as EVERYONE LOSES, most egregiously, the regular education students! Special needs students deserve classroom environments designed specifically to accommodate their learning needs."

Although this participant provided a lengthy response that contained a lot of information about their views, the response did not include an evidence based practice. They appear to have used their response to describe their frustration with inclusionary practices, and the demands put upon them to ensure that all students in their classroom receive appropriate instruction, and not be deterred by students of differing abilities. In many ways, the primary position of this educator was that children with disabilities would not be in the general classroom.

Similarly, another participant also provided a lengthy description, also without an EBP.

"I could develop a relationship with her and any of the other assistive people such as the paraprofessional & classroom teacher. to ask about what activities she prefers and what is the best environment for her. I could place this student into a group that is understanding and empathetic, as opposed to a group of students who would get easily frustrated. I could check in with her before & after class to set goals on how to behave in the classroom and treat other students. If she is self reflective, I could provide self reflective practices such as a goals sheet

that summarizes her behavior regarding specific skills she is attempting to work on."

Although building relationships with your students is an important component of teaching, it is not an evidence based practice. This respondent commented about working with the student to set goals, but was not specific about what the focus of those goals would be, which would be important when addressing the behavior described in the scenario. If the goals are not specifically written to address the deficits she is facing in being included in the classroom, they would be inconsequential. Consistent with many of the responses, this response demonstrated that the teacher did not appear to know any EBP that would be appropriate and impactful for the student with EBD in the scenario.

4.9 Responses Coded as an EBP

Table 4.13 demonstrates respondents provided a range of responses from explicitly naming an EBP to providing a rich description of an intervention. The respondents provided responses that fit into 15 of the 48 EBPs I identified from the literature.

Positive Reinforcement

The most frequently provided EBP from the respondents was positive reinforcement. The responses that were coded as positive reinforcement ranged in quality from just providing the term positive reinforcement to providing the term with an accompanying rich description of positive reinforcement in practice. An example of a

description of positive reinforcement that just provided the term positive reinforcement can be seen in this response, “Positive Reinforcement class wide Breaks as needed for individual Peer mentoring if possible Find strengths, tech or interests for motivation.” This response stated Positive Reinforcement as one of several proposed interventions. The response did not describe how positive reinforcement would be used, and it didn’t contextualize the positive reinforcement for the scenario.

An example of a robust description of positive reinforcement can be seen in this response: “Verbal. non-verbal cues Positive reinforcement of appropriate behavior Reminders of appropriate behavior PBIS rewards Teaching of appropriate social skills.” The respondent provided more detail about the type of positive reinforcement and describes the Positive Reinforcement as something that functions within a PBIS framework.

Although Positive Reinforcement was the most common EBP included in the responses, most of the descriptions were not robust. Most coded as Positive Reinforcement only stated the term. While stating the term does align with the EBP, it is not possible to determine if the respondents understood how to implement positive reinforcement in practice.

Clear Rules / Clear Expectations

The second most frequent response that included an EBPs was clear rules/clear expectations. Once again, the responses that were presented for this code ranged in quality from providing the explicit term to providing an example that could be interpreted as meeting the requirements for the term, without specifically naming the

term. Examples of a descriptions of clear rules/clear expectations that just provided the term can be seen in this participant response:

> "Clear, simple rules and expectations which are consistently and fairly applied. Predictability of events and activities through establishing routines, information, cues and signals about forthcoming transitions and changes, as well as for content, duration, and consequences for activities. Frequent use of praise, both verbal and nonverbal."

This respondent provided the term for clear rules and expectations, but did not give explicit information about how they would provide or teach those skills to the student, or the class. While stating the terms clear simple rules and expectations does align with the evidence based practice, it does not provide a robust description of what that would entail.

Additionally, an example of a description of clear rules/clear expectations without using the explicit terminology can be seen in this response:

> "Preview expected behaviors and roles before groups are assigned Work out a cueing strategy to help her alert a teacher that she needs to take a break Use routines whenever possible and prepare her for any changes in routines."

This respondent provided a detailed description of clear rules and expectations, but did not label it with the term. They described how they would teach the expected behaviors and roles prior to group work, provide routines, and prepare her with for any changes in those routines. This respondent is describing both proactive and reactive

strategies that could be used to help ensure the student had a positive experience in the scenario provided.

Clear rules/Clear Expectations was the second most common EBP included in the responses, but unlike Positive Reinforcement, most coded as this EBP were because of the descriptions of activities that fit the clear rules and expectations category, not because the participants used the term. This could be a result of participants understanding of the strategies provided in practice, but not having the knowledge that it would be termed as clear rules and expectations.

Aca***demic Supports and Curricular/Instructional Modifications***

The third most frequent EBP included in the responses was Academic Supports and Curricular / /Instructional Modifications. Similar to other EBPs, the responses that were presented for this code ranged in quality from simply providing the explicit term to providing an example that could be interpreted as meeting the requirements for the term, without specifically naming the term. Examples of a descriptions of academic supports and curricular/instructional modifications that just provided the term can be seen in this participant response: “Allow her to work in groups of choices or modify the assignments. Give her partial work...some with group some on her own” This response, although brief, does provide an EBP in the form of modified assignments. Although the respondent did provide an EBP, they did not describe what the modifications would look like, how they would be done, and for what type of assignment they would be done for.

Additionally, an example of a description of academic supports and curricular/instructional modifications without using the explicit terminology can be seen

in this response: “Work in proximity to teacher. Buddy student to work together. Modify . shorten work load time. Frequent breaks.” This respondent provided short, brief statements about strategies they would implement, which included descriptions of academic supports and curricular modifications, but did not specifically name them as such.

Academic Supports And Curricular/Instructional Modifications was the third most common EBP included in the responses. Much like Clear Rules/Clear Expectation, most of the responses coded for this EBP because they included descriptions of academic supports and modifications, not because they were labeled as such. This could be a result of participants understanding of the strategies provided in practice, but not having the knowledge that it would be termed as providing academic supports or curricular modifications.

Behavior Intervention Plan / Behavior Support Plan (BIP/BSP)

Another frequently provided response was behavior intervention plan/behavior support plan. Once more, the responses that were provided for this code ranged in quality from providing the explicit term to providing an example that could be interpreted as meeting the requirements for the term. An example of a description of BIP / BSP expectations that provided the term can be seen in this participant’s response:

> “First and foremost, I would institute a simple BIP - Behavioral intervention Plan for the student. At first in my class then school wide. which outlined the expectations of the classroom and provided the student means to earn a reward each class. Skinner was a madman, but conditioned rewards can be useful.”

This participant provided both the term BIP and Behavior intervention plan, but failed to describe what the plan would address with regards to behavior. They did further state that they would develop plans for the classroom and schoolwide. Typically, behavior plans are written to be used throughout the school environment, not just in the classroom. This respondent demonstrated a knowledge of the terminology, but not necessarily an understanding of the process and implementation.

Another example of a description with a BIP / BSP did not include the explicit terminology can be seen in this response:

> "I would develop a behavior plan to motivate the behaviorally challenged student to be more compliant. With the help of our SAC, we would develop a plan to address tantrums. The class might be taught to ignore tantrums. We would do group projects. I would determine the teams. Everyone would have a turn working with everyone else. Initially, projects would be very structured."

This respondent provided a detailed description of the process they would use to create an implement a BIP, but did not refer to it by the terms. This demonstrates that they understand the concept of a behavior intervention plan, just did not know use the terminology to name it.

The BIP / BSP was included in just 9 responses, and most of the descriptions were not robust. Most of the responses coded as BIP / BSP only stated the term. While stating the term does align with the EBP, it is not possible to determine if the respondents understood how to create and implement BIP / BSP in practice. None of the responses include a rich description of a BIP / BSP that demonstrated that the

respondent understood how a BIP / BSP was developed, targeted for a specific behavior, or implemented in the classroom.

PBIS

The fourth most frequent EBP included in responses was PBIS. The responses that were coded as PBIS ranged in quality from providing the explicit term to providing an example that could be interpreted as meeting the requirements for the term, without specifically naming the term. Examples of a descriptions of PBIS and that just provided the term can be seen in this participant response: "Behavior chart indicative of current struggles Peer buddy to promote positive behaviors PBIS Sit and think Break box Student survey" Although this participant provided the term PBIS, which met the EBP expectation, they did not speak explicitly to the different components of PBIS. Another respondent provided a description of PBIS without using the explicit terminology can be seen in these responses:

> "Check In Check Out. Establish a relationship to monitor climate. Study Buddy. A student who has interpersonal skills to support her / his friend. Class Dojo token points reward and parent pipeline for communication. Reduce the conflict / distress with adaptive lessons and alternate quiet place for a short time until the student agrees to return to class and is in a safe personal space"

This respondent provided the use of a Class Dojo, which is part of the PBIS framework, as well as Check-in Check-out, a Tier 2 intervention common in PBIS models, but they did not identify it as such. However, the response was not robust. It did not describe the

features of PBIS, nor did it describe how Tier 2 or Tier 3 interventions would be required to meet the needs of the student with EBD in the scenario.

PBIS was only included in six responses, and most of the descriptions were not robust. Most coded as PBIS only stated the term. While stating the term does align with the EBP, it is not possible to determine if the respondents understood how to implement PBIS in practice.

Teach Replacement Behaviors

Teach Replacement Behaviors was also included in six responses by participants. The majority of the responses that were coded as Replacement Behavior just named the EBP. For example,

> "I would strategically group her with positive role models in the class. I would also work on replacement behaviors in place of the tantrums. I would give her a timeout space in the classroom to go when she felt stressed or angry."

This respondent stated they would teach replacement behaviors in place of tantrums, but did not give specific details as to what those behaviors would be. Consistent with the other examples, this response did use the term Replacement Behavior, but it did not include a rich description of what a replacement behavior is, how a replacement behavior needs to be functionally equivalent to the problem behavior, or how the respondent would implement the replacement behavior.

Functional Behavioral Assessment

FBA was identified as an EBP in five responses. All but one of the responses used the term FBA. An example of a response that included FBA was, "Have adjustment

counselor prepare FBA and follow up with BIP to help target behaviors and formulate an action plan or SSP." This participant did use the term FBA, which meets the criteria for being coded as an EBP, however they did not elaborate on the process involved in conducting an FBA. Another respondent did not use the term FBA,

> "Evaluate the function of the behavior Recognize precurses to escalation Build relationships with she and between peers for an environemnt of emotional safey Teach scripts to identify feelings and meet the matching function for the behavior Front load check ins for crurrent reality. for student to assess the days expectations. demands Engineer the environement to create as much success as possible Fade in demands rather than give the whole demand."

This respondent provided a detailed description of some of the facets that go into conducting an FBA, without actually labeling it as an FBA. Critical was the understanding demonstrated about the importance of a function in understanding behaviors and in establishing an appropriate FBA.

FBA was not frequently reported and most of the descriptions were not robust. Most coded as FBA only stated the term FBA. While stating the term does align with the EBP, it is not possible to determine if the respondents understood how to conduct FBAs and to take the information gathered through the assessment to develop interventions to put into practice to address student behavior.

Other Evidence Based Practices

As you can see from Table 4.13, the remainder of the responses coded as EBPs were low in frequency. These EBPs included planned ignoring, structured environment,

choice-making, Check-in Check-out, antecedent-based interventions, teaching self-monitoring, pre-correction strategies, and the use of peer-reinforcement. One Example of a response including one of these interventions was

> "Planned Ignoring for the class when student refuses to follow direction, has tantrums, or is projecting her anger as to not escalate. PBIS, Check In Check out, students should be setting and working towards goals. Positive praise and rewards for positive social interactions. If the student in unable to work in a group, we can make accommodations so the student is able to get the content. Seating: Student will have a seat with a group, but also a place to work alone when needed.

This respondent gave examples of Planned Ignoring and Check in Check Out by the EBP name (as well as other EBPs). This response is also a good example of a robust response in its number of EBP produced.

Another respondent provided a response that addressed about planned ignoring, but did not refer to it as the EBP name, "Ignore problem behavior and praise expected behavior of student and peers. Choice of preferred partners.seating when expectations are being met." The response provides sufficient information about how the respondent would provide planned ignoring, through ignoring the problem behavior, without referring to it as the EBP of Planned Ignoring.

The responses in Other Evidence Based Practices were low in frequency, which could be construed as respondents not having ample information about those EBP. It should also be noted that many of participants who listed the EBPs that were low in

frequency were the same participants that listed multiple EBPs in their responses. This indicates that a small set of respondents appeared to have a deeper knowledge about EBP more broadly.

Individuals who Provided Robust Responses About EBP

Even though the majority of responses for this item were not based on EBP, there were a few examples of robust descriptions of effective strategies from some of the respondents. An example of a response that did provide an EBP was:

> "Observe the child in class and in informal settings. Interview the child Meet with parents to understand home environment, outside support system, family history, behaviors at home, history of learning disabilities Conduct a Functional Behavioral Assessment Develop a behavioral support plan Build in incentives and sensory breaks Provide tier two academic and behavioral supports for a determined period of time Track progress Refer for initial evaluation if the supports prove insufficient to ensure progress Based on results if the evaluation, determine if the student is eligible for special ed services If so, develop a plan for academic and social skills development with appropriate accommodations If needed provide small group instruction outside as well as inside the gen ed class."

This response demonstrated that the respondent understood (1) the use of Applied Behavior Analysis to conduct a Functional Behavior Analysis using interviews, collecting data on the student's behavior, and (2) then using that data to create a behavior intervention plan that used reinforcement to increase the desired classroom behavior.

The respondent also spoke about developing plans for academic skills development with supporting accommodations through an Individualized Education Program. This response demonstrated a robust knowledge of EBP as they would apply to the scenario in item 31.

A second respondent provided a rich description of interventions that demonstrated a deep understanding of students with EBP and associated EBP:

> "Planned Ignoring for the class when student refuses to follow direction, has tantrums, or is projecting her anger as to not escalate. PBIS, Check In Check out, students should be setting and working towards goals. Positive praise and rewards for positive social interactions. If the student in unable to work in a group, we can make accommodations so the student is able to get the content. Seating: Student will have a seat with a group, but also a place to work alone when needed."

This response also demonstrates that the respondent understood the principles Applied Behavior Analysis, and Positive Behavior Intervention Supports. Furthermore, it demonstrates the respondent had knowledge of specific EBPs like Check-in Check out that can be effective for students with emotional and behavioral disorders.

A third respondent provided a very detailed response that demonstrated a knowledge of student with EBD and the field more broadly:

> "Meet with stakeholders to solicit advice, develop strategies and set up communication networks. Create a culture of reinforcing and bringing to the student's attention time when she demonstrates prosocial behavior. Be explicit

with instruction and discussion behavioral expectations. Provide a regular opportunity with the rest of the class when the student is not present to discuss and debrief about the student's challenges and strengths Create a space and plan for the student to be used either as a place the student can utilize through self-initiation or she can be directed to use in circumstances where she is escalating, or she is demonstrating clearly inappropriate behavior Work to increase self-awareness of triggers and conditions that cause escalation Work to train student with self-regulation and method by which she can de-escalate. Set up a system by which support staff can be utilized to either take the class, or take the student in situations where separation form the class is necessary. If needs be, create a behavior plan with extrinsic rewards provided for prosocial behavior."

This respondent provided a detailed account of the strategies they might use, including a behavior plan, instruction on self-monitoring, and providing clear and explicit instructions for the student. Their description went well beyond the naming of a strategy and include descriptions of how they would work with the students on strategies like self-regulation.

4.10 Percentages of EBP by Position Type

I examined participants EBP responses by position type. Table 4.14 displays the percentage of participants who reported an EBP and did not report an EBP by position. School counselors had the highest percentage of responses that included an EBP. None

of the other groups had 50% of the responses with an EBP, although 47.4% of the responses from administrators did include an EBP. Only about a third or fewer of the responses from general educators, special educators, and school psychologists included an EBP. The lowest percentage was for paraprofessionals, who had just 7.4% of responses that included an EBP.

Table 4.14: Evidence Based Practices Analysis by Position Type

	No EBP		EBP	
Position	Number	Percent	Number	Percent
GenEd	107	70.4%	45	29.6%
SPED	41	67.2%	20	32.8%
School Counselor	3	33.3%	6	66.7%
Para	25	92.6%	2	7.4%
Admin	10	52.6%	9	47.4%
Other	4	80.0%	1	20.0%
School Psychologist	4	66.7%	2	33.3%

4.11 Comparing EBPs from Open-ended Responses to Ratings of Knowledge of EBD

I examined the percentages of open-ended responses that did and did not identify and EBP within the context of the respondents self-rating of their knowledge of the instructional strategies for students with EBD. Table 4.15 shows the percentages of the EBP and Non-EBP responses by the ratings (Strongly Disagree to Strongly Agree) for the Item "I know and understand the instructional strategies for students with EBD." Table 4.15 shows that a small percentage of respondents (5.1%) reported that they Strongly Disagreed about their knowledge of strategies for students with EBD. Eight of those respondents did not identify an EBP, indicating their self-rating was accurate. On

the other hand, six of those respondents did report an EBP despite a low self-rating of their knowledge. About 20.5% of respondents strongly agreed with the statement about their strategy knowledge. However, 25 of the 57 respondents did not provide an EBP in their response. Furthermore, 28% of the participants agreed with the statement about their knowledge of instructional strategies for students with EBD but failed to provide an EBP in their response. On the other hand, 29.4% agreed with the statement and did provide an EBP, demonstrating an accurate perception of their own knowledge.

Table 4.15: Percentages of Responses with EBP by Rating from Item: I Know and Understand Instructional Strategies for EBD

	No EBP		EBP	
	Number	Percent	Number	Percent
Strongly Disagree	8	2.9%	6	2.2%
Disagree	30	10.8%	18	6.5%
Agree	78	28.0%	82	29.4%
Strongly Agree	25	9.0%	32	11.5%

Finally, I examined conducted a point biserial correlation analysis of (1) the ratings on the Knowledge of Instructional Strategies and (2) the identification of EBP or non-EBP among the respondents. In SPSS, the use of Point Biserial is automatically implemented when using Pearson correlation. Table 5.16 displays the findings from the analysis. It shows that there was a very low and non-significant correlation between the participants self-rating of their knowledge and their reporting of an EBP. This indicates a potential lack of accurate self-knowledge regarding evidence-based interventions for students with EBD.

Table 4.16: Correlation of Knowledge and Perceptions of Knowledge for EBD

Correlations			
		Provided an EBP	Able to support EBP
Provided and EBP	Point Biserial Correlation		0.081
	Sig. (2-tailed)		0.12
	N		371
Able to Support EBD	Point Biserial Correlation	0.081	
	Sig. (2-tailed)	0.12	
	N	371	

CHAPTER 5

DISSCUSSION

I administered the International Survey of Inclusion in twenty school districts in a Northeast State. I was interested in understanding educators' perceptions of inclusion and students with disabilities and knowledge of EBPs for students with disabilities. I was specifically interested in educator perceptions and EBP knowledge of students with Emotional and behavioral disorders (EBD). This was the first study in the U.S. that investigated perceptions and knowledge in a single study, and the first to employ a design that collected educator initiated statements of EBP. Critical to this study was employing a method that adhered to the quality indicators reviewed in the literature review in order to establish interpretable findings.

5.1 Instrument Reliability and Structures

I found that the survey was reliable and was appropriate for use with U.S. educators. The PCA resulted in nine factors that included four global factors (Administrative Support for Inclusion, Characteristics and Strategies, Work at Typical Company, Perceptions of Inclusion) consistent with studies using the same survey conducted in Turkey (Ugurlu & Krezmien, 2017), Saudi Arabia (Alsulami, Krezmien, Hosp, & Hamin, 2019) and Germany (Przbilla, Lauterbach, Boshold, Linderkamp, & Krezmien, 2016). My analysis also generated five category-specific factors (Independence Low Incidence Disabilities, Independence High Incidence Disabilities, EBD Support, ID Support, and LD Support). These category-specific factors indicate that some educator

perceptions about disability and inclusion are specific to the characetristics of the different disability categories, which was a unique contribution to the literature.

5.2 Perceptions of Disability and Inclusion

With regard to research question 2, "What are the perceptions of disability and inclusion of a sample of U.S. educators?", I found that educators' perceptions of their ability to include students with disabilities were relatively positive. I found educators reported a high level of confidence in their ability to support students with varying disabilities in the general education classroom. I also found that educators had a generally positive perceptions of their ability to plan and collaborate with staff to support students with disabilities, including a generally positive perception of the administration support they received. Educators also generally supported inclusion of students with disabilities in the general education classroom consistent with prior research (Bosch, 2016; Damore et. al., 2009; Hernandez, et. al., 2016; Jenkins, et. al., 2009; Wilkins et. al., 2004). A novel finding was that educators generally supported the inclusion of students with disabilities in all school activities with peers, something not explored in prior inclusion survey research.

These findings were surprising for a number of reasons. First, students with disabilities struggle in most academic areas and especially in general education settings (Conderman et. al., 2009, Damore et. al., 2009, Gable et. al., 2012, Jenkins et. al., 2009, Kurth et. al., 2012, Ware, S. 2016). The educators' positive perceptions of inclusion of students with disabilities appear not to reflect the challenges teachers face in managing

student struggles and challenges. This is concerning given the rising number of students with disabilities who are failing to meet graduation criteria and receive high school, and instead are receiving certificates of completion (Massachusetts Department of Elementary and Secondary Education, 2020a, U.S. Department of Education, 2020). This appears to be a reflection of a disconnect between the perceptions and the difficulties with supporting students with disabilities in the general education classroom. This is particularly important as students return to schools after a long break from in person education due to Covid-19 shutting down schools in March of 2020 across the United States. With the expectation that students remain in the classroom, with their cohort of students, to reduce the likelihood of spreading the virus through the student and staff population of schools, students with disabilities will be spending more time in their general education classrooms. Many schools are still having special education service staff provide IEP services through a telehealth model from their offices or classrooms within the building (Massachusetts Department of Elementary and Secondary Education, 2020b). As a result, educators will need to truly know how to meet the academic and social emotional needs within the classroom, as removal for services may not be possible. This unfortunate turn of events could and should help to highlight the need for further professional development and training for educators on how to meet the needs of students with disabilities within their classrooms.

5.3 Knowledge of Disability and Inclusion

With respect to question 3, "What is the knowledge of disability and inclusion of a sample of U.S. educators?", I found educators generally self-reported they had the necessary knowledge with regard the characteristics of students with disabilities and the capacity to meet the student's needs in general education settings. Educators reported they could adequately accommodate students with disabilities and knew instructional strategies to support students with disabilities to access the general education curriculum inconsistent with prior research (Damore et. al., 2009, Gable et. al., 2012, Hernandez, et. al., 2016, Jenkins et. al., 2009, Kirch et. al., 2005, Wilkins et. al., 2004, Yang et. al., 2012). That prior research consistently found educators reporting they do not know how to adequately support students with disabilities. There are multiple potential explanations for this finding. One possibility is that educators overestimated their knowledges when responding to the items.

Interestingly, as educators reported high levels of knowledge related to disability and inclusion, they also reported they needed additional training to be adequately prepared to support students with disabilities in the general education setting. This was a novel finding that was inconsistent with prior research (Bosch, 2016; Damore et. al., 2009; Hernandez, et. al., 2016; Jenkins, et. al., 2009; Wilkins et. al., 2004). Together, these inconsistent findings pose a substantial challenge to the field. In order to adequately and appropriately train educators to meet the needs of learners with disabilities it is critical that school leaders and trainers have accurate data on what educators do and do not know. When educators simultaneously report (1) they have

substantive knowledge about students with disabilities and inclusion and (2) they need additional training and support to adequately support those same students in inclusive settings, it is difficult or impossible to understand the true nature of knowledge and need. In order to support the needs, it is critical to get an accurate understanding of their actual capabilities, which may be impaired with the use of surveys ratings. One of the reasons I pursued this study was to understand the current knowledge because a major part of my professional work involves educator training. As an Educational Consultant within public and private schools, I have witnessed first-hand the need for educator training around disability categories and evidence based practices for each, inclusion, academic and environmental modification and accommodation, and classroom management. In order to meet the needs of educators, and students in the classrooms, school districts need to invest in high quality and engaging professional development that addresses Universal Design for Learning (Al-Azawei, 2016, Matthew, 2017, Rao, 2016), effective classroom management (Conderman et. al., 2009, Gabel et. al, 2012, Hernandez et. al., 2016, Jones et. al., 2012), where to find evidence based practices and how to implement them (Jenkins et. al., 2009, Gabel et. al, 2012, Yang et.al., 2012), effective and efficient data collection and how to use it to drive instruction and intervention (Conderman et. al., 2009, Odem et. al., 2017), and how to read and understand student IEPs to ensure appropriate administration of accommodations (Conderman et. al., 2009, Hernandez et. al., 2016, Jenkins et. al., 2009, Kurth et. al., 2012, Sanders et. al., 2015, Santonli et. al., 2008).

School districts are not the only entities that need to address these areas of need, Universities should be gathering information from schools and districts about current areas of needs for students with varying disabilities and adjusting their preservice programs accordingly. Student disability needs within school districts across the United States should be driving the coursework and content of pre-service and in-service educator training programs. In order to address these needs, it is critical that preparation programs remain current and do not stagnate by retaining old models that don't adequately prepare newly certified teachers to support students with disabilities in inclusive settings.

A related novel finding was that educators also generally reported they were able to help students with disabilities to secure and retain employment. These findings were surprising because prior research found that students with disabilities struggled to find and maintain employment due to poor preparation programs and instruction, and lack of generalization of skills from training to actual implementation(McConnell et, al., 2015, Sprunger et, al., 2016, Bouck & Park, 2018, Quigney, 2017, Liu et, al., 2018). Students with disabilities have higher unemployment rates and lower job retention rates in comparison to their typical peers (U.S Bureau of Labor Statistics, 2020). Under IDEA 2004, IEPs must include transition services for the child by age 16 (age 14 in Massachusetts). The transition plan should reflect the student's interests, preferences, accomplishments and skills, what they need to learn, and what they want to do as an adult with regards to where they plan to live and what career they plan to have. Although this has been a requirement since 2004, school districts still struggle to write

and implement them appropriately and effectively (Jenkins et. al., 2009, Kurth et. al., 2012, Sanders et. al., 2015). This could be a result of a few factors, 1) current practicing educators were not taught how to write them during their preservice teaching, if it was prior to IDEA being passed, 2) pre-service educators were not and are not being taught how to write and implement transition plans through their university programming, and 3) school districts are not providing special education providers with professional development around writing and implementing transition plans (Jenkins et. al., 2009, Kurth et. al., 2012, Sanders et. al., 2015). My experience working in many different districts is that all three factors happen, and most districts don't provide explicit training around transition planning until it becomes a Board of Special Education Appeals issue. Unfortunately, much of the professional development that educators receive is a result of a reactive measure, instead of a proactive measure (Conderman et. al., 2009, Gabel et. al., 2012, Jenkins et. al., 2009, Jones et. al., 2012, Kurth et. al., 2012, Sanders et. al., 2015).

5.4 Differences in Perceptions by Disability Category

With respect to research question 4, "Do perceptions of students with disabilities differ by disability category?", I found that there were significant differences in educator perceptions of students with different disabilities. Educators had the most positive perceptions of students with LD, and the most negative perception of students with severe ID. I also found that teacher's perceptions of students with EBD were poorer

than all categories but the ID category. This was a novel finding, as none of the previous research articles examined differences of this type.

Although novel, it does seem to be consistent with student level of need. In other words, the relative perceptions of the different disability categories appeared to be related to the level of need of those respective disability categories as they relate to the general education setting. For example, the EBD were the second most poorly perceived category, which is consistent with intense externalizing behaviors that are very disruptive to classroom settings (Gabel et. al., 2012, Gottfried et. al., 2016). Consequently, their level of need could be deemed to be high, however, the level of knowledge of strategies and interventions provided by respondents, that were evidence based, was very low. Similarly, students who are identified with an intellectual disability, which includes an IQ score of less than 70, and significant deficits in academic, social emotional, and everyday living skills, also require a high level of knowledge of EBPs from educators to make effective progress (Douglas et. al, 2018, Schalock et. al., 2017). In fact, many states require a specialized license for to work with students with severe needs, because of the level need of the students (Douglas et. al, 2018, Schalock et. al., 2017, Teaching Certification. Com, 2020). This may explain the poor perceptions associated with that group.

This finding raises an issue about the need for examining the level of student need when determining teacher training and licensure categories. For example, one trend over the past 10 years has been the creation of state licenses for Board Certified Behavior Analysts (BCBA) in 31 states in order to ensure districts can hire highly

qualified personnel to manage intensive behavior needs in schools (Behavior Analyst Certification Board, 2020). This could be a model that would be effective for special education licensing, where programs could have specific courses dedicated to specific levels of need and specific categories of disabilities. This could help to limit use of disciplinary removals and out of district placements for students with intensive needs, promoting truly inclusive settings

5.5 Knowledge of EBP for Students with EBD

With respect to research question 5, "What is the strategy knowledge of a sample of U.S. educators with respect to students with EBD?", I found there was low strategy knowledge of evidence based practices for students with emotional disabilities. The depth and complexity of their responses to the open-ended response questions about strategies to include students with EBD in their classrooms was poor. The answers provided generally lacked insight into the mechanisms of behaviors and behavioral functions that drive aberrant behaviors. These were novel findings that have not yet been examined in the field. The responses from educators revealed a lack of preparation of educators to adequately support students with behavioral issues. This suggests educators may not be prepared to support students with emotional and behavioral issues in inclusive settings. Given the low number of evidence based practices reported, it appears that higher education teacher training programs, and school based professional development may need to examine the extent to which they prepare future special educators and educators to meet the needs of students with EBD

in their classrooms. As a Board Certified Behavior Analyst, I am frequently called upon to observe and evaluate students with regards to their maladaptive behavior. It's during these observations and interviews with educators that I have witnessed the lack of knowledge and understanding around working with students with emotional and behavioral difficulties and disabilities. It's not uncommon for a student behavior to be a result of a reaction to an adult behavior or an aversion to something in the immediate environment. If these students do not receive sufficient Tier 1 and Tier 2 interventions implemented with fidelity, they may become more disruptive and require more intensive services in Tier 3 or through a referral for services as a student with ED. Based on the findings from this study, the educators were not knowledgeable about the EBP that are typically implemented in a PBIS model, which may lead to unmet needs of their students, and an associated poor perception of the students. Without these EBPs, the students with EBD likely exhibit disruptive behaviors that lead to in-school and out-of-school suspension, negative impact on social relationships, and even expulsion.

Equally troubling was the fact that the knowledge of EBPs obtained through open ended responses was inconsistent with responses on the associated Likert scale items about strategies required to support students with EBD in their classrooms. Educators generally reported they possessed the knowledge necessary to support these students in educational settings, another novel finding as none of the previous studies explored this information. A majority of the educators who provided an open-ended response reported that they did know the instructional strategies required to support students with EBD, but also failed to provide an evidence based practice in their open

ended response. Just one quarter of the educators reported they knew the strategies and also provided an evidence based practice. This finding reveals a major problem with current educator knowledge and their respective perceptions of that knowledge.

According to the U.S. Department of Education (U.S. Department of Education, 2020), students with EBD are educated with their peers in a general education setting at lower rates than their classmates with other disabilities, are educated in a separate setting to the general education classroom than their disabled and non-disabled peers, and are educated in a different school than their disabled and no-disabled peers at a much higher rate, and face disciplinary action at a much higher rate than their peers. If educators truly had the knowledge and skills to work with students with EBD, the discrepancy in numbers should, and would be less. It should also be noted, that students with EBD have lower graduation rates, and higher dropout rates than their other disabled peers (U.S. Department of Education, 2020). If school districts and pre-service educator trainings programs don't begin to recognize this trend, and provide training and instruction around working with students with EBD, using evidence based practices to address academic and social emotional deficits, the numbers with continue to increase, and the EBD student population will continue to be grossly underserved given the severity of their academic and social emotional needs. Despite the limited number of educators who were able to provide EBPs, there were educators who did provide robust EBPs, indicating there are educators who do possess this knowledge, and indicating the capacity for in-service teachers to develop that knowledge, which is

important when considering professional development and training on EBP for students with EBD.

5.6 Limitations

As a result of this being a small study of educators in one state, the findings from this study should be considered with reservations. The study included 20 school districts from a small Northeastern state. As a result, this led to limited demographics within the participant sample. It should also be noted that I only examined one disability category with respect to evidence based practices. Teacher knowledge and perceptions in working with students with other disabilities may provide a very different set of data and results.

Not all participants completed the entire survey. Of the 684 participants who responded to the survey, only and 53% completed the short answer items that were asking for EBPs for working with students with described disability. Having a larger response to those items would allow for a better comparison of educator's perceptions of their knowledge and skills to their demonstrated knowledge and skills through the EBPs they provided in their responses to the short answer items.

The majority of the sample included general educators (305). The number of special education teachers was half that of the general educators, followed closely by participants who were paraprofessionals. Related Service personal (such as Occupational Therapist, Physical Therapist, Speech Language Therapist, Vision Specialist, Hearing Specialist) only made up 7.2% of the respondents, however most schools have a

large number of related service providers, especially larger districts. Having a larger number of responses from those providers who have received specialized training in inclusion and special education through their degree tracks may impact the results in a larger study.

It should also be noted that I did recruit more rural schools, but did not create weights by locale. There is a chance that the ratings from the rural educators may have had a disproportionate impact on the findings. Also, because the sample size was relatively small, the multiple regression analysis did not include interactions in the model. There may have been interactions that were not identified.

5.7 Implications for Future Research

Future researchers should attempt to conduct a large scale survey with a nationally representative sample, or a series of studies with teachers from diverse districts. There are multiple ways to advance this research, including utilizing a multi-state or even a national sample of educators using the International Survey on Inclusion. This could also allow researchers to examine potential differences by state or by region. These studies would provide a more robust picture of educators' perceptions and knowledge of inclusion and students with disabilities. This study explored the findings associated with EBD as a subset of the larger study. Future research should examine the open ended responses for student with LD, ID, and autism. These studies could examine larger samples of students within a category or investigate strategic knowledge across all disability categories.

It would also be important to contrive a research study(ies) that involved explicitly teaching educators evidence based practices to use with student with EBD and then how to implement them in the classroom, with a data collection component that an observer would then use to rate of accurate and appropriate implementation of the trainings. One of the deficits of many professional development trainings is the lack of continual coaching, observation, and shaping of expected behavior around implementation. Learning about practices and interventions in theory is very different to applying them in the moment during a heightened situation. This would allow for real world coaching and learning, which will be more useful for educators, than learning from lecture based or video-based instruction.

Another research project could be to observe students in classrooms and to determine which interventions are being implemented by educators, and which of those implemented interventions are EBPs. Such a study could also examine educator explanations of their intervention choices in order to better understand the level of strategic EBP knowledge and the application of that knowledge with students in practice. Such a study could quickly identify strengths and limitations and establish professional development interventions based on need. This training could be provided to student intervention teams so that they are prepared to support students more efficiently and effectively.

5.8 Implication for Practice

The findings from this study have potentially revealed some major issues with respect to teacher perceptions and knowledge of students with disabilities and inclusion. Several key findings have important implications for practice. First, the inconsistency of educator beliefs in their knowledge of characteristics of students with disabilities and the associated strategies to support student with disabilities in general education settings revealed a problem related to educator training, both at the pre-service level and at the professional development level. In order to address this issue school districts and universities need to recognize the lack of knowledge and implementation, and/or discrepancies in knowledge and implementation. Higher Education programs need to ensure that their teacher training programs are providing preservice teachers the strategies and skills they require to work with students with disabilities. In general education teacher training programs, this should include not just coursework about instructing students who are typically developing, but also instruction about special education, what the 13 disability categories are and the symptomology of each, what an IEP is, and how students are found eligible, their roles and responsibilities with regards to an IEP, how to find, learn, and implement evidence based strategies and instruction, knowledge about, and how to provide, Tier Instruction/Tiered Systems of Support, and how to collect and use data meaningly to drive instruction. In special education teacher training programs, this should include all of the aforementioned items, as well as how to use meaningful assessment, how to create and implement appropriate accommodations and modifications, how to write IEPs that include

measurable and challenging, yet attainable, goals, and how to prepare for and participate in an IEP Meeting. Additionally, school districts should be developing and implementing meaningful training based on solid data collection around student performance and educator instructional needs and/or weaknesses.

Second, the lack of adequate knowledge of EBP for students with EBD also has some implications for teacher training and professional development. The number of students diagnosed with EBD is rising, but the level of knowledge and supports has remained stagnate for years (Damore et. al., 2009, Gable et. al., 2012, Hernandez, et. al., 2016, Jenkins et. al., 2009, Kirch et. al., 2005, Wilkins et. al., 2004, Yang et. al., 2012). As school districts return to in person learning after 6 months of remote learning, the number of students already identified as EBD, may exhibit externalizing behaviors at increasing frequency and intensity. These students who may have been barely maintain their behavior at school prior to Covid-19 closures, may return with escalated behaviors because they haven't had exposure to social situations typical of school settings. Lack of daily structure in routines and expectations, and lack of demands being placed upon them for the COVID-19 timeframe could significantly impact student behavior as they return to in person learning. Without a solid foundation of evidence based strategies and practices, educators are going to struggle to meet the new needs of these students. Given that educators were already reporting and demonstrating deficits in this area, this is concerning. School Districts are going to need to prioritized professional development and collaboration to provide the services to support students within their school buildings, or incur the cost of sending students out of district to costly schools that can

meet their needs. Seeking out training, coaching, and consultation from outside providers that specialize in working with students with emotional and behavioral difficulties should be a priority for administrators to ensure their students and educators needs are met.

Third, it was evident that educators need to be provided administrative support for inclusion which needs to include time for educators to collaborate about the students they are supporting. Although consultation is frequently written into student IEPs for related service providers and general educators, that time is not typically available during the school day (Conderman et. al., 2009, Jenkins et. al., 2009, Jones et. al., 2012, Kurth et. al., 2012, Strogilos et. al. 2016, Yang et. al. 2012). Consultation happens more commonly though conversations on the fly in the hallways, teacher preparation rooms, by the copier, or through brief emails. For inclusion to work, there needs to be time allotted to educators to meet, that's more conducive to collaboration, where they can sit together, uninterrupted, to discuss students' needs and intervention recommendations. It requires administrators to provide the time in their schedules, to ensure it is happening, and not plan other activities during that allotted time. Once that time is secured, meeting attendees should create and adhere to an agenda, to make sure the time is used efficiently and effectively. Without these types of supports, consultation and collaboration will continue to be unsuccessful, therefore impacting student progress.

5.9 Conclusion

The Individuals with Disabilities Education Act (IDEA, 2004) was developed to ensure that all students with disabilities were afforded the same educational experiences as their typically developing peers. It is to be implemented in conjunction with the Every Student Succeeds Act (ESSA, 2015) to ensure that all students are educated to meet their highest learning potential. The education of students with disabilities has significantly improved since 1975 when the Education for All Handicapped Children Act was passed, but we still have improvements to make to ensure that each student has the opportunity to access all academic and social emotional learning activities. We need to continue to provide training for pre-service and in-service teachers on inclusion of students with disabilities, characteristics of disabilities, and strategic knowledge of EBPs to use when working with different disability populations. Providing continuing education with regard to working with students with disabilities should be of upmost importance to both Universities and Colleges that are providing teacher training programs, and School Districts that are educating students with disabilities. Using Evidence Based Practices to educate all students is good teaching practice and should be a priority for all institutions, both higher education and school districts.

Appendix 1

Table of Evidence Based Practices for Students with EBD

EBD	Source
	Gable et al., (2012)
	The National Comprehensive Center for
Clear rules/expectations	Teacher Quality (2011)
A crisis intervention plan for emergency situations	Gable et al., (2012)
Academic supports and curricular/instructional modifications	Gable et al., (2012)
A systematic approach to cooperative learning	Gable et al., (2012)
Specialized instruction to promote learning and study skills	Gable et al., (2012)
Peer-assisted learning	Gable et al., (2012)
Choice making opportunities for students	Gable et al., (2012)
Instruction in self-monitoring of student performance	Gable et al., (2012)

A program of peer-mediated intervention to promote positive behavior skills	Gable et al., (2012)
Social skills instruction taught as part of regular class instruction	Gable et al., (2012)
An anger management program	Gable et al., (2012)
A behavior support/management plan	Gable et al., (2012)
Pre-correction instructional strategies	Gable et al., (2012)
Group-oriented contingency management	Gable et al., (2012)
System of positive behavior intervention and support	Gable et al., (2012) NCCTQ (2011)
The use of peer-reinforcement to promote appropriate student behavior	Gable et al., (2012)
Instruction in self-monitoring of nonacademic behavior	Gable et al., (2012)
Behavior contracts	Gable et al., (2012) Gable et al., (2012)
A formal procedure to develop function based interventions	The National Comprehensive Center for Teacher Quality (2011) What Works Clearinghouse

Structured environment	The National Comprehensive Center for Teacher Quality (2011)
Active supervision and student engagement	The National Comprehensive Center for Teacher Quality (2011)
Encouragement of Appropriate Behavior	The National Comprehensive Center for Teacher Quality (2011)
Antecedent strategies	The National Comprehensive Center for Teacher Quality (2011)
Teach replacement behaviors	The National Comprehensive Center for Teacher Quality (2011)
Differential reinforcement	The National Comprehensive Center for Teacher Quality (2011)
Planned ignoring	The National Comprehensive Center for Teacher Quality (2011)
Time out from positive reinforcement	The National Comprehensive Center for Teacher Quality (2011)
Reinforcement	The National Comprehensive Center for Teacher Quality (2011)
Prevent-teach-reinforce	Gage (2015)
Check connect and expect	Gage (2015)
Direct social skills instruction	Gage (2015)
	What Works Clearinghouse

Positive reinforcement	Gage (2015)
Involve parents	Gage (2015)
The Behavior Intervention Program/Check in, Check out	Gage (2015)
	Gage (2015)
First Steps to Success	What Works Clearinghouse
Coping Power	What Works Clearinghouse
Caring School Community	What Works Clearinghouse
Positive Action	What Works Clearinghouse
Too good for Drugs and Violence	What Works Clearinghouse
Fast Track Elementary School	What Works Clearinghouse
Early Risers	What Works Clearinghouse
The Incredible Years	What Works Clearinghouse
Lessons in Character	What Works Clearinghouse
Too Good for Violence	What Works Clearinghouse
Facing History and Ourselves	What Works Clearinghouse
Building Decision Skills	What Works Clearinghouse
Connect with Kids	What Works Clearinghouse

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