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Educator Knowledge and Usage of Evidence-based Interventions for Students with Emotional and Behavioral Disorders in Special Education Programs Across California

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Educator Knowledge and Usage of Evidence-based Interventions for Students with Emotional and Behavioral Disorders in Special Education Programs Across California

A Dissertation by

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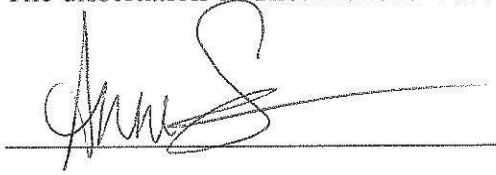

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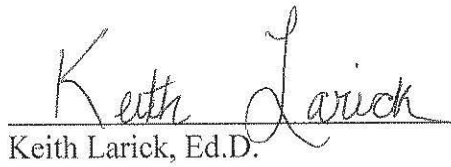

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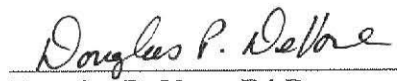

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To my cohort mentors, and the many instructors I have had throughout this journey, you all made this experience memorable, the doctoral program at Brandman University pledged to sharpen my thinking to become a transformational leader, and I believe it has. For that, I will be forever grateful.

ABSTRACT

Educator Knowledge and Usage of Evidence-based Interventions for Students with Emotional and Behavioral Disorders in Special Education Programs Across California

by Thelmisha N. Vincent, M.S., BCBA, M.Ed.

Purpose: The purpose of this study was to identify the extent to which evidence-based interventions being utilized with students with emotional and behavioral disorders (EBD) by general education teachers, special education teachers, and behavior interventionists working in K-12 special education programs on comprehensive public and non- public school campuses in California.

Methodology: This mixed method study identified commonly used instructional strategies for students with (EBD) in public and non-public school settings. Respondents were purposively chosen from general education teachers, special education teachers, and behavior interventionists across California. The data from online survey and interviews were analyzed through factorial ANOVA, descriptive statistics of means and standard deviations, as well as Chi square test of differences. The themes which immerged from interviews are also described.

Findings: Findings indicate some improvement in awareness amongst education professionals regarding evidence-based instructional strategies based on findings of previous studies, participants lacked clear understanding of which interventions hold empirical weight. Similarly, there was low reported evidence that evidence-based practices were being utilized within the classroom. Results yielded no significant differences between education professionals or education setting regarding the

interventions used and respondents generally felt unprepared to work with this student population.

Conclusions: This study supported the need for comprehensive professional development for those working with students with EBD. The findings of this study support prior research that students in this population do not receive generally receive education based on empirically supported practices and inadequate teaching practices and teacher preparation lead to students losing out on critical learning opportunities.

Recommendations: Further research is recommended to explore how MTSS and PBIS systems are being implemented across California special education programs and their impact on outcomes for students with emotional and behavioral disorders as well as to provide insight into how these systems are currently utilized. Likewise, a review of the impact of the 2016 changes to teacher credentialing would provide insight on whether the field is advancing in a positive direction.

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CHAPTER I

Introduction

The life trajectory of young people with significant challenging behavior, especially those with disabilities, has been well documented as grim and plagued with barriers. Children with Emotional and Behavioral Disorders (EBD) are often unable to maintain appropriate social relationships with others; have academic difficulties in multiple content areas earning poor grades and low competency assessment scores and have the least favorable outcomes of any group of individuals with disabilities, and they often display characteristics that threaten the probability of achieving success in school, in their communities, or throughout adult life (Clark & Davis, 2000; Kauffman & Landrum, 2009; Landrum, Tankersley, & Kauffman, 2003; Nelson, Benner, Lane, & Smith, 2004; Rosenberg, Westling & McLeskey, 2008; Van Acker, 2010; Webber & Plotts, 2008). Alarming statistics illustrate this point, such as only 42% of youth with EBD graduate with a high school diploma and over half of students with EBD are arrested after leaving school with 70% of those who drop out spending their adult life in and out of prison (Van Acker, 2004; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Given the tremendous drain on school and community resources, EBD in children has continued to command the attention of the public and educational professionals prompting legislative mandates to identify and implement effective evidenced based interventions to better serve this student population (Kauffman & Landrum, 2013, 2009; Odom, 2009: Odom et al., 2005; Simpson, Peterson, & Smith, 2010).

Because children with EBD generally do not acquire the essential skills necessary for school success in the same manner as their nondisabled peers, the majority of students

classified as EBD receive their education in specialized programs able to deliver explicit instruction of socially expected behaviors, social and interpersonal skills, and teaching strategies that directly target their unique learning needs in order to develop their academics (Bradley, Henderson, Monfore, 2004; Hester et al., 2004; Kauffman and Hallahan, 2005, Robinson, 2007) with an increasing number of students with EBD receiving a portion of their education in general education classrooms (Wagner et al., 2006; Webber & Plotts, 2008). As such, teachers in both special education and general education settings must be knowledgeable of and able to meet the diverse academic, behavioral and socio- emotional needs of students with EBD.

Gable, Tonelson, & Walker-Bolton (2010) conducted a review of available literature on educator knowledge of evidence-based instructional strategies in order to assess progress towards meeting best practice set forth by IDEA 2004. In their review, Gable and his team found inadequate information on the knowledge and skill level of special educators regarding evidence-based practices in general and even less information relative to educators who work with students with EBD in general education settings despite the legislative mandates some several years prior. Similarly, this researcher reviewed the currently available literature for information specific to California educators' knowledge and implementation of Evidence- Based Practices (EBP) and only found studies related to whether or not specific interventions were effective as opposed to studies exploring educator knowledge and accurate implementation of said interventions suggesting a need for further investigation in this area (Blood & Neel. 2007; Cook & Shirmer, 2003; Dunlap et al. 2006; Fitzpatrick & Knowlton, 2009; Gable, Tonelson, &

Walker-Bolton 2010; Greenwood & Abbott, 2001; Hathcote, 2011; Kennedy & Jovlivette, 2008; Park & Lynch, 2014; Walker, 2004; Wehby, Lane, Falk, 2003).

Many teachers report being confused about which educational strategies have empirical support, due to having perceived the strategies to be inappropriate for their students, a history of unsuccessful implementation because of inadequate training, or holding concerns about the feasibility of implementing the strategy in the classroom (Greenwood & Abbott, 2001; Mostert & Crockett 1999-2000; Schiller, Malouf, & Danielson, 1995; Showers, 1990). Consequently, the complexity of incorporating successful research-based strategies into the classroom highlights the tremendous need for professional supports that practitioners can access to meet the academic and behavioral challenges they encounter on a daily basis to improve the academic and socio-emotional outcomes of students identified as having an EBD.

Background

"No children begin school ready to learn," (Hester et al., 2004, p.5). This statement is particularly true for students with emotional and behavioral challenges. According to the U.S. Department of Education National Center on Education Statistics 2009, there were 283,000 students identified as having an emotional or behavioral disturbance (EBD) being served in federally supported programs, representing 0.6% of the total student enrollment in 1976. By 2007, this number increased to 464,000 representing 0.9% of the total student enrollment across the country (Snyder & Dillow 2010). Between 1991 and 2001 there was a period of rapid growth in the United States of the number of children with disabilities served under the Individuals with Disabilities Education Improvement Act (IDEIA) (US Department of Education, office of special

education programs, 2008). After this time, the number of children with disabilities being served under IDEIA leveled off and remained static through 2007. By 2010, the number of students meeting the classification of EBD had decreased to 407,000. Yet, despite this decrease, the percentage of students classified under emotional disturbance continues to grow when compared to all students with a disability (US Department of Education, Office of Special Education Programs, 2012). The state of California has experienced a similar pattern in the growth of number of children being served under IDEIA (US Department of Education, Office of Special Education Programs, 2012).

The 2000 U.S. Surgeon General's report on children's mental health indicated that, within the US, one in five children and adolescents experienced the signs and symptoms of a diagnosable mental health disorder during any given year (Knopf, Park, & Mulye, 2008; US Department of Health and Human Services, 2000) with almost one in 10 children and youth meeting the diagnostic criteria for being emotionally impaired (Knopf, Park, & Mulye, 2008). According to several researchers, two thirds of these children and youth do not receive the proper services needed to address their mental health needs (Chandra, Minkovitz, 2006; Knopf, Park, & Mulye, 2008). This point is further exemplified by the alarming statistics found in a report from the Southern Poverty Law center in which a reported 85 % of children and youth in Juvenile detention centers had EBD and that only 40% of students with EBD actually go on to finish high school.

Currently, of all students with disabilities, students with EBD represent approximately 8% of the student population. Even with the presence of special education programs and services, national data construct a discouraging picture of school and related outcomes for these students. For example, the National Longitudinal Transition

Study (NLTS-2) found that secondary students with EBD were the oldest (at age nine) of any disability group at the time they began to receive special education services despite evidence of early intervention's impact on long term success (Wagner, 2003). A mere 34% of all children who are given a diagnosis at an appropriate age to receive early intervention services actually receive services, and only 30% attend preschool special education programs (Wagner, 2003). Beginning special education services at an older age, or not receiving early intervention services, suggests that challenging behavior patterns were present, in some cases for long periods of time, before receiving intervention. Further, while 30.66% of students with EBD are in the general education classroom, they are in this setting for less than 40% of the day (Bradley, Henderson, Monfore, 2004). The disconnect with the general education setting and student population is further exemplified by the fact that they are four times more likely than any other disability group to attend a separate public or private education facility (Bradley, Henderson, Monfore, 2004), including a residential setting, home-based instruction, or a hospital program for emotional/behavioral treatment (Bradley, Henderson, Monfore, 2004). Further still, these students frequently move from placement to placement, with 40% having attended five or more schools (Wagner, 2003). Finally, suspension or expulsions occurred for 72.9% of students with EBD, compared to 32.7% of all students with disabilities and 22% of students in general education, further compounding these students' detachment from school (Skiba, Peterson, & Williams, 1997). Taken together, the aforementioned data suggest that schools are not making the grade in meet the needs of students with EBD, even when contrasted with the entire population of students with disabilities.

Ultimately, it is the role and responsibility of educators to prepare students to lead independent and productive lives once they leave school (Robinson, 2007). For most students, this objective can be achieved though teaching the necessary prerequisite skills and by helping them to make judicious decisions regarding their behavior. However, the majority of students with EBD do not obtain these skills in the same manner as their typically developing peers and therefore, require specific instructional interventions for skill development. These interventions then become crucial for educators charged with teaching the skills students with EBD will need later in life.

Describing and Utilizing Evidence-Based Practices

Walker (2004) found that educators do not contact the research literature on EBP and did not adapt this information for use in the classroom. Using EBP in education ensures that interested parties are able to utilize empirical evidence in their decisions regarding educational programming and interventions (Wing Institute, 2006). The data collected through implementation of EBP helps to connect research to the daily operations of instructional practice, relying on and scientific rigor rather than subjective opinions and trial and error approaches (Wing Institute, 2006).

Three major criticisms can be found throughout the research literature regarding the use of EBP in the classroom. The first criticism notes that the theoretical foundations of EBP are not readily understood by most educators (Cook, Landrum, Tankersley, Kauffman, 2003; Shernoff, Kratochwill, & Stoiber, 2003). Cook et al., 2003 found that teachers needed reliable, practical, and accessible information that could be easily comprehended, and that clearly and concisely described the approach, which student groups had demonstrated success using the approach, implementation procedures, and

fidelity of the intervention. Likewise, educators have noted that instructional protocols seldom lend themselves to skill development, and that the training they do receive is often inadequate to implement the program with integrity (Shernoff, Kratochwill, & Stoiber, 2003), and otherwise do not meet their needs as further outlined by Cook et al.

The second criticism of EBP is that some educators may find it challenging to use a particular intervention if they have only been exposed to written materials about that strategy and have not observed the strategy being implemented with students or had an opportunity to practice the strategy themselves (Cook et al., 2003; Shernoff et al, 2003). Without administrative and systematic support to implement new strategies, educators will often lose their initial enthusiasm and lapse back into prior teaching habits (Cook et al., 2003), such as adopting the EBP in a way that is not recommended by the treatment, thereby diminishing the validity of the strategy (Shernoff et al, 2003).

Third, Cook et al., 2003 found that educators often find it tough to combine the EBP with the artistry of teaching due to their pedagogical preparation. EBPs have been critiqued for being too specialized and scripted, leaving no room for the educators to make modifications or decisions during implementation, thereby, leaving them to perceive instruction as being robotic and mundane (Shernoff et al., 2003). Additionally, many teachers feel that their preparation programs did not adequately prepare them for the complexities of being in the classroom (Cook et al., 2003), therefore, the interventions they choose to apply in the classroom are typically not those exposed to in their preparation courses. At some point in their careers, teachers will encounter a student for whom an instructional strategy must be modified to meet their individual needs. The more the teacher encounters the need to modify a particular intervention, the

less likely that teacher will be to implement said intervention all together especially if they feel they are not adequately prepared to make the necessary adjustments.

In order to promote the continued use of EBP within the school setting, Walker, 2004 points to three areas of innovation and development: a) study implementation and treatment integrity, b) expand fusion and sustainability of EBP, and c) improve transportability of interventions for efficacy and effectiveness within the usual practice settings. In other words, Walker, 2004 calls upon researchers to take their work a step further in explaining how their findings are meaningful and applicable to the classroom or school wide system. Researchers should then also be able to expand the results of their studies from small sample populations to larger scale application with validity while maintaining the user-friendliness of the intervention (Walker, 2004). A good example of how research has effectively translated from theory to practice can be found in Positive Behavior Intervention Strategies (PBIS) and the capital Effective Behavioral Support programs which was initially funded in 1998 with a handful of schools and quickly grew to being implemented in more than 1500 school districts across 23 states by 2010, and to almost 30,000 by 2018 (Horner, Freeman, Nelson, & Sugai, 2010; OSEP 2019). Following the recommendations of Walker, this study aims to explore implementation of EBPs across California schools to improve transportability of interventions for efficacy and effectiveness across practice settings.

Interventions for Students with or At-Risk of EBD

Students with EBD struggle in school, arguably more so than any other student group. Where it is generally known that these students have severe social skills deficits, it is lesser known that these students also have significant academic deficiencies as well.

These students perform 1.2-2 grade levels on average behind their typically developing peers while in elementary school (Trout, Nordness, Pierce, & Epstein, 2003). This discrepancy tends to only get worse throughout their matriculation, and by the time they reach high school, they are preforming almost 3.5 grade levels below their peers (Coutinho, 1986; Epstein, Kinder, & Bursuck, 1989). These findings should come as no surprise, given that over 50 % of students with EBD are also likely to meet one or more of the eligibility criteria for a learning disability (Glassberg, Hooper, & Mattison, 1999).

Despite their bleak academic outcomes, the majority of interventions found within the research literature for these students have mainly focused on behavioral interventions, often neglecting glaring academic shortcomings (Ryan, Reid, & Epstein, 2004). Recognizing a demand to also address the academic needs of students with EBD, researchers have begun examining ways in to increase student engagement in hopes of bettering graduation rates (Mooney, Epstein, Reid, & Nelson, 2003). Given the monumental challenges that teachers of students with EBD face while attempting to address their academic, behavioral, emotional and social skills needs, it is imperative that they integrate empirically sound instructional practices into their classrooms to maximize effectiveness for student academic growth.

Researchers at the University of Nebraska's Center for At-Risk Children's Services (e.g. Epstein, Nelson, Trout, & Mooney, 2005) analyzed the available intervention literature related to academic performance deficits of student with EBD in public schools. Epstein et al.'s review yielded a small amount of literature in which positive results were reported across study participants, settings, and academic content (Nelson, Benner, & Mooney, 2008). These researchers divided academic interventions

into three major categories: (a) peer-mediated interventions, in which the students provide instruction to each other; (b) self-mediated interventions (e.g., self-monitoring, self –evaluation), in which the student implements the intervention independently; and (c) teacher mediated interventions in which the teacher delivered the academic instruction to the students.

Interventions for students with EBD can also be divided into three basic categories: a) primary or universal interventions; b) secondary or small-group interventions; and c) tertiary or individualized interventions (Fitzpatrick & Knowlton, 2009; Scheuermann & Hall, 2012; Vannest et al., 2010) each level builds upon the other beginning with an emphasis on prevention of problem behavior for all children at the primary level, more systematic and structured focus for a select groups of students at the secondary level, and very intensive individualized supports for an even smaller group of students at the tertiary level (Blood & Neel, 2007; Kern, Hilt-Panahon, & Sokol, 2009; Lewis, Hudson, Richter, & Johnson, 2004; OSEP, 2010, Scott, Park, Swain-Bradway, & Landers, 2007; Van Acker, 2005),

Students with EBD face a multitude of challenges in the school environment. Because the number of students with EBD in schools continue to increase (US Department of Education, National Center for Education Statistics, 2012), it is critical that educators are adequately prepared to meet the exceptional and challenging needs of the student population. Educators have an ethical and legal obligation to implement effective and meaningful strategies for students with EBD. “In choosing among evidence-based best practices, we must keep in mind that neither the problem nor its solution rests solely with the child,” (Hester et al., 2004, p.7). Education professionals involved with

students with EBD must recognize the key role they play in providing correct service provisions. "…when teacher[s] begin to take a proactive role in shaping their perceptions and subsequent behaviors toward a student with EBD, they look closely for the student hiding underneath these behaviors, a positive learning environment and a positive student-teacher relationship ensues," (Regan, 2009, P.61).

Problem Statement

Research in the area of EBD is a comparatively young field (Nelson, 2004). To date, there are large gaps in the area of intervention and treatment research for this student population. Because the number of students identified as having EBD in schools continues to grow (US Department of Education, National Center for Education Statistics, 2012), it is vital that teachers and other school personnel are sufficiently prepared to address the exceptional needs of this unique student population. Education has long been recognized as providing an entry to better quality of life (Carnevale, Smith, & Strohl, 2010; Porter, 2014). It provides individuals with greater chances for economic upward mobility and there is a direct correlation between educational attainment and wealth (Carnevale, Smith, & Strohl, 2010; Johnson & Sengupta, 2009; Porter, 2014). Given the negative prognosis for many students with EBD, providing the most salient educational experience is crucial for their future success.

Simpson et al. (2010) stress that well-trained and competent teachers are the most central component of successful programs for students with EBD yet, many educators report having little to no curriculum or specific preparation for working with the EBD student population (Bradely, Henderson, & Monfore, 2004; Simpson et al., 2010; Vannest et al., 2010). In an effort to gain insight into how well this student population is

being served in California, the present study will provide insight into the types of interventions currently being used in special education classrooms across California for students with EBD, and how closely current practices align with evidence -based practices as identified throughout the literature.

Purpose

The purpose of this mixed methods study is to identify the extent to which evidence-based interventions being utilized with students with emotional and behavioral disorders by general education teachers, special education teachers, and behavior interventionists working in K-12 special education programs on comprehensive public and non- public school (NPS) campuses in the state of California. The study will also exam the respondents' knowledge of evidence-based practices for this student population and their perceived preparedness to implement these interventions with fidelity.

Research Questions

The research questions for this study are as follows:

1. Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?
2. Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionists working with students with emotional and behavioral disorders across public, non-public, private, or other alternate education setting?
3. Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists perceive themselves most

prepared to implement in working with students with emotional and behavioral disorders?

4. What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?
5. Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionists working in public, non-public, private and alternative education settings?

Significance of Study

Students with EBD have some of the worst school performance data of any student disability category (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004), and carry a poor prognosis into adult life struggling with such issues as adult adjustment challenges, antisocial behavior, delinquency, depression and other mental health concerns, possible institutionalization, social rejection, substance abuse, and prolonged or frequent periods unemployment and under employment (Goodlad, 1997; Kauffman, J. M., & Landrum, T. J. (2009); Walker, Colvin & Ramsey, 1995; Wolf, Braukman, & Ramp, 1987). These discouraging life outcomes present a significant problem for society as a whole in that it cost tax payers approximately $247 billion annually for the economic impact emotional and behavioral disorders have on the education, health care, judicial, and welfare systems in the United States and that number only continues to grow (Einsberg & Neighbors, 2007). As such, law makers have recognized a need following tremendous pressure and fiscal responsibilities, to identify proactive and preventative

measures to address the mounting social-economic problem presented by this population. Many have turned to research on education and instructional practices for answers as mounting evidence emerges suggesting that strong academic instruction and intervention is the first line of defense against these bleak outcomes, both in and out of school (Farely, Torres, Wailehua & Cook, 2012).

Within educational research, quite a few scholars have found that many schools and educators have struggled to convert theory into practice and few teachers actually employ EBPs in the classroom (Fitzpatrick & Knowlton, 2009; Ryan, Pierce, & Mooney, 2008; Wing Institute, 2006). Studies exploring this gap between research and practice have found that ultimately these recommendations have remained overlooked by the greater education community. As an alternative to current common practice, researchers and concerned organizations have advocated for targeted, evidence-based approaches to EBD interventions and a need for increased professional development in fidelity of implementation of said strategies in order to help teachers effectively support students with EBD. These groups have also called for further research in the area of implementation fidelity to better understand and fill the gap between research and practice (Nelson, 2004; Simpson et al., 2010; Vannest et al., 2010; Walker, 2004). Furthermore, the existing research describes the need for greater understanding of interventions being implemented in classrooms across California and the degree to which current instructional practices align with evidence driven best practices (Simonsen et al., 2008; Simpson et al., 2010; Vannest et al., 2010; Yell et al., 2009;)

By examining evidence-based interventions currently being utilized by educators in California schools, this study will add to the current body of implementation research

by using a mixed methods approach to explore whether educators are able to identify evidence-based interventions for students with EBD, the degree to which these interventions are implemented in the programs of the respondents as well as how educators perceive their own ability to implement the strategies with fidelity.

This study was designed to provide information that administrators, teachers, and support personnel can use in their decision-making process to develop optimal instructional practices for this student population and improve overall student success. Additionally, the current study seeks to add to the body of knowledge in intervention and implementation research by providing insight of how far the field has come in narrowing the gap between theory and implementation, what barriers persist in these efforts, and will add to the field's knowledge of the overall values of different interventions for students with EBD.

Definitions

The following terms were used throughout this document.

Alternative Schools (Alt-Ed). Alternative school is a general term that typically describes all educational activities that fall outside of the traditional K-12 school system, including but not limited to, charter schools, schools for the gifted, schools for students with behavioral problems, and GED preparation programs (Aron, 2003;Tobin & Sprague, 2000).

Applied Behavior Analysis. Applied Behavior Analysis (ABA) has been defined based on the work of Baer, Wolf, and Risley (1968 & 1987) and Cooper et al. (1987) and was defined as a technique, strategy, procedure, or intervention that was systematically implemented for the purpose of improving a socially significant behavior.

Education Practitioner. A practitioner has been defined as individuals who provide direct or indirect services to students with EBD within the school setting, including general education and special education teachers, and behavior interventionists.

Emotional and Behavioral Disorders (EBD). Emotional/behavioral disorders is defined as a condition displaying one or more of the following characteristics over a long period of time and to a noticeable degree that adversely affects a child's educational performance: (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) Inappropriate types of behavior or feelings under normal circumstances; (d) A general pervasive mood of unhappiness or depression; and (e) A tendency to develop physical symptoms or fears associated with persona or school problems (Code of Federal Regulations, Title 34, Section 300.8(c)(4)).

Evidence-based Practice/Strategy (EBP/EBS). The definition of evidence-based practice/strategy was based on the No Child Left Behind Act of 2001 (20 U.S.C. § 7801 [37]) and the Individuals with Disabilities Education Improvement Act of 2004 (20 U.S.C. § 1414 [d] [1] [A] [IV]). Evidence-based practice/strategy was defined as any practice or strategy that is based on peer-reviewed research and involves the application of systematic and objective procedures to obtain knowledge that is reliable and valid with regard to educational activities and programs.

Inclusive Classroom. An inclusive classroom is any classroom containing both general education students and students with an Individualized Education Program (IEP) and had both a general and special education teacher assigned together in the classroom for at least one period of the day.

Mainstream Schools. Mainstream is synonymous with general or regular education, which describes the typical public K-12 schools found in communities across the United States, most with varying percentages of special education students. This term is used to contrast with Alt-Ed settings, which are specifically designed to serve students with serious emotional and behavioral problems.

Non-Public School. The definition of a nonpublic school has been derived from the California Department of education and regulatory education code 56034 which defines California's nonpublic schools (NPS) as specialized private schools that provide services to public school students with disabilities. These Alt-Ed schools enroll students with exceptional needs pursuant to an individualized education program. The tuition of a student in an NPS is paid by the public LEA that places the student in the student in the NPS based on the student's individual needs. Unlike other private schools, each NPS is certified by the California Department of Education (CDE).

Self-Contained Classroom. A self-contained classroom has been defined as a classroom

catering to students who have special educational needs due to severe learning difficulties or physical disabilities. A classroom setting in which children with special needs are pla ced with other children with similar needs. These classrooms are considered most restrictive of all public-school classrooms and do not include general education students or teachers.

Delimitations

This study was delimited general education teachers, special education teachers, and behavior interventionists working in K-12 education programs on comprehensive public, private, and non-public school campuses serving students with EBD throughout the San Francisco Bay Area who were listed in the California Department of Education program registry.

Organization of the Study

The reminder of this study is organized into four chapters, a bibliography, and appendices. Chapter 2 presents a review of the relevant literature related to the characteristics of students with EBD, their history and overview of instructional needs. Chapter 2 will also explore characteristics of teachers for students of EBD, student teacher interactions, the need for effective intervention for this student population, and how the use of evidence-based practices can help to mitigate some of the instructional challenges faced by teachers of students with EBD. Chapter 3 outlines the research design and methodology for this study. In Chapter 4 an analysis of the collected data as well as a discussion on the findings will be presented. Lastly, Chapter 5 will provide a summary, concluding statement, and recommendations for future research. The study will conclude with a bibliography and appendices.

CHAPTER II: REVIEW OF LITERATURE

This review of the literature contains five sections. Section one, provides a historical overview of this student population followed by a discussion of the approaches utilized to address the needs of this student population in section two. In section three, the unique characteristics of students with EBD and their instructional needs along with the different types of educational placements available to them are outlined along with information regarding the educational background and quality of teachers serving this student population presented in section four. The literature review then concludes with an overview of specific evidence-based practices for addressing the unique behavioral and academic needs of this student population respectively in section five.

Ask any teacher about the students in their classroom and those teachers are most likely to share that there is at least one student in the classroom who exhibits especially challenging behaviors. In a 2011 nationally-representative sample of youth both males and females in grades 9-12: 32.8% reported being in a physical fight in the 12 months preceding the survey; 16.6% reported carrying a weapon (knife or club) on one or more days in the 30 days preceding the survey; and 5.1% reported carrying a gun on one or more days in the 30 days preceding the survey; the prevalence was higher among males (8.6%) than females (1.4%) (Centers for Disease Control and Prevention, 2011). While this is not a new phenomenon, it is evident that today's students are displaying emotional and behavioral difficulties with much greater frequency and intensity than in previous years (Centers for Disease Control and Prevention, 2011; Walker, Zeller, Close, Webber, & Gresham, 1999). Furthermore, trepidations regarding student behavior in schools have

intensified as of late, from school shootings, physical altercations involving anywhere from two to 50 or more students, vandalism and destruction of personal property, and bullying. Educational personnel are grappling with how to effectively serve students with emotional and behavioral needs across the nation and around the world including countries that have historically been viewed as nonviolent societies such as the recent school shooting which took place in Sweden in late October 2015.

This study seeks to highlight the evidenced based instructional strategies contained within the literature for students with emotional and behavioral disorders and determine to what degree education professionals in California are aware of and utilize the strategies identified. In order to understand what research has already been conducted with this particular student population in regard to the effective instructional strategies, teacher knowledge and utilization, a review of the available literature was conducted. The goal of this literature review was to gain better understanding of this particular student population as a whole, the historical background of students with EBD in schools and their specific instructional needs, the educational personnel working with this student population, the instructional strategies with empirical evidence of their effectiveness for use with this student population, and the utilization of said strategies in the classroom.

History of Students with EBD

History tells us that children with EBD have been present in every society and era. In the past, these children were not given any special treatment. On the contrary, they were frequently left to their own devices. There were subjected to severe punishment, abuse, seclusion, rejection, and ridicule in whatever environment they happened to find themselves (Kanner, 1962; Kauffman, 1976). The purpose of

segregated placements or alternative placements was to deal with these children in an effective and humane manner. Some of early (19th century) segregated placements were psychiatric hospitals. "Moral Treatment" of individuals in general psychiatric hospitals included physical, occupational, recreational, psychological, and educational therapies (Brigham, 1994; Mayo, 1839). In these settings both adults and youths were treated.

Because school is such an important part of children's lives, it played a role in the evolution of child psychiatry (Bettelheim, 1950). In the 1930's, there was special attention, in the form of special units for children and adolescents in psychiatric hospitals (Kanner, 1957). The Menninger Clinic's Southard School started in 1926 as a school for young children who were functioning at a "retarded level". Children with psychiatric disorders were included later. While "Moral Treatment" was the model for those with psychiatric issues, those who were juvenile delinquents, homeless or "bad" were placed in "houses of refuge" or "Reform schools" (Rotham, 1971). As a general rule, if an individual was placed in a psychiatric hospital, there were deemed to be "sick" and deserving of therapeutic care; whereas, those in "reform schools" were "bad" and deserving punishment.

Overtime, hospitals and residential placements continued to provide some "educational therapy" to the children they served. The assumption behind this practice was that some children could not be managed and taught in their communities but living in a structured environment for a time with trained personnel could restore the needed attitude and behaviors to allow reintegration (Bettelheim, 1950).

In 1953, the first day school for students with severe emotional disturbance was opened (Fenichel, 1966). The primary purpose of this type of school was to allow the

student to live at home but receive an education in a more structured setting. By the 1970's mainstreaming affected the placements of students with disabilities in all categories. In the 1990's the "inclusion" movement identified the neighborhood schools as the appropriate educational placement for essentially all children, regardless of disability (Stainback & Stainback, 1996). Both mainstreaming and inclusion seemed to threaten the maintenance of the range of alternative placements. The continuum of alternative placements requires the establishment of service programs that contain a variety of alternative settings as options.

Despite the push for inclusion which has continued since the mid 90's, the small percentage of students officially recognized as having EBD continue to spend a considerable amount of their educational experience outside the general education setting in stand- alone programs. According to the U.S. Department of Education 2002, pupil census data, 32% of students classified as EBD spent more than 60% of their educational experience in alternative education settings during the 2000-2001 school year. Furthermore, 23% spent anywhere from 21 to 60% of their school day outside the general classroom setting and 18% of students with EBD received their education in standalone settings such as private treatment programs (U.S. Department of Education, 2002).

Characteristics of Students with EBD

In schools across the United States, students with behavioral disorders are classified as having EBD if they display at least one of the following behaviors over an prolonged period of time and to a noticeable extent: (a) an impairment in educational performance that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers or

teachers; (c) inappropriate behaviors of feelings under normal circumstances; (d) a general mood of unhappiness or depression and (e) a tendency to develop physical symptoms or fears associated with personal or school problems (IDEA, 2004). Nearly half a million children in the United States receive special education services under the category of Behavior Disorders (U.S. Department of Education, 2008). This category includes several different variations of emotional and behavioral disorders, including internalized behaviors (e.g. Generalized Anxiety, Major Depressive Disorder, Bipolar Disorder) and externalized disorder (e.g., Attention-Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, Conduct Disorder).

The IDEA definition of EBD is used almost exclusively in school settings, primarily within the realm of special education and is far less inclusive than the DSM-V definition. Using the criteria from the IDEA, approximately 2% of the total student population would meet the criteria for EBD (Kauffman, 2001). Those included within this 2% are mainly students who have difficulty following directions, are oppositional, and who display aggression towards others. Within the Special education system, about 6% of the total student population is identified as having an emotional and /or behavioral disorder and are in need of specialized services (IDEA Public Data and Resources, 2011/2012).

As previously noted, in any given educational setting, there is likely to be a sizable group of students with considerable mental health concerns however only a select few display behaviors that warrant special education services. Given the statistics above, it seems that only a small number of students with EBD really go on to receive formal assessments and relevant special education services. The rest of the students not

identified for specialized education services continue to receive instruction in general education classrooms despite their lingering mental health concerns. While these students may also experience significant challenges in school, it is not possible to rule out other variables such as motivation. As such, this current study will focus solely on those students who have been identified as needing additional support services to address their instructional needs.

Given these social, emotional, and in many cases, mental health needs, the literature indicates a critical need for the integration of successful evidence-based strategies to support these students across all domains (academic, social, behavioral and mental health) as well in order to improve academic and social outcomes for students identified as having EBD (Cook & Shirmer, 2003). Thus, it is important to have a solid understanding of what is meant by these terms in relation to addressing the instructional needs of students with EBD. Therefore, a brief overview of each of these characteristics is presented as follows.

Academic Needs of Students with EBD

Students with EBD qualify for special education and other provisions under the U.S. Department of Education category of serious emotional disturbance. The students with disabilities served under the EBD category are a heterogeneous group who exhibit social, academic, and behavioral problems (Rutherford, Quinn, & Mathur, 1996). The challenging behaviors exhibited by students with EBD disrupts young children's school readiness (Joseph & Strain, 2003; Kendziora, 2004), interferes with the learning of others (Kendziora, 2004; Wehby et al., 2003), stresses teachers (Joseph & Strain, 2003; Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008) and without intervention can

become a lifelong concern (Joseph & Strain, 2003). Research has indicated that early intervention and positive behavior supports for students with challenging behavior leads to both positive academic and behavioral outcomes (e.g., Duda, Dunlap, Fox, Lentini & Clark, 2004; Kendziora, 2004).

The needs and services of students with EBD vary greatly (Lane et al, 2005). Some students' needs are met successfully with few adjustments in the general education classroom while other students require extensive residential care, clinical therapy or even hospitalization (Mackie et al., 1957).

Common learning challenges. Where it is well documented that these students have severe social skills deficits, which inhibit their ability to development healthy and meaningful relationships with others, these students also experience considerable academic skill deficits as well. When academic outcomes are compared to that of other student disability groups, students with EBD tend to receive the lowest grades and test scores (Wagner, Marder, et al., 2003; Bradley et al., 2004). The average student with EBD performs one to two grades below their peers in elementary school and 3.5 grades or more below their non-disabled peers by the time they reach high school resulting in fewer than one third of this student group performing at our above grade level in any given academic domain (Coutinho, 1986; Epstein, Kinder, & Bursuck, 1989; Trout, Nordness, Pierce, & Epstein, 2003). These statistics should come as no surprise, given the 50% comorbidity rate of learning disabilities found within this student population (Glassberg, Hooper, & Mattison, 1999). As a result of these academic challenges, students with EBD have attained one of the worst, if not the worst, graduation rates of any student disability group (U.S. Dept. of Education, 2014, 2010, Wagner, Newman, et

al., 2006; Van Acker, 2004). Because a vast number of students with EBD are unsuccessful in mastering even basic academic skills, and often drop out of high school, they also experience great difficulty functioning successfully within the community and struggle to transition into the job market and maintain gainful employment (Gunter & Denny, 1998). In a study examining long term post-secondary outcomes for this student group found a 52% unemployment rate amongst youth with EBD just four years after they stopped attending high school (D'Amico & Marder, 1991).

Students in both self-contained classrooms and stand-alone programs have been found to make limited academic progress across the school year. For example, Lane, Wehby, Little, and Cooley (2005) found that students in the self-contained schools made some academic progress in reading comprehension and oral language measures but displayed decreases in achievement in the area of writing. Another study by Nelson, Benner, Lane, and Smith (2004) determined that students with EBD demonstrated academic deficits in all academic content areas when compared their peers. These deficits were found to be stable over time for reading and written language but increased over time in mathematics. Students with EBD who engaged in externalizing behaviors (e.g. aggression, delinquency, and inattention) had a higher likelihood of having academic problems than students who exhibited internalizing behaviors (e.g. withdrawal, anxiety, depression, somatic complaints, social and/or thought problems).

Researchers have hypothesized several reasons for the poor academic performance of students with EBD (Wehby, Lane, & Falk, 2003). The first hypothesis is that students' problem behaviors avert and interrupt academic instruction. Because these students engage in challenging behaviors, the emphasis and focus of teacher attention in

the classroom has been on managing behavior, rather than instruction of academic content. These researchers found that classrooms for students with EBD tend to operate under the assumption that inappropriate behavior has to be ameliorated before academic instruction can be attempted.

The second hypothesis is that the behavior of students with EBD shapes teacher behavior, resulting in limited academic instruction. Several studies have found that classrooms for students with EBD are differentiated by low frequencies of instructional requests (Jack, Shores, Denny, & Gunter, 1996; Shores et al., 1993; Wehby, Symons, & Shores, 1995; Wehby et al., 2003); instances of inappropriate behavior are preceded by academic instruction (Wehby et al., 1995; Wehby et al., 2003); and students with high rates of aggression received less instruction than students with lower rates of aggression (Carr, Taylor, & Robinson, 1991; Van Acker et al, 1996; Wehby et al, 1998; Wehby et al., 2003).

Social Needs of Students with EBD

The lack of social skills is one of the unifying features of students with EBD. Students may engage in socially inappropriate behaviors because they do not have the necessary skills to succeed within the school setting and therefore require specific instruction in socially appropriate and expected behaviors. For these students, disruptive behavior is often the result of a discrepancy between the demands of the school environment and social competencies of the individual students (Schinke & Gilchrist, 1984).

Prior to being identified for special education, most students with EBD have been in regular classrooms where they could observe and learn from appropriate peer models.

However, these students usually fail to imitate these models. They don't benefit merely form being with other students who display appropriate behaviors. Incidental social learning is insufficient to address their difficulties (Colvin, 2004; Hallenbeck & Kauffman, 1995; Kauffman & Pullen, 1996; Rhode, Jensen, & Reavis, 1992; Walker, Ramsey, & Gresham, 2004). For students with EBD to learn from peer models of appropriate behavior, most will require explicit, focused instruction about whom and what behaviors to imitate (Kauffman, 1999: Walker, 1995).

Social skills instruction for student with EBD is as crucial as any academic skill (Hallahan, Kauffman, & Pullen, 2009). Some children need to be taught the skills that individuals use to function in normal social tasks, like starting and maintaining conversations, giving and receiving compliments, engaging in play with peers, and making a request (Gresham, 2002). Also, how people manage their feelings and behavior and how they interact with other people are essential components of the curriculum for students with EBD. These skills must be learned and then practiced in natural settings to maximum generalization after treatment. Students with EBD learn to replace their avoidance and hostility with these normal responses when given specific instruction and practice in real situations.

Social skills interventions are based on the premise that (1) the individual lacks the skills to engage in positive behaviors that result in reinforcement, (2) others may avoid interacting with an individual who exhibits negative or antisocial behaviors, or (3) individuals may be unable to reinforce others thus reducing the rate of mutual reinforcement (Hallahan, Kauffman, & Pullen, 2009). Predominantly, social skills interventions rely on a combination of instruction, modeling, and /or role play.

Mental Health needs of Students with EBD

Students with EBD frequently have mental health diagnoses that can present a wide variety of behaviors causing concern in the school setting. These behaviors and/or mental health disorders are frequently classified in two broad dimensions: externalizing and internalizing (Cicchetti & Toth, 1991). Externalizing and internalizing classifications are not mutually exclusive. Individuals often show behaviors of both. For example, students with EBD may show internalizing behaviors like distractibility, poor concentration, and short attention span and also display externalizing behaviors like annoying others and fighting. Comorbidity or the existence of more than one condition in the same person is not uncommon (Cullinan, 2004).

Externalizing behaviors. Externalizing behaviors are characterized by acting out towards others and are most commonly associated with the mental health disorders of Attention-deficit/ Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD). Not surprisingly, students who exhibit these disruptive behaviors are problematic in the traditional classroom environment and display poor academic performance. This antisocial behavior has been related to truancy and high dropout rates and acts of violence committed by youths (Rumberger, 1987; Snyder, 2000). Other less serious but harmful forms of aggression continue to get the attention of educators because of their incidences in the school setting. The most dangerous of these behaviors are physical fights and carrying weapons to school. This information has resulted in increased attention by educators to the origins and occurrence of externalizing disorders among students with EBD.

Since these problem behaviors tend to accelerate over time, these behaviors are likely to become extremely troublesome to others and may ultimately result in the student's being "pushed out of school" (Walker, Ramsey, Gresham, 2004). The 1997 reauthorization of IDEA stipulated that a student with an identified disability could not be expelled from school for behaviors caused by the disability. Rather than expulsion, these students are often reassigned to a special school. These externalizing behaviors have a clear negative impact on school achievement and present many challenges within the classroom for educators. Yet, as previously noted, students with EBD often exhibit internalized behaviors either in addition to externalizing behaviors or in isolation.

Internalized behaviors. Internalized behaviors commonly occur in individuals diagnosed with mood disorders, one of which is bipolar disorder, or anxiety-related disorders (Gresham, & Kern, 2004). Where students with externalizing behavior tend to immediately get the full attention of school officials, students with internalizing behaviors, who may be able to sit still in the classroom none-the-less, require intense mental health intervention which they seldom receive in school.

The association between problems in academics and behavioral difficulties is clear. Some describe the possibility that academic problems may lead to behavior problems for some students and behavior problems may lead to academic problems for others. Though there is no clear causal link between academic and behavioral problems, learning problems do seem to be linked through co-morbidity with other factors, such as attention, hyperactivity, attendance, disciplinary problems, and family background (Farmer, 2000).

An even more complex concern is students with major psychiatric disorders (e.g., Schizophrenia, bipolar disorder) who may have a wide variety of behavior and academic problems. Some individuals may need hospitalization and intensive treatment, while others may be able to remain at home and attend school. Although the trend today is away from placement in institutions or special schools, those students with severe disorders may require more restrictive placements, specialized treatments, and procedures. Because many emotional or behavioral disorders are manifestation of developmental disabilities and therefore will not be completely eradicated or cured there is a need for a strong commitment by educators to provide the targeted and sustained interventions necessary to help those students be successful over time. Some research suggests that many youths and young adults with severe conduct disorders will require interventions throughout their life span (Wolfe, Braukmann, & Ramp, 1987).

Long Term Outcomes for Students with EBD

Behavioral difficulties in childhood are associated with a variety of difficulties that carry into adulthood (Visser, Cole, & Daniels, 2002). Children and youth with EBD are much more likely to have problems maintaining employment, forming and maintaining personal relationships, and are at increased risk of criminal activities as adults (Stevenson & Goodman, 2001). Children, who display aggressive and anti-social behaviors and subsequently experience school failure, face ongoing mental health challenges and poor social adjustment into adulthood (Hallahan, Kauffman, & Pullen, 2009). Many children and youth with behavioral disorders grow up to be adults who have real difficulties leading independent, productive lives. This is especially true for those who have conduct disorders (Walker, 2004). The conduct disordered (hyper

aggressive) child's adulthood is frequently characterized by socially intolerable behavior, social incompetence, and incarceration (Walker, 2004; Stevenson & Goodman, 2001).

Usually, students with behavioral disorders are not good at making friends. If they do develop friendships, it is often with peers who also have negative behavior (Farmer, 2000). Often students with behavioral disorders lead lives of terrible desperation and their affect is one of extreme unhappiness. In the school setting, their dysfunctional behavior indicates they are not getting something they need. Their poor decision making brings them to the attention of school officials and juvenile courts. Because schools are charged with maintain safe learning environments and students with poor judgment and poor decision-making skills threaten the environment, school officials often choose more restrictive school placements that offer the best safety and protection (Farmer, 2000).

When recurrent disciplinary office referrals fail to stop their disruptive behavior, these students are usually given in-school suspension (Kritsonis & Cloud, 2006; Morrison, Anthony, Storino & Dillion, 2001). Persistent struggles then result in the student being suspended from school (Arcia, 2006; Dupper & Bosch, 1996). Frequent suspensions from school means the students are not able to access the curriculum and maintain any skills which they may have acquired while present. Frequent suspension is also one of the leading causes of poor attendance; a major risk factor associated with low test scores and school failure (Roby, 2004).

Many students with EBD live lives of desperation, depression and rejection. Students who are withdrawn or depressed do not develop the close and satisfying relationships needed for normal child and adolescent development. Many students with

EBD display abusive, destructive, unpredictable, hostile, and aggressive behavior even towards others who are attempting to be friendly (Farmer, 2000).

Students with a diagnosis of EBD are frequently destined for a life of crime and abuse. Because of poor judgement and lack of internal control, students with EBD often provoke aggressive and even violent counter reactions in individuals they may be attempting to victimize (Cullinan, 2004). Consequently, students with EBD are often placed in restrictive treatment programs for their own protection as well as the protection of those they may victimize. Because students with EBD persistently engage in patterns of disrespect towards their parents, teachers and other authority figures, they are frequently described as being their own worst enemies. This self-destructive pattern of disrespect and blatant defiance contributes, more than any other variable, with early exclusion from general education settings (Hallahan, Kauffman, J.M., & Pullen, 2009).

Causes of Misbehavior in Students with EBD

In order to develop effective interventions for students with EBD, better understanding of the developmental factors associated with challenging behavior is needed. Any observable behavior, whether socially accepted or inappropriate, is a complex phenomenon resulting from a long chain of historical influences. Therefore, it becomes quite difficult to understand the cause of basic human behaviors, let alone more intricate emotional and maladaptive behaviors. By examining some of the possible causes of EBD, we can gain greater insight into this student population and this greater understanding will in turn improve the effectiveness of the interventions employed with this student group (Coie, Miller-Johnson, & Bagwell 2000; Doll & Lyon, 1998).

A number of theories have emerged throughout the literature that seek to shed light on what causes some children to engage in maladaptive behaviors. The first theory is derived from Freud's teachings and is referred to as the psychoanalytic model (Freud, 1946); this theory suggests that abnormal behavioral development is a direct result of unsettled psychological struggles. The second theory comes from the behavior analytic school of thought and is referred to as the behaviorism/social learning theory. From this viewpoint, behavioral challenges are heavily influenced by dynamics within the environment (Watson, 1913; Skinner 1953). The third theory is referred to as the biological model, under which the argument is made that emotional and behavioral disorders are primarily the result of abnormalities of the brain, neuroanatomy, and other biochemicals within the body. As science has evolved, researchers have concluded that with the complexity of emotional and behavioral disorders, these behaviors are likely the result of a combination of the aforementioned factors and no one theoretical paradigm can explain causation alone. It is not possible to attribute any particular challenge one may face to a person's unique biology, their environment, or their family of origin. Most often these challenges are an ongoing interplay of biological, dispositional, environmental, and sociocultural variables (Coie, Miller-Johnson, & Bagwell 2000; Doll & Lyon, 1998).

Given the evolution in causation theories, a relatively new theory that has become popular in the study EBD is that of developmental psychopathology. This theory has been defined by Wicks-Nelson and Israel (2003) as "a general framework for understanding disordered behavior in relation to normal development. It acts as a way of integrating multiple perspectives of theories around a core of developmental issues and

questions" (p.22). Under this framework, emotional and behavioral concerns are thought to be a product of an intricate interplay of various factors and therefore, the cause of said behavior is multiply determined. The developmental psychopathology model contributes to teachers and other educators' understanding of the relationship between the behaviors observed in the classroom, the student's history, and current environmental factors, as well as the interventions used to promote the development of more socially accepted behaviors (Jones, Dohrn, & Dunn, 2004). This model fosters the ability for teachers to refrain from simplistic single-minded portrayals of behaviors of concern and instead give increased attention to the developmental course that led up to the presentation of socially unaccepted behavior.

Educational Environments

Even though students with EBD come with a variety of labels and diagnoses, placement decisions should not be based on the diagnostic label of the child, but instead the child's specific needs. Within the public school, there are a number of possible service delivery models: (1) full-time general education, (2) general education with classroom resource support, and (3) the self-contained special education classroom. Research over the past 40 years has indicated that often the general education classrooms where students with EBD are taught do not employ the strategies and supports that have been proven effective (Hayling, Cook, Gresham, State, & Kern, 2008). Therefore, for many students with EBD in public schools, there is a wait-to fail model. School personnel react to problem behaviors (office referrals, suspensions, and even expulsions) instead of implementing a proactive supportive approach intended to prevent problems. Federal initiatives and national efforts (NCLB and IDEA) have led professionals to conclude that

more students with disabilities should receive education in general education classrooms. However, in looking at students with EBD, this move towards inclusion raises certain issues.

Even though these students have very complex needs some researchers maintain that the general education environment or inclusion is the most appropriate placement for all students with disabilities. The underlying premise of full inclusion is that the regular classroom in the local neighborhood public school is always the least restrictive environment (LRE) for all students including those with disabilities. On the flip side, the underlying premise of the full continuum of alternative placements is that the LRE for learning will vary from student to student (Crockett & Kauffman, 1999). Those opposing full inclusion argue that a full continuum of alternative placements ranging from regular classrooms to resource classes, special self- contained classes, and special day or residential schools and hospitals is necessary if every student with a disability is to receive an appropriate education (Bateman & Chard, 1995). According to Hallenbeck, Kauffman, & Lloyd (1993) the full continuum of alternative placements is essential to providing students with their LRE. Today, alternative schools tend to serve at-risk students and have smaller student populations then typically found in traditional educational settings, individualized instruction to meet the specific needs of individual students (Tobin & Sprague, 2000), and environments "that strengthen relationships among peers and between teachers and students" (p. 32).

There are several studies that have documented a connection between the severity of EBD and the degree of restrictiveness of the school placement. Youths residing in residential settings exhibited more severe behavior problems, had greater risk factors in

various areas of life, and had more contact with agencies then peers served in special education in public school settings (Silver, Duchnowski, Kutash, & Friedman, 1992). Even with IDEA, the impairment criterion has been criticized for being overly subjective and vague (Wiley, Siperstein, Brountree, Forness, & Brigham, 2008). Studies have shown that schools do not necessarily serve a homogenous group of students in the category of EBD. Indeed, some studies indicate that there is a variation in interpretation of *impaired education performance* to mean low achievement relative to the average achievement of students in their school, not to a more universal standard of "low achievement" (Wiley, Siperstein, Brountree, Froness, & Brigham, 2008). Students with severe EBD often receive educational services in self-contained classrooms on a public-school setting or special day school in an alternative education environment. These settings are intended to address the very particular needs of this student population. Some general characteristics of these programs are low student/teacher ratio, high degree of structure, individual and/or small group instruction, opportunities to work through emotional and or behavioral issues immediately, and adults who are given specialized training to work with students who exhibit both internalizing and externalizing behaviors. Frequently, a major goal for students in these highly restrictive environments is to eventually transition back to a less restrictive placement (LRE) in a public school (Tobin & Sprague, 2000; Wiley, Siperstein, Brountree, Froness, & Brigham, 2008).

Educators in both the alternative and public schools do not take these transitions lightly. Placing an ill-prepared student into a public-school environment may result in repeating the cycle of school failures. A student who has displayed anti-social behaviors in the past may not be welcomed back by the school officials, parents, or students. These

scenarios not only produced lowered self-esteem and frustration for the student but can increase tension between the self-contained school and public school (Owens & Konkol, 2004).

A frequent concern regarding specialized behavior programs in alternative settings is that skills acquired in the alternate setting do not readily generalize to the natural environment. Since students with EBD most commonly feared situations occur at school, integrating interventions used in the alternate setting into the public-school setting provide optimal opportunity for meaningful change and stability (Owens & Konkol, 2004).

Teacher Quality, Preparation and Experience Working with Students with EBD

A combination of academic deficits and behavior problems increases the challenges that educators face in providing quality instruction to students with EBD (Sutherland et al., 2008). Moreover, one child having a "bad" day among a group of children can lead to "a chain of reactive behavior" (Kenziora, 2004 p. 331). Although most educators endeavor to meet the behavioral and instructional needs of students with EBD, they often become discouraged by the lack of sustainable effective intervention programs (Eber, Sugai, Smith, & Scott, 2002). However, some educators may be unable to address disruptive student behavior due to inadequate preparation.

While both general and special education teachers are tasked with providing meaningful and effective instruction to students with EBD, these teachers generally report needing the wisdom, confidence, and/or expertise necessary to meet this expectation. A study of teachers of students with EBD conducted by George and colleagues (George, George, Gersten, & Grosnick, 1995) reported that two-thirds of

educators in their study did not feel their teacher preparation program adequately prepared them for working with this student population. This study also found that educators in both general and special education classrooms regularly expressed aggravation over the taxing stressors related to instructing students with EBD. In particular, teachers voiced concerns regarding the amount of time and resources required to address disruptive behaviors exhibited by these students especially when teachers do not have the knowledge base, practice experience, or assurance to meet this challenge.

Defining teacher quality is difficult and the meaning changes depending upon the context in which the definition is used (Berliner, 2005). Teaching refers to an activity in which "a person, who possesses some content, conveys that content to a person, who initially lacks content, to some acceptable or appropriate level" (Fenstermacher & Richardson, 2005, P. 187). According to this definition of teaching, learning has to take place for teaching to be said to have occurred.

According to Blanton, Sindelar, and Correa (2006) teacher quality refers to the actions of a teacher, the knowledge a teacher possesses, and the teacher's creativity. For example, a competent teacher of students with EBD should be able to apply a problem-solving approach to develop an individualized educational program to meet each child's unique medical, psychological, social, and educational needs (Mackie & Williams, 1959). Effective teachers may also be defined as those skilled at promoting the academic achievement of their students (Murnane & Steele, 2007: Nougaret, Scruggs, & Mastropieri, 2005).

Classroom practice that reflects effective instruction and classroom management of students with disabilities is another dimension of beginning special education teacher

quality (Brownell et al., 2009). Moreover, with the current emphasis on accountability, special education teachers have additional responsibility to ensure that their students make adequate progress as measured by state level standardized assessments. Sindelar and colleagues (2005) point out that an expert teacher provides intensive, explicit instruction and practice in small groups accompanied by scaffolding and emotional support, which is good teaching. Therefore, a teacher demonstrates competence by practicing good teaching frequently and also has evidence of student learning (e.g. Berliner, 2005; Fenstermacher & Richardson, 2005). Experience in the classroom is therefore a key factor in teacher quality. However, "increased domain knowledge or relevant experiences alone cannot make a novice an expert" (Alexander & Judy, 1988, p.10).

In quality teaching, a learner should acquire an acceptable level of proficiency in content taught according to disciplinary standards of adequacy using age appropriate, morally defensible methods (Fenstermacher & Richardson, 2005). The skills a teacher uses in quality teaching are related to the teacher's role which differs depending on the teacher's assignment. The role of a special educator is complex (Brownell et al., 2009) and more so in the area of EBD as many non-educational agencies and other professionals are also involved in the delivery of services. Teachers and other specialist need to work in concert to develop programs for students with EBD who exhibit serious maladaptive behaviors (Mackie et al., 1957). Furthermore, challenging behaviors presented by students with EBD make expertise in classroom management vital if teachers are to successfully manage problem behaviors and alleviate academic deficits (Oliver & Reschly, 2010).

Teacher quality is multifaceted. While researchers need frameworks to conduct comprehensive studies (Carlson, Lee, & Schroll, 2004), educators need an understanding of key aspects of beginning teacher quality to guide teacher preparation and evaluate the efficacy of the programs (Brownell et al., 2009). Quality has been a part of the efforts to prepare special educators therefore, mandates such as IDEA and NCLB will undoubtedly continue to change the content of teacher preparation programs (Smith, 2006).

Competencies for teachers of students with EBD

Students with EBD exhibit complex and challenging behaviors that increased the probability of future school failure, substance abuse, and multiple arrests (Wehby, Lane, and Falk, 2003). As a result of concerns regarding poor educational outcomes for students with EBD, IDEA 1990 included specific federal initiative to achieve better educational results for students with EBD (Cheney & Barringer, 1995). One way to accomplish positive educational outcomes was to provide and maintain an adequate number of qualified personnel. Teachers of students with EBD, regardless of the setting (i.e. self-contained classroom, hospital, or detention facility) need competencies beyond those needed by other special education and general education teachers (Mackie et al., 1957).

There is currently, a nation-wide shortage of qualified special education teachers resulting in even fewer qualified education professionals to work with students with EBD (American Association of Employment in Education, 2000). Instructing this student population is frequently described as the most arduous, complex, and therefore least desired area within special education. It comes as no surprise then, that special education teachers who teach students with EBD report the highest rates of turnover among all

special educators (AAEE 2000; Brownell et al., 1994; George et al., 1995; Haselkorn & Calkins, 1993; Singh & Billingsley, 1996). Those who stay face one of the most stressful and challenging jobs in education (Center, 2001; Zabel & Zabel, 2001). There is a clear need for well-prepared general and special education teachers in order to meet their daunting instructional needs.

Expertise in teaching, as in any other field, requires a foundation of domain-specific knowledge that facilitates efficient and effective utilization of strategic knowledge. Although competencies on their own do not ensure effective teaching, they may be used to enlighten students about skills required to be a good teacher (Reynolds, 1999). The 1957 study on the qualification and preparation of teachers of exceptional children, funded by the office of education, initiated investigations into teacher competencies that contributed to successful teaching of students with various disabilities (Mackie & Williams, 1959). Part of that study involved identification of distinctive competencies required of teachers of students with EBD. The competencies identified addressed two domain areas of teaching: (a) knowledge and understanding and (b) abilities, skills, and techniques. The competences in the knowledge and understanding domain area relate to "(a) growth, development, and emotional disturbances; (b) learning problems and abilities; (c) social and cultural factors; and (d) agencies and legal framework" (p.10). Competencies related to the abilities, skills, and techniques domain were those that enabled the teacher to work with colleagues, parents and students (Mackie et.al., 1957). The 1957 nationwide study confirmed that special educators' preparation should contain distinctive knowledge, skills, and abilities in each disability category for which they may be assigned (Mackie & Williams, 1959).

Since the 1957 study, several investigators have endeavored to establish specific competencies that teachers of students with various disabilities would need (e.g. knowledge and skills for teaching reading to students with learning disability [Brownell et al., 2009]; knowledge and skills in classroom organization and behavior management for students with EBD [Oliver & Reschly, 2010]; knowledge and skills for teaching students with hearing impairments in self-contained or resource settings [Roberson, Woosely, Seabrooks, & Williams, 2004]). Historical studies related to determining competencies needed by teachers of students with EBD have been reported (e.g. Bullock & Whelan, 1971: Dorward, 1963; Shores et al., 1973).

Factors influencing teacher competence. Student characteristics and needs, the nature of teacher preparation, and teacher shortage are examples of the factors that can influence a teacher's ability to demonstrate proficiency in teaching. Persistent exposure to extremely challenging behavior may result in early burnout, frustration, feelings of inadequacy, exhaustion, stress, anger, embarrassment, and disappointment among teachers of students with EBD (Kendziora, 2004). Although students with EBD in public schools represent a small percentage of the total student population, they explain over half of the behavioral incidents managed by schools, taking up considerable quantities of teachers and administrators' time and resources (Eber et al., 2002).

Research has shown that behavioral interventions, social skills instruction, and effective academic instruction can be used to address disruptive behaviors in the classroom (e.g. Lane, Gresham, & O'Shaughnessy, 2002; Wehby et al, 2003). Teacher praise, scaffolding, direct instruction, instructional accommodations and modifications, and student choice applied consistently (Lewis, Hudson, Richter, & Johnson, 2004;

Niesyn, 2009), in addition to positive behavior supports and functional behavioral assessment-based interventions, are effective instructional strategies that increase on task behavior and decrease disruptive behavior in the classroom (Lewis et al., 2004). Too often evidence-based practices are not applied consistently in classrooms serving students with EBD. Lack of skills, knowledge, time, fear of change, and current dissemination practices have been cited as some of the reasons behind the research to practice gap. Process-product studies have shown that when students with disabilities receive intensive, explicit instruction, they make significant gains.

Unfortunately, not many students receiving special education services receive adequate intensive explicit instruction (e.g., Brownell et al., 2009; Niesyn, 2009). In a review of textbooks used in the training of teachers of students with EBD, Lane and colleagues (2002) found that most contained insufficient content on instruction in academic areas. For example, Brownell et al. (2009) found that elementary and middle school special education teachers, when teaching reading, rely more on generic teaching practices then on instructional strategies specific to reading instruction. Teacher preparation for teachers for students with EBD should focus on preparing teachers to use best practices to ensure that students are adequately served.

The existing literature highlights the complex relationship between learning and problem behaviors. Behavioral problems and academic deficits are correlated, although the causal relation is still indeterminate (Oliver & Reschly, 2010). Therefore, to ensure desirable outcomes for students with EBD, classroom-based interventions should target both behavior and academic needs (Sutherland et al., 2008).

Teacher interactions with students with EBD. Students with EBD often induce emotions of intimidation, disdain, and fury in many adults (Jones, Dohrn & Dunn, 2004). Coupled with a lack of knowledge, expertise, and experience, these feelings can have an adverse effect on teachers' confidence in their ability to effectively intervene with these students. When teachers struggle to effectively manage students exhibiting challenging behaviors in their classrooms, they tend to turn to more punitive practices in response to these challenges, which only serves to further magnify the problem rather than employ a more proactive and preventative intervention.

When exploring classroom practices for students exhibiting challenging behaviors, research has identified teacher-student interactions as particularly problematic. Strain, Lambert, Kerr, Stagg, and Lenker (1983b) found differences in the amount of praise provided to students who were and were not considered socially or academically competent by their teachers. Kindergarten teachers delivered praise to 63% of students they viewed as socially/academically competent, but only 18% of students they viewed as lacking social/academic competence. Overall, socially/academically low rated students not only received more negative feedback, they also received more repeated commands, demands, and requests when they were complaint. This finding demonstrated that the students most in need of the most academic and social-emotional support were the most likely to receive negative teacher feedback (Strain et al., 1983b).

Lago-Delello (1998) also found differential teacher behavior towards students at risk for EBD. Her study found that kindergarten and first grade students at risk for the development of serious emotional disorders were more likely to be both rejected and labeled by their teachers as having significantly fewer ideal pupil characteristics. In

addition, teachers resisted making certain types of accommodations for them, such as providing changes in tasks, materials, or instructional methods. The students who were at risk also were significantly less engaged academically and received significantly more neutral or negative statements and nonacademic feedback then peers who were not at risk.

Van Acker and colleagues (1996) found that teachers behaved very differently with students at high risk for aggression and severe antisocial behavior than with mid-risk students. For the mid-risk group, teachers were more likely to call on them to answer academic questions (though both groups were equally likely to volunteer) and consistently provided praise for correct responding. Teachers also more often used task redirection when students were in the mid-risk group engaged in negative behavior, whereas their most frequently utilized strategy for intervening with the negative behavior and noncompliance of the high-risk group was reprimand. Unfortunately, teacher reprimand only increased the likelihood of additional negative and/or noncompliant behavior occurring. Similarly, teacher praise was an unpredictable event in the aforementioned classrooms. Although teacher praise of the correct responses from mid-risk students was consistent, it was not predictable for either student group in response to positive/neutral social behavior and compliance. For the high-risk students, the only behavior that reliably predicted a teacher response was inappropriate behavior, consistently eliciting a teacher reprimand.

In an investigation of general education classrooms, Nelson and Roberts (2000) found that teachers' efforts to stop disruptive behavior of target students with a history of high frequency disruptive or externalizing behaviors were not effective while criterion

students without a history of externalizing behaviors corrected their behavior every time after only one corrective teacher request. However, when a target student engaged in disruptive behaviors, teachers were more likely to use a reprimand that focused on the inappropriate behavior (i.e. teacher asking a student to stop a disruptive behavior: "stop hitting"), whereas criterion students were more likely to receive a command focusing on the appropriate behavior (i.e. teacher redirected the student to engage in a desired behavior: "I need you to pay attention"). These data suggested that antecedent interventions might be effective with students with a history of challenging behavior, as their emphasis would be on prevention. Nelson and Roberts also found that the behavior of the target and criterion students did not differ across contexts or settings (e.g. independent work, cooperative learning, direct instruction, transition), suggesting that universal interventions that can be applied across multiple context/settings may be effective in decreasing inappropriate behavior.

Shores and colleagues (1993) also found that teachers' interactions with students with EBD were limited and negative in nature. When a student had a history of aggressive behavior, teachers responded with 6 to 20 times more negative consequences than they did with students with EBD who were considered non-aggressive or students without EBD. Students with EBD also received low rates of positive responses to their appropriate behaviors. For example, raising one's hand and asking a teacher for help were responded to by teachers less than 50 percent of the time. The most common interaction between a student with EBD and an instructor was a teacher mand (i.e., the teacher telling a student to do something). In contrast, teacher positive social reinforcement occurred at rates ranging from once every two hours to once every 15

minutes. The classroom environment of students with EBD in their study was characterized by high frequencies of teacher direction and very low frequencies of positive social reinforcement from their teachers. These conditions have been documented as antecedents to escape and avoidance behaviors, similar to behaviors a person would engage in when faced with an aversive stimulus.

The literature responds to these challenges by offering a relatively rich description of effective practices, as well as evidence that well designed programs can be of benefit to students with EBD and or at risk of failing mainstream schools (Guerin & Denti, 1999; Kauffman et al., 2002; Nichols & Utesch, 1998; Raywid, 1990, 1998). However, while effective techniques have been researched and are available, many educators report a lack of training, knowledge and resources to implement these techniques. Without sufficiently trained teachers, students with EBD are at greater jeopardy for being placed in more restrictive settings, when they possibly could have been effectively taught in more traditional settings given proper interventions.

Behavioral Intervention Strategies for Students with EBD

The previous research creates a dim image of the classroom environment of students with a history of externalizing behavior. It is a classroom with more frequent teacher directions and negative feedback than teacher praise (Strain et al., 1983b; Lago-Delello, 1998; Shores et al., 1993; Van Acker et al., 1996). It is a classroom where teachers focus on telling students what not to do, rather than what they should be doing (Nelson & Roberts, 2000). The previous research points to the variable of teacher praise as an important intervention component for students with challenging behavior. Numerous studies have addressed the pattern of low teacher rates of praise in order to

intervene with the challenging behavior of general education students (e.g. Workman, Kindall, & Williams, 1980; Andrews & Kozma, 1990). In all these studies, teacher praise has been found to be a vital, though often absent, component in classrooms for students with EBD. The literature has shown a clear correlation between praise and behavior improvements. It is possible that such an intervention could improve behavior sufficiently in the absence of a Functional Behavior Assessment (FBA).

Concerning the issue of imbalance between teacher praise and mands the research points to an intervention that has the potential to interrupt this cycle and replace it with a cycle of academic and behavioral learning: increasing Opportunities to Respond (OTR). Frequent OTR to academic material allow teachers to provide important feedback that aids adjustment of instruction based on student understanding and facilitates student learning because of increased engagement (Sutherland & Wehby, 2001).

Several studies have examined the effect of frequent opportunities to respond on academic learning of students with EBD and students who display disruptive behavior (Sutherland & Wehby, 2001). Carnine (1976) and West and Sloane (1986) found that increasing OTR increased correct responding with two groups of students: students with academic deficits and high rates of off task behaviors (Carnine, 1976) and students with EBD (West & Sloane, 1986). These studies also found that faster presentation rates resulted in decreased off-task behavior (Carnine, 1976) and disruptive behavior (West & Sloane, 1986). This research made evident that increasing teacher requests (OTR) yields improvements in the academic performance and classroom behaviors of students with problem behaviors.

A related intervention that has similar face validity to increasing students' OTR is modification of task difficulty. Providing students with instructional material in which they can achieve a high level of accuracy (i.e. instructional match) has resulting in increased oral reading accuracy and fluency (Daly, Martens, Kilmer, & Massie, 1996), reading comprehension, and engagement (Treptow, Burns, & McComas, 2007) for students with academic and behavioral disabilities. Meyer (1999) discovered that when students with learning disabilities and EBD were alternately given easy and difficult tasks during functional analysis, off- task behavior increased during difficult tasks for 3 out of 4 students, Kamp, Wendland, and Culpepper (2006) found that decreasing the difficulty of a task, as part of an FBA-based multi-component intervention, resulted in increased engagement and decreased disruptive behaviors for students with academic and behavioral challenges. These studies provided evidence that consideration of task difficulty level is a viable intervention for students with challenging behaviors.

Another related intervention in which students with EBD can receive rewards and positive attention for appropriate behavior is through class-wide incentive systems, commonly known as point systems, behavior charts, or level systems. These class-wide incentive systems are designed to improve students' behavior, and often consist of the following components: a) clearly communicated expectations of appropriate behaviors; b) some form of feedback about the students' performance of those target behaviors; and c) immediate or delayed reinforcement for improved behavior through points, activities, privileges, tangible items, and/ or free time (Farrell, Smith, & Brownell, 1998). Incentive systems based on classroom expectations of appropriate behavior have been employed as group contingency interventions (Lohrmann & Talerico, 2004), as a single intervention of

a token economy (Higgins, Williams, & McLaughlin, 2001), and within a package of interventions (i.e. positing rules, teacher movement, token economy, and response cost) (De Martini-Scully, Bray, & Kehle, 2000; Musser, Bray, Kehle, & Jenson, 2001) for students with and without EBD. The effectiveness of these interventions for improving student behavior and regulating student-teacher interactions contributes to the continued popularity of this intervention (Farrell, Smith, & Brownell, 1998).

Proactive Interventions

Many alternative education settings for students with EBD, albeit unintentionally, actually mimic and intensify the etiological circumstances that are often present leading to the formation of the condition. Several researchers who examined programs and services for students with EBD found that these programs often stress the use of control and exclusionary practices instead of prevention and intervention strategies with greater long -term effectiveness (Knitzer, Steinberg, Fleisch, 1990). Kaufman (2001), suggests that when educators can recognize and implement proactive strategies, behavioral challenges are far less likely to present themselves in the classroom. Similarly, a study conducted by Jones, Dohrn and Dunn (2004), found that therapeutic learning environments can help students gain understanding of and overcome their emotional and behavioral problems.

The environments and strategies that foster prosocial behavior in the classroom have become more and more evident in the literature (Algozzine, Adudette, Ellis, Marr, & White, 2000; Frieberg, 2005; Jones & Jones, 2004; Nelson & Roberts, 2000; Sugai & Horner, 2005). These environments include (a) behavior expectations that are clearly defined, (b) direct instruction of behavioral expectations, (c) consistent reaction when

expectations are not met, and (d) individualized supports in place for more persistent behavior concerns. For example, in their research, Jones and Jones (2004), found classrooms in which educators utilized engaging curriculum that had been specifically tailored in response to the students' academic skill deficits, and prompted a community of support, led to a climate of positivity which fostered student growth, skill development and lessoned the occurrence of problem behaviors. In addition to the aforementioned environmental factors, Jones and Jones (2004) also suggest that these types of classrooms can be developed when educators effectively address violations of stated expectations immediately following the violating incident. They also suggest that the learning process is personalized and demystified; quality relationships between the teacher, students and peers are encouraged; and students are given frequent opportunities to engage in small group instruction.

Positive behavior support. Extreme incidents of violence in schools in recent years have led to heighted public awareness and concern regarding safety in our nations' schools and disciplinary protocols (Skiba & Peterson, 2005). This awareness has fueled research efforts to explore effective strategies to decrease if not eliminate disruptive and violent behaviors in school. One model gaining in widespread popularity and recently backed by governmental and education research is Positive Behavior Support (PBS) (Bradley, 2001; Sugai & Horner, 2005). PBS is a broad term used in reference to implementation of positive behavioral interventions and systems to attain socially significant behavior change (Sugai, Sprague, Horner, & Walker, 2000). PBS gains its theoretical background from the field of Applied Behavior Analysis and other behavioral sciences that has adopted person specific interventions and modified them to be

implemented with a systems approach across an entire student body of a given school (Sugai & Horner, 2005). PBS focuses on prevention and positive methods for targeting problem behavior as opposed to more traditional restrictive and punitive methods.

Initially, PBS was developed as an alternative to commonly used punitive strategies individuals who displayed extreme topographies of self-injurious behaviors and aggression (Carr & Durand, 1985; Meyer & Evans, 1989). Based on behavioral and biomedical science, empirically validated procedures, and principles of systems change which thwart the occurrence of problem behavior (Carr et al., 2002; Sugai & Horner, 2005), PBS strategies have been shown to be far more effective than punishment procedures for long term behavior change and have become far more socially acceptable over time (Mayer, 1995; Mayer & Leone, 1999). The main attributes of PBS are data-based decision making, pro-activity, and a problem-solving orientation which can be implemented using a wide range of intervention strategies. The emphasis is always placed on reinforcing or increased the desired behaviors versus a focus on unwanted behaviors as is the case with more punitive methods (Horner, 2000; Sugai et al., 2000).

In an educational setting, for example, a teacher would deliver verbal/tangible reinforcement such as a token or statement of admiration for desired behavior rather than taking away privileges from students because of undesirable behavior such as not being able to play with peers during recess. Positive reinforcement can occur through "teachable moments", in which a student is observed engaging in a desirable behavior, and that behavior is immediately reinforced. For instance, a student is given verbal praise for transitioning quietly into the classroom, or a token for raising their hand and waiting to be acknowledged versus calling out in class.

Comprehensive classroom management. As previously noted, Jones and Jones (2004), stressed the importance of positive relationships in managing student behavior. These ideas were part of a larger methodology referred to as the model of Comprehensive Classroom Management. Reinke, Hermant and Stormont (2013) claim that "teachers indicate that they consider classroom management to be the most challenging aspect of their job and one in which they receive the least amount of training" (p. 39). It is critical that teachers are experts with creating their own classroom management. Successful classroom management skills have proven to create a positive relationship between teachers and students. According to the literature, it "...develops a classroom social environment in which students agree to cooperate with teachers and fellow students in pursuit of academic growth" (Brown, 2004).

A comprehensive classroom management approach incorporates many components of PBS including establishing general behavior expectations; establishing well-defined classroom rules; systematic and consistent response when expectations and procedures are not followed, and the utilization of student specific behavior intervention plans for persistent behavioral difficulties. A key distinction between PBS and this model is an emphasis on quality of instruction, student participation in developing behavioral expectations for the school as a whole and the classroom; problem- solving skills; parental involvement; and the formation of a caring and supportive community within the school.

Jones and Jones (2004) contend that in order for programs for students with EBD to be comprehensive and effective, they must effectively utilize the components of PBS including a school-wide culture of care and support which can be achieved by

incorporating the tools outlined in their model of comprehensive classroom management. According to the data collected from various schools in their study, office referrals, suspensions, expulsions, and disruptive behaviors in common areas of the school were reduced by 35 to 49 % when the school systematically implemented comprehensive classroom management procedures.

Taking this line of thought a step further, a few researchers have also pointed to the need for cultural responsiveness in designing comprehensive classroom management (Weinstein, Curran, Tomlinson-Clarke, 2003). While most teachers strive to provide equal learning opportunities for all students regarding of race, studies show racial discrimination continues to be an issue within schools as implicit racial bias is an issue that affects everyone given the dynamics of our current society. With the disproportionate number of students classified as having EBD coming from communities of color, and the vast majority of educators not from those communities, educators will unconsciously partake in racist actions due to societal stereotypes against racial diversity. Weinstein, Clarke and Curran (2004), claim that educators have to care so much about ethnically diverse students and their achievement. It is important for educators to reevaluate the expectations they have of their students, to prevent discrimination. Furthermore, Weinstein, Curran and Clarke (2003) recognized that differences in discourse style can have a direct effect on students' behavior. An increase in culturally responsive classroom management could lead to more successful student/teacher relationships, which will lead to positive behavior.

Academic Intervention Strategies for Students with EBD

While the aforementioned interventions were established to address aberrant behaviors in the classroom and may have also provided an added boost to academic performance as well, the majority of intervention studies conducted with this student population have explored behavior modification, often ignoring blatant academic concerns (Ryan, Reid, & Epstein, 2004). Recognizing the need to address academic challenges as well, researchers have begun exploring instructional strategies for students with EBD that would serve to improve school engagement and the long-term goal of improving student outcomes overall (Mooney, Epstein, Reid & Nelson, 2003). The complexities of meeting the academic and social skill development needs of students with EBD make it essential for teachers to integrate empirically sound instructional techniques in the classroom to make the most of their teaching effectiveness.

To that end, researchers at the University of Nebraska's Center for At- Risk Children's Services (e.g. Epstein, Nelson, Trout, & Mooney, 2005) conducted a meta-analysis of three decades of research related to enhancing the academic abilities and functioning of students with EBD in public schools receiving intervention at the primary level. Their review found positive outcomes across various participants, environments, and disciplines (Nelson, Benner, & Mooney, 2008). Given the varied nature of the research, studies of academic interventions were divided into three main categories: (a) peer-mediated interventions which include interventions such as cross-age tutoring and class wide peer tutoring, in which instruction is led by the student's peers (b) self-mediated interventions which include self-monitoring and self- evaluation, wherein

students instruct themselves; and (c) teacher mediated interventions which include story mapping and mnemonics for which instruction is led entirely by the teacher.

Primary Interventions

Peer-mediated interventions. For this category, the teacher pre-selects the instructional method and pairs students with each other to lead the instruction. For example, a teacher may have students practice math facts, or read a short passage to each other instead of the teacher leading the review (Hoff & Robinson, 2002). There are many instructional techniques that fall within peer-mediated interventions including, class wide peer tutoring (CWPT), class wide student tutoring teams, cooperative learning, cross-age tutoring, peer assessment, peer-assisted learning strategies (PALS), peer counseling, peer mentoring, peer modeling, peer monitoring, peer network strategies, peer tutoring, reciprocal peer tutoring, and reverse-role tutoring (Utley & Mortweet, 1997).

In a review of literature on peer-mediated interventions, Ryan and colleagues (2004) found 14 different studies in which academic performance was positively improved when peer-mediated interventions were used. The particular peer-mediated interventions that had the highest ranking of effectiveness were cross-age and same-age peer tutoring. A clear example of the efficacy found within cross age peer tutoring was provided in a study by Cochran, Feng, Cartledge, and Hamilton (1993). These researchers had a group of 5th graders in special education to provide peer tutoring to 2nd graders with low performance on their sight words for 30 minutes a day over a period of eight weeks. In the end, both the tutors and tutees demonstrated increased sight word recognition and improved social interactions with peers when compared to their

classmates were not included in the peer tutoring activities. In a similar study, Falk and Wehby (2001) paired higher preforming readers with lower preforming peers for kindergarten reading instruction to explore the efficacy of same-age peer tutoring through instructional protocol known as kindergarten peer-assisted learning strategy (K-PALS). The kindergarteners exchanged responsibilities over the course of one school term while engaged in various activities designed to increase reading fluency and comprehension. Conclusions from this research indicated that the participants were able to increase their skills in letter sound correspondence and in blending sounds using this instructional strategy. To this end, the peer mediated interventions included in Ryan and colleagues' (2004) review yields strong concluding evidence of significant academic gains for students with EBD in a manner that is enjoyed by students and teachers alike, thus giving strong social validity to this technique and increased chance of future use. Moreover, Utley and Mortweet (1997) speculated that peer-mediated interventions could offer an effective method of counteracting the negative effects of high teacher-student ratios commonly found in today's classrooms and an effective substitute for teaching in isolation for students with acute learning deficits.

Self –mediated interventions. Self-mediated interventions are instructional strategies for which academic instruction is led by the students themselves. Five main types of self-mediated interventions have been found throughout the literature. Sometimes referred to as self-management or self- regulation interventions, this class of interventions includes such techniques as goal setting, self-evaluation, self-instruction, self-monitoring and strategy instruction. For all self-mediated interventions, educators provide the initial instruction to students on how to implement the intervention and

instructional activities and gradually transfer the responsibility of completing the instructional tasks completely to the students. In this way teachers ensure the students comprehension and ability to execute the required skills.

In a study of self-monitoring interventions, Carr and Punzo (1993) taught 3 junior high school aged boys from a self –contained classroom to monitor how many assignments they completed and how many correct responses they gave throughout the day from a list of given independent work assignments across subject areas. Following the teacher training, Carr and Punzo collected data on student performance which indicated that students demonstrated increased on task behaviors which resulted in improved accuracy and productivity across all academic subject areas. Similarly, Skinner, Belfiore, and Pierce (1992) assessed an instructional procedure that is said to encourage high rates of correct student responses on academic tasks across a variety of subject areas known as cover, copy, and compare (CCC). CCC basically requires students to follow a sequence of problem solving steps which involve: (a) reviewing a problem and its solution; (b) covering the problem and its solution; (c) rewriting or copying the problem and solution without looking at the original version; and (d) comparing their written version with the original problem and solution to check how closely the two match. Those students who provided a correct response move on to the next item or problem to solve whereas those students with an incorrect response are required to complete the process until their rewrite matches the original. Skinner and colleagues (1992) found that this intervention resulted in an increased average in accuracy across the whole class when compared to the class baseline, and students enjoyed completing assignments in this manner as well. These findings suggest that akin

to peer-mediated interventions, self-mediated methods have also shown their ability to yield significant academic improvements across multiple subject areas for students with EBD.

Teacher-mediated interventions. Teacher mediated interventions refer to strategies in which the instructor (or someone other than the student or peer) takes responsibility for the instructional strategies employed and involve the manipulation of antecedents and/ or consequences to promote the occurrence of desired student responses. These interventions are designed to aid the teacher in intervening before undesirable behaviors that interfere with academic success even occur. By manipulating the consequences, teachers are able to which reinforcers are most likely to elicit the desired student responses and behaviors so that they may capitalize on these behaviors to foster student academic growth. Interventions in this category include adjustment to task difficulty, contingency contracts, story mapping, and token economies.

Pierce and colleagues' (2004) analysis of teacher-mediated intervention studies found throughout the literature yielded 30 separate studies from multiple academic journals which met the inclusionary criteria for their review. Of these studies, 90% showed positive outcomes for students with EBD. Teacher –mediated interventions showed the strongest efficacy in improving reading and low to moderate improvements in math scores. Pierce and colleagues had two very interesting findings from their study. One, these interventions were effective even when implemented over brief periods of time (average of 22 days of implementation per technique). However, the researchers note that while it is encouraging to be able to positive growth through brief interventions, other studies have shown that brief implementation may not be sufficient in maintaining

significant and long-term change for students with EBD (McConaughy, Kay, & Fitzgerald, 2000). Secondly, Pierce and colleagues note that only a small percentage of these studies included any information on social validity making it difficult to determine any functional value. Without this data, it is difficult to conclude whether the interventions included in their study were advantageous and practical for all educators.

In summary, there is considerable data to back the use of teacher-mediated interventions for enhancing the academic achievement of students with EBD particularly in the area of reading skills. A brief explanation of these instructional techniques and the student groups for which evidence of their effectiveness has noted can be found in Appendix A. Several of the interventions outlined in Appendix A present the potential for substantial growth across various academic areas particularly for students with EBD. Nevertheless, the outcomes of Pierce and colleagues (2004) study among others, indicate that more research is needed before we can generalize these findings confidently to wider populations of students.

Secondary or Small Group Interventions

In addition to the aforementioned academic skill deficits, students with EBD frequently struggle socially and their struggles with interpersonal skill deficits contribute to school failures that are not successfully addressed with primary interventions. Those students not responding positively to universal strategies require more concentrated interventions provided at the secondary level (Burke, Vannest, Davis, Davis, & Parker, 2009; Coffee & Ray-Subramanian, 2009; Gresham & Kern, 2004; Kavale, et al., 2004; Lane, 2004; Lewis et al., 2004; Meadows Stevens, 2004; Polsgrove & Smith, 2004; Rivera et al., 2006; Robinson, 2007; Van Acker, 1995). At the secondary level, greater

emphasis is placed on increasing positive social behaviors in students with EBD, in which case, direct instruction of social skills in small groups is advantageous (Kavale et al., 2004).

Given their proclivity to engage in aberrant behaviors in the face of adverse situations, students with EBD need to be taught socially appropriate approaches to resolving problems as they arise (Van Acker, 1995). Systematic, explicit instruction in problem-solving arranges for deliberate occasions for students to practice emerging social skills and receive feedback and coaching. Within social skills training, instructors guide students through introspective lessons exploring why particular behaviors are considered inappropriate in a given context. Since behavior change is a continual process, a single lesson or unit on appropriate behavior will not lead to lasting change, therefore, educators need to develop ways of integrating social skills training into their existing course of study (Van Acker, 1995).

In addition, several studies have found that behavioral progress monitoring is an essential component of social skills integration (Burke et al, 2009: Coffee & Ray-Subramanian, 2009). This progress monitoring can be effectively achieved through the use of such tools as daily behavior report cards, good behavior notes, or home-school notes. These tools also fulfill the IDEIA requirement for periodic reports and documented monitoring of goals. In a study by Burke and Colleagues (2009), progress monitoring tools were found to have high reliability with students identified as being at risk for developing or having an EBD within a Reponses to Intervention (RTI) Framework.

At the secondary level Cognitive behavior interventions (CBI) have also been found beneficial to providing students with EBD the skills needed to appropriately behave across different settings (Gresham & Kern, 2004; Polsgrove & Smith, 2004; Robinson, 2007). CBIs provide students with the tools to gain self-control over their own behaviors (Polsgrove & Smith, 2004), and develop effective problem-solving skills to address academic and interpersonal challenges as they arise (Robinson, 2007). CBIs typically include principles of behavioral therapy to alter underlying thought processes that negatively influence visible behaviors (Robinson, 2007) and therefore have strong empirical evidence for use with students with internalizing behavior concerns (Gresham & Kern, 2004) as these concerns can stem from faulty thought patterns.

At times, the behavior challenges presented by students with EBD appear to far outweigh their academic challenges resulting in a tendency for teachers to focus on teaching adaptive behavior skills and neglecting their academic needs especially in the area of reading however the students' frustration in their reading difficulties may be the catalyst of many behavioral challenges in the classroom (Lane, 2004; Rivera et al., 2006). Similarly, Rivera and colleagues (2006) observed that reading instruction strategies involving differentiated instruction in small-groups at the secondary level of intervention showed much stronger efficacy than previous undifferentiated, whole-group instructional practices at the primary level. Additionally, all of the successful reading interventions reviewed by Rivera and colleagues included at least some, if not all, of the elements of effective reading instruction considered essential under NCLB legislation. This legislation indicates that effective reading instruction must address comprehension, fluency, phonemic awareness; phonics; and vocabulary.

Regarding other subject areas, the literature on secondary interventions is quite limited. In a review of small group and differentiated instructional strategies, Hodge et al., (2006) found a lack of research on math or other subject areas. Likewise, Hodge and colleagues found an absence of empirical research related to teacher-directed interventions and small-group instruction of problem –solving skills.

Tertiary or Individualized Interventions

Within the population of students with EBD, there is a select group may continue to struggle despite primary and secondary interventions (Jolivette, 2005; Van Acker, 2005). When this occurs, it becomes necessary to deliver individualized interventions or tertiary level support (Turnbull et al., 2002). At the tertiary level, educators seek to identify student specific variables that affect school success. To achieve such sophisticated individualized support educators have developed and implemented a functional behavior assessment (FBA). The use of FBAs for students engaged in high intensity socially unacceptable behaviors is widely documented in the research literature on the subject (Blood & Neel, 2007; Jolivette, 2005; Kern et al., 2009; Lane, Eisner, et al., 2009; Lane Kalberg et al., 2009; Lewis et al., 2004; Turnbull et al., 2002; Van Acker 2005).

Functional behavioral assessment. Functional Behavioral Assessment (FBA) is an intervention methodology that has become mandated by law (IDEA 1997; IDEIA 2004) for the use in schools, is relatively new and promising strategy for assessment and intervention development for students with EBD. While an FBA can take on different forms, the underlying intention is the investigation of the function or purpose that a challenging behavior serves for and individual. This occurs either through experimental

manipulations, as with a functional analysis (i.e. Iwata, Dorsey, Slifer, Bauman, & Richman, 1994), or the use of direct (i.e., observations targeting the antecedents and consequences of challenging behaviors) and indirect methods (i.e. interviews) to uncover information that leads to the development and testing of hypothesis statements (i.e. Kern, Childs, Dunlap, Clarke, & Falk, 1994).

From an assessment and intervention development methodology that was first primarily used with individuals with developmental disabilities in clinical settings, FBA has expanded in terms of setting and target participants. Ervin and colleagues (2001) and Reid and Nelson (2002) documented that students with EBD and ADHD being educated in special and regular education classrooms were increasingly participants in the FBA research literature.

The relationship between behavior problems and environmental events has long been known however there has not been a systematic method for investigating this link and using that method to develop effective interventions until recently. In 1994, Iwata and colleagues illustrated a systematic strategy for identifying behavioral function with individuals with developmental disabilities (Functional analysis). Subsequently, this process has been expanded, not only with respect to procedures, but also to other populations without significant cognitive delays.

The first study that applied this methodology to students of average cognitive abilities was Kern, Childs, Dunlap, Clarke, and Falk (1994). Rather than structuring analogue situations and providing reinforcement for problem behavior to ascertain behavioral function, as Iwata's model entails, Kern and colleagues examined behavior problems in naturally occurring context (termed Functional Assessment). Over twenty

subsequent studies have demonstrated that this approach is applicable and effective for reducing behavior problems among individuals with an average range of functioning (Kern, Hilt, & Gresham, 2004).

FBA and intervention effectiveness. Despite its history and mandated use in the law (IDEA 1997, 2004), several researchers have questioned the benefit of an FBA to intervention effectiveness. Specifically, the concern is that FBA's are helpful in settings where environmental variables can be easily controlled (i.e., clinics) and with students with severe disabilities, whose behaviors may presumably be less complicated, but effectiveness has not been demonstrated in other settings or with diverse populations. Two literature reviews (Ervin et al., 2001; Reid and Nelson, 2002) investigated the existing literature base to begin to answer the question of an FBA's usefulness and reach. Improvement in behavior as a result of assessment-based intervention was found almost universally in the studies reviewed; the FBA based intervention almost eliminated the problem behavior, even though some of those students had previously received other interventions that were not effective. Measures of acceptability/social validity were sparse in both reviews. When obtained, teachers rated the FBA procedures positively. These reviews documented that FBA has expanded its reach beyond students with cognitive disabilities and clinical settings and is an effective intervention for students with EBD as well.

Individualized behavior intervention plans. When a FBA has been introduced, typically a behavior intervention plan (BIP) is subsequently developed and becomes part of the student's Individualized Education Plan (IEP) (Blood & Neel, 2007; Buck, Polloway, Kirkpatrick, Patton, & Fad, 2000; Ervin et al., 2001; Gable, Quinn, Rutheford,

& Howell, 1998; Reid & Nelson, 2002; Sugai, Lewis-Palmer, & Hagan, 1998). Nevertheless, in their research Blood and Neel (2007) discovered that students requiring tertiary interventions rarely had a fully developed FBA and most of the FBAs they reviewed were missing key components. Their findings suggested that FBA's were typically developed by educators who had little understanding of FBAs and BIPs, viewing these documents as more of a compliance measure rather than a behavior coaching tool. Additionally, Blood and Neel found that most of the FBAs they examined were based on educator judgment instead of actual performance data, and that there was little to no evidence of parental or student involvement in the development of said plans. When properly implemented, FBAs can provide invaluable insight into the occurrence of aberrant behaviors and beneficial tool for educators. However, based on the current inclusionary criteria for evidence-based practices for students with EBD, FBAs remain an emerging intervention strategy (Lane, Eisner et al., 2009; Lane, Kalberg et al., 2009).

Level systems. Level systems are behavior management frameworks that were developed to increase desired behaviors, increase self-management of behavior, and cultivate personal accountability for academic, emotional, and social performance (Algozzine, 1990; Bauer, Shea & Keppler, 1988; Beuchert-Klotz, 1987). To date, no commonly established definition of level systems exists throughout the literature. However, Farrell et al. (1998) defined level systems as "organizational framework(s) in which a teacher can shape a student's desired behaviors in hierarchies of behavioral expectations or levels thorough the systematic application of behavioral principles" (p.1.) However, these systems have also been described as behavioral intervention frameworks in which students earn their way through a succession of levels based on consistent

display of desired behavior, while emphasizing the importance of developing intrinsic motivation and self-management strategies as the students' progress through the level system (Cancio, 2008).

A review of the literature on level systems suggests four main purposes a) to support data based decision making (Cancio, 2007); b) to provide an external structure for behavioral expectations(Tobin & Sprague, 2000); c) support the development of students' intrinsic motivation and ability to self- manage their own behaviors(Cancio, 2007); and d) to provide a pathway to less restrictive settings(Barbetta, 1990; Cancio, 2007; Farrell et al, 1998; Kerr & Nelson, 2005, 1989).

Behavior contracts. Several examples have been found throughout the literature which highlights the positive effect of behavioral contracting on the reduction of inappropriate behaviors and providing increased opportunity for positive interactions with students with EBD. According to Cook (2005), behavior contracts provide increased opportunity for positive attention from the teacher thereby breaking the negative cycle that often occurs between the teacher and students with EBD and in doing so serves to increases student self-esteem. In this manner, students with EBD receive positive attention and reinforcement for good or desired behaviors rather than negative attention for maladaptive behaviors. Furthermore, Cook argues that behavioral contracts fosters better communication and rapport between the teacher and student thereby allowing the teacher to attend to the whole class versus focusing attention on one or two disruptive students within the classroom.

In a study of the use of behavioral contracts for middle school students in a general education classroom who were frequently off task during the day, Allen, Howard,

Sweeney, and McLaughlin (2016) found that individualized behavior contracts resulted in instantaneous and notable improvements in on-task behaviors for all study participants. Even when the contracts were no longer implemented, students' on-task behaviors remained high, indicating intervention generalization and sustained positive affect. In their study, Allen and his colleagues noted that it required very little time and effort on the part of the instructor to effectively employ the behavior contracts, making this technique very appealing to educators where the amount of time required to implement an intervention is a huge factor in whether they adopt the practice. Behavior contracts also serve to improve student –teacher relationships and opportunities for positive communication and interactions, require little effort to implement and are not disruptive to others in the learning environment.

As some research suggests, one type of intervention alone is insufficient to promote positive change. In more severe cases in most students with EBD, a combination of intervention strategies integrating cognitive behavioral treatments with psychopharmacologic intervention may be necessary (Forness et al., 2006). Forness and colleagues (2006) found that behavioral interventions or CBIs alone resulted in the desired responses in only 32% of students studied, whereas to 52% of students receiving psychotropic medications alone showed improvements in the desired behaviors and the remaining 48% of students showed no response to psychopharmacological interventions. Given these findings, educators must understand that every student with EBD is exceptional and will respond to interventions differently, thus, their intervention program must also be uniquely designed to meet each individual students' needs.

The academic concerns of students with EBD are equally as critical at the tertiary level of intervention. For a great number of students with or at risk for EBD, the presentation of academics can serve as an aversive stimulus which prompts occurrence of maladaptive behaviors as a way of escaping or avoiding the academic demand (Hagan-Burke et al., 2007). Nonetheless, when applied appropriately, modifications to the curriculum and methods of instruction, will potentially decrease this aversion and result in higher rates of positive academic behavior responses and fewer problem behaviors.

For a select group of students with EBD who continue to engage in severe aggressive and violent behavior despite the aforementioned interventions, physical restraint or seclusion may be necessary. In the event that these practices become necessary, certain guidelines are to be followed to ensure safety and prevent overuse of these invasive procedures.

Another key component of tertiary level support is an emphasis on aiding in school to community transition planning (Cheney & Bullis, 2004). Traditionally, transition plans have mainly included those services available in school, yet students with EBD often require a more comprehensive coordinated approach involving the collaboration of multiple agencies, similar to the systems of care approach such as wraparound services (Eber & Keenan, 2004; Lambros et al., 2007). As previously noted, students with EBD have poor outcomes after leaving high school and have difficulty navigating social structures. As a result, a good number of students with EBD struggle to access much needed social services from mental health and adult service systems which are most often fragmented and cumbersome to navigate. Each system operates under different governance structures, often leading to confusion given the differing eligibility

criteria, definitions, policies and interventions employed. Developing a comprehensive service plan within a supportive school environment can help to encourage more successful transitions into adult life (Lambros et al., 2007).

The wraparound approach is a multidisciplinary tertiary level intervention which identified proactive and positive behavioral supports to promote a more inclusive family friendly, and youth focused environment that can reduce the chance of repeat offenses (Hardman et al., 2014). According to Hardman and colleagues, a typical wraparound team follows a four phase intervention plan that involves (1) team members are determined and coordinated based on the student's identified issue, need and collected data; (2) a plan is developed by all stakeholders with emphasis on student strengths and available family supports; (3) the team implements the plan and documents successes through frequent team meetings and ongoing communication between all stakeholders; (4) once evidence and data show success, the team discuses transition to secondary level supports and shares methods of accessing community resources with all stakeholders. Intervention goals typically include enhanced family relationships, emotional and behavioral growth, less interaction with the justice system, and improved academic performance.

While multidisciplinary approaches such as wraparound have been shown to be an effective evidence-based intervention, implementation is not without its own challenges. The wraparound protocol requires strict structure, keen attention to detail and exceptional coordination (Epstein et al., 2003). When the team does not or is unable to follow wraparound principles, established protocols and or procedures, the interventions developed tend to further exacerbate the student's identified challenges and further

compromises their success in schools and in their community (Quinn & Lee 2007). One of the biggest factors in the success or failure of multidisciplinary teams is family involvement. Epstein et al. (2003) found that families were often not included in the wraparound meetings due to work conflicts, general apathy, or lack of proper coordination and communication amongst members of the wraparound team. The lack of family contribution effectively negated the entire process. It therefore becomes the wraparound team's ultimate responsibility to remain flexible, non-judgmental and inclusive in order to provide effective evidence-based interventions and avoid complex and problematic implementation of this tertiary level support.

Synthesis Matrix

Synthesizing literature involves comparing, contrasting, and merging disparate pieces of information into one coherent whole that provides a new perspective (Roberts, 2010). A high-quality literature review reflects careful analysis of all sources and a critical synthesis in which previous studies and information are related to each other (Roberts, 2010). The synthesis matrix highlights the literature that has been reviewed and identifies key points in utilizing evidence-based interventions for student with EBD.

The combined information from the synthesis matrix points out that the history of serving students with EBD, their presentation in the classroom, and their academic as well as behavioral needs across the continuum of services. Further, the matrix identifies that educators and service providers knowledge of and preparation to implement evidence-based strategies for this student population and highlights the various EBP found throughout the literature. The matrix supports the idea that strategies to support

school staff can enhance the positive outcomes for students with EBD and can be found in Appendix B for further review.

Summary

Students with EBD are a unique subset of the special education population representing approximately 8% all of students with disabilities. Even with the presence of special education programs and services, national data construct a discouraging picture of school and related outcomes for these students. Most children and youth with EBD have multiple and complex needs. For most of them, life is chaotic in many ways. In addition to their problems in school, they often have family problems and difficulties in their community including substance abuse, problems maintaining employment, and lack of positive peer and adult relationships, and illegal activities. In school, they are more likely than students in any other disability group to be separated from their regular education peers, receiving educational services either in a segregated classroom on a general education campus or in a separate facility (i.e. stand-alone educational program, residential treatment facility, home based instruction, or hospital) (Bradely, Henderson, & Monfore, 2004). When in school, despite having the highest absenteeism rates, they are most likely to be suspended from school (NLTS-2, Wagner, Newman, & Cameto, 2004).

The research has established a clear link between poor academic performance and deleterious outcomes for students with EBD in both the immediate (e.g. academic setbacks and low rates of graduation), and long term (e.g., high rates of incarceration, unemployment or underemployment and substance abuse) (U.S. Department of Education, 2006), therefore it is crucial for educators to properly deal with the severe academic discrepancies of students with EBD. At present, there is a strong push for

schools to integrate evidence-based practices in the classroom. This push is ultimately the essence of NCLB 2001 which requires educators to place greater emphasis on academic instruction and interventions with empirical evidence to support their efficacy.

Teachers of students with EBD understand that the students they serve must confront a disproportionate amalgam of academic and social difficulties in comparison with any other student group. Researchers have long debated over the causal correlation between a student's behavior and degree of academic success. However, a growing number of researchers concede the likelihood of a give-and-take connection between the two variables (Trout, Nordness, Pierce, & Epstein, 2003).

As the prevalence of students with EBD in schools continues to grow (U.S. Department of Education, National Center for Educational Statistics, 2009), it becomes essential that teachers are amply prepared to meet their distinctive and perplexing needs. A discussion of evidence- based intervention strategies for students with EBD, or at risk for academic challenges and behavioral difficulties, was explored throughout this chapter with an emphasis on the usefulness of the presented techniques for students with disabilities in general, and students with EBD more specifically. Instructional strategies were described in relation to the three tiers of the PBIS Framework. At the primary or universal level interventions such as peer-mediated, self-mediated and teacher- mediated interventions were reviewed. This writer outlined the literature on social skills development at the secondary level of interventions. Lastly, interventions at the tertiary level to support students needing individualized care to address specific challenges not responding to whole and small group instructional strategies were examined.

Educators have a legal and ethical obligation to utilize appropriate strategies for students with EBD with empirical evidence to support their efficacy. "In choosing among evidence-based best practices, we must keep in mind that nether the problem nor its solution rests solely with the child," (Hester et al., 2004, p.7). Educators concerned with students with EBD must comprehend the crucial responsibilities they hold in proper delivery of services and supports. Although attending to the needs of students with EBD may be the single greatest challenge facing schools today, victory over adversity is possible. "… when teacher[s] begin to take a proactive role in shaping their perceptions and subsequent behaviors toward a student with EBD, looking closely for the student underneath these behaviors, a positive learning environment and a positive student-teacher relationship ensues, "(Regan, 2009, P.61).

CHAPTER III: METHODOLOGY

This chapter presents the methodology and the procedural components used to conduct the research in this study. The purpose statement and the research questions provided the rationale and foundational basis for the research on the interventions utilized in California with students with emotional and behavioral disorders and educators' perceptions on their preparedness for implementation. The chapter also includes the research design, population, sample, instrumentation, reliability/validity, and data collection/analysis, as well as limitations as it pertains to this study.

Purpose Statement

The purpose of this mixed methods study was to identify and describe the evidence- based interventions currently being utilized with students with emotional and behavioral disorders by general education teachers, special education teachers, and behavior interventionists, working in K-12 education programs on comprehensive public and non-public school campuses in the state of California. The study will also exam the respondents' knowledge of evidence-based practices for this student population and their perceived preparedness to implement these interventions with fidelity.

Research Questions

The research questions for this study are as follows:

1. Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?
2. Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and

behavior interventionists working with students with emotional and behavioral disorders across public, non-public, private, or other alternate education setting?

3. Which evidence-based interventions do special education teachers, and behavior interventionists perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?
4. What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?
5. Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionists working in public, non-public, private and alternative education settings?

Research Design

This current study employed a mixed methods research design, which can be translated into a study that "combines qualitative and quantitative approaches into the research methodology of a single or multi-phased study" (Tashakkori & Teddie, 2010, pp.17-18). Generally speaking, there are two main reasons for conducting mixed methods research; legitimation and representation. Onwuebuzie & Collins (2007) indicates that "Legitimation concerns increasing the validity of the collection and interpretation of the data, whereas representation concerns 'extracting adequate information from the underlying data" (P. 353). For example, the current study compared quantitative data to the qualitative data in the form of narrative responses to check for consistency in responses, thereby determining the validity of the data. To address

representation, the quantitative and qualitative data was intertwined in the analysis, in order to increase the depth and value of the presented data.

The literature describes five specific purposes for choosing a mixed methods approach (Onwuebuzie & Collins, 2007): (a) triangulation- or the merging and confirmation of results from different methods studying the same phenomenon; (b) complementarity- or the ability to elaborate, enhance, or clarify results from one method with the results from the other method; (c) development- using the findings of one method to advise another; (d) initiation-uncovering inconsistencies and ambiguities that lead to restructuring of the research question; and (e) expansion- broadening the reach of a particular line of inquiry by means of different approaches for different inquiry components. The purpose of using mixed methods in the current study can be described in terms of complementary and expansionary, as the qualitative data was used to inform and expand the quantitative data, and vice versa.

Because both quantitative and qualitative data was be gathered simultaneously, this study has a concurrent design model that includes a qualitative component but has an emphasis on quantitative data. Even though both forms of data have been collected simultaneously, these data were not be combined until the analysis phase; therefore, this study is more aptly described as partially mixed methods rather than a fully mixed method design.

Population

A population is generally referred to as a group of elements or cases whether individuals, objects or events, that conform to specific criteria and the results are generalized (McMillan and Schumacher, 2010, p. 129). Creswell (2008) stated that

participants should be those most directly affected by or responsible for the process being studied so that the data generated by the participants directly relate to the study questions. Creswell's description of the population is very clear about the makeup of the larger population and how many are included in the target population.

The population for this study was general education teachers, special education teachers, and behavior interventionists, working with students with EBD across California. According to the California Department of Education (CDE) there are 10,393 public and charter schools across the state and 295,025 teachers to meet the instructional needs of California's children and youth (CDE, 2015). The Bureau of Labor and Statistics calculates 33,790 of those teachers are in K-12 special education classrooms across California as of May 2016. CDE does not currently maintain data on how many teachers work with any particular student population within the state therefore, it is not possible to determine exactly how many of those special education teachers work specifically with students with EBD. However, given the approximately 26,000 students in California with EBD, and an average class size of 20 students as regulated by CDE, it can be estimated that there are at least 1,690 teachers leading instruction for students with EBD in California. Similarly, although behavior analysts are most known for their work in special education and more specifically, for their work with students with autism, many board-certified professionals work in a wide variety of fields and data is not currently maintained on how many individuals work specifically within the field of education or with a particular student group. To estimate the number of behavior interventionists working in California, data was obtained from the Behavior Analysis Certification Board registry of Certified Behavior Analysts and Registered Behavior

Technicians most commonly referred to as RBTs. In California, there are currently 3,985 registered BCBA, BCBA-D, and BCaBAs and 5199 RBTs.

Target Population

In research, ideally, all members of the population would be studied however this is often not feasible given the size of the group under investigation, inaccessibility due to geographical location to the researcher and or time constraints (Roberts, 2010). Another common challenge in using an entire population is that the researcher cannot obtain the names of all population members (Creswell, 2008). In these circumstances, a target population is an easily identified group that shares the characteristics of a population (Creswell, 2008; McMillian & Schumacher, 2006). In research, this process is referred to as purposeful and convenience sampling. Purposeful sampling is a non-probability sample that is selected based on characteristics of a population and the objective of the study. Convenience sampling is another type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in study (Creswell, 2008).

The target population of this study consisted of general education teachers, special education teachers, and behavior interventionists across six San Francisco Bay Area counties (Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, and Solano County) that serve students with EBD. The San Francisco Bay area is comprised of rural, urban, and suburban areas across nine separate counties, 101 cities, and approximately 160 different school districts. This target population was selected because these districts represent a wide cross section of the various special education programs across California and provide a reasonable snapshot

of programs and services in urban, suburban, and rural areas representing most regions of the state. This target population was also selected because of its geographical accessibility to the researcher and professional connection to educators in this region. Likewise, a review of the Behavior Analysis Certification Board registry of Certified Behavior Analysts there are 582 BCBA, BCBA-D, and BCaBAs along with 557 RBTs within a 50-mile radius of the City and County of San Francisco. In total 1690 general and special education teachers and 1,139 behavior interventionist or an overall study population of 2,829 education professionals.

Sample

A sample is a subset of the target population that the researcher identifies and studies (Creswell, 2008; McMillian & Schumacher, 2010; Roberts 2010). Once a researcher identifies a sample, inferences are made to the population (Patton, 2015). It is important for researchers to select a sample that is as representative as possible of the target population in order to draw accurate conclusions (Creswell, 2008; Patton, 2015; Roberts, 2010).

The participants of this study were obtained from a combined convenience and purposeful sampling of general education teachers, special education teachers, and behavior interventionists working in inclusive and self-contained K-12 classrooms across California. The purposeful method identified participants that met selection criteria and the convenience method allowed the researcher to select those qualified participants who were most accessible to the researcher.

The criteria for participant selection was:

a) potential study participants were directly involved in the instructional practices of students with EBD;

b) participants were currently working with this student population or had worked with this student population within the past three years

c) participants worked in classrooms on either a public, non-public, private, or charter school campus.

Sample Selection Process

Purposeful and convenience sampling was used to select individuals who were "likely to be knowledgeable and informative about the phenomenon of interest" (McMillan &Schumacher, 2010 p.489). Purposeful sampling is used when the researcher chooses participants who are representative of the broad topic and who have relevant information regarding the topic of interest (McMillan & Schumacher, 2010).

Initially, 30 different districts across six San Francisco Bay Area counties were targeted for this study based on the researcher's professional connection to administrators who would have direct access to the general education teachers, special education teachers, and behavior interventionists within their districts within this region of the state using the purposeful sampling approach. After approximately four weeks of recruiting participants in this manner, the response rate of study participants remained too low to yield any sort of statistical power. As such, the researcher employed a method of snowball sampling to solicit greater participation.

Snowball sampling refers to the non-probability method of participant selection wherein current participants are asked to share information about the study with other individuals who fit the selection criteria who may not have otherwise been identified

(Patton, 2015). Because previously identified study participants reached out to their friends, colleagues, and associates, it is impossible to know how many people received the survey link, and their geographical location within the state thus affecting the scope of the target sample population.

To access study participants in public school settings, this researcher obtained a listing of all districts within the San Francisco Bay area from the California Department of Education database of state approved districts and programs. Purposeful sampling methods were employed to narrow this listing down to 30 districts for which the researcher had direct access or professional connections. The researcher contacted the superintendent, director of special education and program specialists for the 30 districts via email with a letter of introduction and description of the study (Appendix C) in order to obtain permission and support in collecting data from teachers and behaviorist within their respective districts. Once permission was received, email recipients were asked to share the survey link to all the general educators, special educators, and behaviorists who provide services to students with EBD in their service area. Later, the researcher on this study, reached out to the superintendents, directors of special education, and program specialists who had agreed to participate and asked them to share the study information with anyone else they may know who might be interested and willing to participate. In that manner, snowball sampling was used to expand the study beyond the identified districts in hopes of generating a greater response to the study.

To access student participants in private and Non-public school settings, this researcher utilized her professional connections as a member of the California Association of Private Special Education Schools (CAPSES), to gain direct access to the

directors of non-public schools and agencies across the state. The researcher contacted the current CAPSES president to seek permission to distribute information about the study to the CAPSES members inviting them to participate by sharing the survey link with the teachers and behaviorist within their respective private, charter, non-public schools and agencies. Because CAPSES membership is not limited to those programs within the San Francisco Bay area, it was anticipated that an indeterminate number of participants could be generated from outside of the initial target.

In similar fashion, the researcher contacted the Behavior Analyst Certification Board (BACB) to request permission to distribute the survey to registered persons in the San Francisco Bay Area through their research portal. The researcher completed the BACB research portal application available online which required submission of IRB approval notice, study consent form, brief study description and the weblink to the Survey Monkey form. Study information remained posted on the research portal for a period of two weeks however the BACB was not able to provide statistics on how many people actually viewed or followed the link or their geographical location within the state.

As the purposeful sampling approach to obtaining study participants yielded a low response rate, the researcher employed the snowball method of sampling to encourage greater study participation and reach enough responses to gain statistical power. Study participants were asked if they were interested in receiving additional information about the study at its conclusion and or if they were willing to participate in a focus group or 1:1 interview to gain more depth into the topic. Those participants who volunteered their contact information for the interviews were also contacted and asked to share this survey

with other individuals who they thought would be interested and or willing to participate. In this manner the study sample was expanded to a much larger portion of the state as the referral process lent itself to accessing educators state-wide.

To obtain the qualitative data for this study, the survey respondents were asked if they are willing to participate in a focus group session lasting no more than 30 minutes at location and time that is convenient to them. Those willing to be a part of the focus group provided the researcher with their basic contact information via the survey link. In this manner, the researcher set a target to survey 85 general education teachers, 85 special education teachers, and 114 behavior interventionists for a total of 284 education professionals followed by 7 focus group sessions with four participants each providing a total of 28 focus group participants or 10% of the initial estimated target population.

Instrumentation

The survey instrument used in this study was developed by the researcher using the Survey of Services for Students with Emotional Disabilities in Virginia developed by Dr. Robert Gable and colleagues from the Virginia Technical Assistance Network (Gable, 2010) as well as an adapted version disseminated in Texas for a similar study conducted by Hathcote in 2011 as a guide to help facilitate the development of survey questions. In the Gable study, the survey instrument was extensively pilot tested and critiqued by numerous specialists within the Virginia Department of Education and the Virginia Commissioner of Education.

For the purposes of this study, the survey instrument was converted to an electronic format using the web-based survey platform Survey Monkey. In addition, survey questions have been modified from broad categorical questions (i.e. “In my

program we use/have Academic supports and curricular instructional modifications) to more specific strategy identification questions (i.e. “In my program we use/ have brief instructional intervals”) in effort to gain a more unambiguous understanding of current practices and utilization of EBPs in California Schools.

The electronic survey opened with the informed consent information, and the participant was required to agree to the terms of the informed consent before being able to continue to the actual survey itself which contains four sections (See Appendix D).

The first section of the survey asked respondents to identify which of the strategies listed have evidence to support their use with students with EBD using a five-point Likert scale. The response options for section one was: No evidence, Some evidence, Strong evidence, Not sure if there is evidence, and I don’t know what this is. The second section lists program components or interventions that have been found throughout the literature and request that respondents indicate how often each of the listed interventions are utilized in his/her setting. This section is also constructed on a five-point Likert scale with response options of Never, Sometimes, Always, Not Sure if I/W Have This, and I Don’t Know What This is. The third section of the survey instrument asked respondents to rate how well prepared they perceive themselves to be to implement each of the interventions listed, also based the same five-point Likert scale from section two. Respondents did not have the ability to navigate backwards within the survey to alter previous responses to survey questions as this may have resulted in false reporting of prior knowledge and skewed the data. In the last part of the survey demographic information about the respondent will be collected. The demographic data included the level (i.e. elementary or secondary), type, and setting of the school; whether

the participant was currently working with students with EBD or within the past three years; service delivery model in the school; respondent's current position; and number of years in the field.

To gather a more in-depth understanding of responses generated from the survey, focus group questions were developed based on the survey framework to provide triangulation and confirmation of the results. A series of 6 questions (Appendix G) were developed to gain greater understanding of current instructional practices for students with EBD across California. Sessions were conducted using the online meeting platform Zoom and sessions were recorded and transcribed in order to code responses for common themes.

Reliability and Validity

According to Patton (2015), reliability in qualitative research refers to "the degree to which your instrument consistently measures something from one time to another" (p. 151). Cox and Cox (2008) described reliability as developing a survey that is consistent over time, whereby if the study were repeated, similar results would be obtained. Because the survey instrument and focus group questions used in this study were developed using a combination of sources the reliability and validity cannot be assumed, therefore, the researcher conducted a field test to determine reliability and content validity of the instrument items.

Field Test

To assess the reliability and content validity of the survey instrument items and focus group questions, five education professionals currently working with students with EBD were asked to complete the survey instrument using the Survey Monkey platform.

These professionals were comprised of behavior analysts, general education teachers, and special education teachers working in public and private as well as alternative education settings. The researcher asked each of the field test participants to complete the survey online as if they were actual participants. They were asked to record how long it took them to complete the survey from start to finish and any questions that arose while answering survey questions. The researcher then reviewed any questions that were noted by field test participants to determine what if any revisions were needed to provide greater clarity to instrument items.

Feedback from the survey field test was that the survey was long in appearance but that respondents were able to answer each question with relative ease. The survey took between 10 to 15 minutes to complete which was less time than they initially thought. Two of the respondents asked for more specific information on some of the instructional strategies presented in the survey, noting that they were not aware of so many different options and felt that the study was timely and needed as they were encountering more students with EBD in their classrooms.

Similarly, to increase reliability, the researcher conducted two focus group sessions with a special education teacher, general education teacher, and behavior analyst from the field test participant group to determine if the questions would yield useful information as written. Because consistency of data collection, data analysis, and data interpretation was critical to internal reliability, the researcher utilized a focus group script and set questions (APPENDIX E) in effort to ensure each participant was asked the same questions in a similar fashion which helped to determine whether the process could be replicated, and the same conclusions drawn by another researcher given the same data.

The focus group feedback yielded similar findings to that of the survey field test in that, participants wanted to know more about the specific strategies the other participants were using and how these strategies were applied to specific student profiles. The researcher had to redirect the discussion back to the specific focus group questions on more than one occasion but encouraged further discussion outside of the focus group session. Given the interest in the topic and extended discussions, the focus group session lasted a little over an hour in duration. During the first focus group session, the researcher found that the wording of some of the questions led to participants getting off topic, and some of the questions needed to be more open ended to elicit and more informative response. The researcher then revised the questions to be more specific yet open-ended to present to the second group. In the second focus group field test session, participants were able to remain on topic and respond informatively to the guiding questions. The researcher had to redirect the group to remain on topic only once and the session was 45 minutes in duration. In both the survey and focus group sessions, the participants commented positively on the convenience of the online survey and web-based meeting format.

Reliability

Literature suggests when a study achieves consistency in its data collection, data analysis, and results, it is then deemed reliable (Creswell, 2003; Patton, 2015; Roberts, 2010). This review also enabled the researcher to determine inter-coder reliability as well as to determine the level of agreement amongst participants that the items measured what they were intended to measure for content validity. Inter-coder reliability is a term used when a third-party evaluator reads and compares the data and reaches the same

conclusions and consistencies in coding the characteristics as the researcher (Patton, 2015).

For the purposes of this mixed methods study, a peer researcher was selected to check the coding of focus group responses to ensure accuracy of the themes. The raters need to achieve at least 80% agreement on themes for inter-coder reliability to be achieved. In the focus group field test, coders achieved 93% agreement on themes. Lastly, external reliability is evident when another researcher replicates the study and achieves the same results and conclusions. The issue of generalization was not significant for the qualitative portion of this research study because the qualitative data is difficult to replicate when humans are in interviews as behaviors and interactions of both the participants and the researchers may be different. As a result, external reliability of the data is not a concern for this study.

To assess the reliability of the quantitative data, Chronbach's alpha was calculated to determine the internal consistency or average correlation of items in the survey instrument as a gauge of its reliability. The Chronbach's alpha for the subscale of empirical evidence for each instructional strategy listed was .89, the subscale of interventions used was .84, and the prepared to use subscale was .95 suggesting a high level of reliability for the survey instrument.

Content Validity

To further assess content validity, the research cross referenced each of the survey and focus group questions with the research questions to ensure that questions did in fact measure what they were intended to measure. Table 1 provides an illustration of the correlation between research questions and survey and or focus group questions.

Table 1. Correlation Between Research Questions Survey Instrument items and Focus Group Questions

Research questions	Survey instrument items	Focus group questions
1.Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?	Survey part I: knowledge of evidence-based strategies question 1 Survey part II: Frequency of implementation questions 1 & 2	Focus group question 2
2. Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionist working with students with emotional and behavioral disorders across public, non-public, private, or other alternate education setting?	Survey part II: Frequency of implementation questions 2 & 3 Survey part IV: Demographics questions 6;7; 8; 11; 12	Focus group question 2
3. Which evidence-based interventions do special education teachers, and behavior interventionists perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?	Survey part III: Perception of individual preparedness question 4	Focus group questions 1 & 3
4. What are the factors that general education teachers, special education teachers, and behavior interventionist perceive as contributing to their preparation to implement evidence-based interventions?		Focus group questions 1;2;3
5. Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers,	Survey part III: Perception of individual preparedness question 4 Survey part IV: Demographics questions 6; 7; 8; 11; 12	Focus group question 3

and behavior interventionists working in public, non-public, private and alternative education settings?

Data Collection

Permission to conduct this study was requested and received from the internal review board of Brandman University. An introductory letter providing a brief summary of the study and an invitation to participate along with the link to the online survey to be provided to general teachers, special education teachers, and behavior interventionists working throughout the San Francisco Bay Area. It was estimated that this survey would take no more than 10 to 15 minutes to complete however data on survey responses indicated participants spent an average of 23 minutes answering all of the questions. At the end of the second week of data collection, a reminder email was sent out to potential participants who have not responded. By the end of the third week, very few responses had been received to the survey, the researcher recognized a need to expand recruitment efforts and therefore employed a method of snowball sampling in order to gather enough responses to gain statistical significance. Snowball sampling is also a non-probability sampling method wherein study participants recruit other participants to participate in the study (Patton, 2015). In this manner, the survey was disseminated beyond the San Francisco Bay Area into other regions of the state namely in southern California. As the data was returned electronically, the researcher stored this information securely within the Survey Monkey platform for later categorization and analysis. In all, data collection occurred over a period of approximately six weeks until a minimum number of surveys are returned to meet statistical power requirements.

The letter of informed consent sent to participants was be kept anonymous and confidential and indicated that their email address would not be linked to the survey and the survey would not be coded in any identifiable form. Participants were informed in the letters that their participation was completely voluntary, and that the completion of the survey indicated their voluntary consent to participate in the study. Additionally, the participants were informed that they can exit the survey at any time and there are no correct or incorrect responses.

Survey monkey, (www.surveymonkey.com) a web-based program, was employed to ensure anonymity and confidentiality, the invitation to complete the survey contained the necessary access link to complete the survey. The web-based program recorded the number of participants that complete the survey. At the conclusion of the six-week data collection period, the completed surveys were downloaded, and the data recorded into the SPSS statistical package for analysis. Surveys and data that were printed out or downloaded have been stored in a locked file cabinet or secure password protected electronic file where they will remain for five years from the date of the dissertation defense. The researcher will be the sole possessor of the keys to the file cabinet or password for secure electronic file containing the completed surveys.

Data Analysis

The demographic data collected for the survey was coded (e.g., level of school; elementary=1; middle=2, and high school=3). Responses to the survey questions were quantified based on the five-point Likert scale (e.g. never=1, rarely=2, sometimes=3) and each response coded to the corresponding program component. This procedure was applied to the second, third, and fourth sections of the survey. Data was analyzed using a

statistical analysis software package as described above. Data mining procedures were employed initially, and any missing data was analyzed to determine if a mean, median, or mode can be substituted or if the entire case should be omitted. Any demographic data that appeared to have relevance to the survey results were also be interpreted.

To answer research questions one, and three, descriptive statistical analysis of simple frequencies, means, and standard deviation was calculated and interpreted. Questions two and 5 were analyzed using a factorial ANOVA. In addition, a correlational analysis was utilized to assess the relationship between knowledge base and implementation. To answer research question 4, this researcher initially set out to conduct 7 focus group sessions containing four participants each. However, given the low response rate and conflicts in scheduling, this researcher conducted a series of 7 individual interview sessions with general education teachers, special education teachers, and behavior interventionists, currently working with students with EBD to gain their perspectives on related preparation for working with this student population.

Each interview was completed via a secure web-based meeting platform such as Zoom Meeting at an agreed upon time based on the participant's preference and availability. Each interview session lasted no more than one hour in duration and sessions were recorded for later transcription and coding of themes to aide in the analysis using the qualitative data analysis software package Nvivo. To ensure interrater reliability, the researcher asked a colleague to code one of the interview sessions independent from the researcher. Once coded, the researcher compared results to determine the level of agreement. The researcher made sure to protect participants' anonymity and that of the programs, schools or districts where they work. A total of 4 open ended questions (See

Appendix G) were asked during the interview session with additional clarifying questions as needed as determined by the researcher for further elaboration on any of the key interview questions. At the end of the session the researcher thanked each participant for their involvement and reiterate that their responses will remain anonymous and confidential.

Institutional Review Board (IRB) and Quality Review (QR)

This mixed methods study was presented to the Brandman University IRB and QR board in October 2018. The main purpose of the IRB is the protection of those participating in a research study, particularly around ethical issues such as informed consent, protection from harm, and confidentiality (Roberts, 2010). The IRB form was obtained from https://irb.brandman.edu/ . The IRB process required detailed and comprehensive information about the study, the consent process for participants, how they were recruited, and how their confidential information was protected for anonymity. The IRB committee's signed permission is necessary before data collection can begin (Roberts, 2010). Upon IRB review, it was concluded that this study had minimal risk to study participants because the probability of harm or discomfort was not greater than they would ordinarily encounter. Similarly, this researcher was required to obtain IRB approval from one of the non-public school organizations contacted for participation in this study. Approval letters associated with this study can be found in Appendix F.

Limitations

Several limitations are associated with the current study. The first is related to the influence of the researcher's own views shaped by 15 plus years' experience working with the EBD student population as educator, licensed professional mental health

counselor, behavior analyst, and current administer in a non-public school setting during the data interpretation.

A second limitation is that results from the study are limited to survey respondents that may or may not provide complete representations of services for students with EBD in California as the researcher must assume that respondents are being honest and accurate in their responses. Likewise, it is possible that the particular regions of the state represented in this study may not be reflective of other regions as there may be significant differences between coastal and inland regions of California or the San Francisco Bay Area and the Central Valley for example, or other parts of the state which were not represented; to generalize the results of this study more broadly, it would be necessary to also include participant samples from other regions of the state and of the country.

Another limitation that is generally attributed to survey research is the tendency to oversimplify ones' lived experiences. The subjective design of questionnaires and multiple-choice questions with predetermined categories may not allow respondents to provide answers that truly reflect their thoughts, feelings, or opinions regarding a particular question (Fowler, 2008). An added limitation of this study is that the respondents may not be representative of the entire population; rather, they may only be those who agree to participate, which may bias their responses. A common pitfall to survey research that may apply to this study is that participants may misunderstand survey questions. Surveys are also susceptible to under-rater or over-rater bias, which is the tendency for respondents to give consistently high or low ratings (Isaac & Michael, 1995). Since this survey will be conducted via the Internet, it is important to note that

this type of research typically has notoriously low response rates. Thus, the results of this study will be highly tentative, as only data from those who choose to respond will be included in the results (Patten, 2012). Finally, the respondents' familiarity with the Internet and computer technology may pose challenges to their ability to access and complete the survey accurately.

Summary

Chapter 3 provided the reader with an overview of the intend purpose of this study and the research questions posed by the researcher. Chapter 3 outlined the manner in which the study sample population was identified and the process of obtaining study participants. Once the target population was identified purposeful and snowball sampling was used to collect the qualitative and quantitative data. Consent was also needed in order for participants to avail themselves to participate in the interviews. The limitations were presented and reviewed. The final two chapters of the study consist of major findings, provide future recommendations for research, and conclude the study.

CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

Overview

The present study was conducted to obtain a current snapshot of the utilization of evidence-based interventions with students with EBD across California. Specifically, this study investigated educator knowledge of evidenced-based interventions and their preparation to implement those strategies in their instructional practice. Chapter IV provides a review of the studies intent via the purpose statement as well as the research questions. The research methods and data collection procedures used for this study will be summarized followed by a description of the studies population and sample. Demographic data will also be discussed followed by an analysis of the quantitative and qualitative findings at they relate to each of the five research questions. The chapter concludes with a summary of the quantitative and qualitative analyses in order to bridge the gap in the literature between knowledge and theory of evidence-based instructional strategies for students with EBD and actual implementation of said strategies in the classroom.

Purpose Statement

The purpose of this mixed methods study was to identify and describe the evidence- based interventions currently being utilized with students with emotional and behavioral disorders by general education teachers, special education teachers, and behavior interventionists, working in K-12 education programs on comprehensive public school and non-public school campuses in the state of California. The study will also exam the respondents' knowledge of evidence-based practices for this student population and their perceived preparedness to implement these interventions with fidelity.

Research Questions

The research questions for this study are as follows:

1. Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?
2. Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionists working with students with emotional and behavioral disorders across public, non-public, private, or other alternate education setting?
3. Which evidence-based interventions do special education teachers, and behavior interventionists perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?
4. What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?
5. Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionists working in public, non-public, private and alternative education settings?

Research Methods and Data Collection Procedures

The current study utilized a mixed methods research design to explore current instructional practices in California schools for students with EBD. An anonymous online survey instrument (See Appendix F) was used to gather quantitative data on the

knowledge and use of evidenced-based instructional strategies. The survey instrument used in this study, was developed by the researcher using the Survey of Services for Students with Emotional Disabilities in Virginia developed by Dr. Robert Gable and colleagues (Gable, 2010) as well as an adapted version disseminated in Texas for a similar study conducted by Hathcote in 2011 as a guide to help facilitate the development of survey questions. A field test was conducted of the survey instrument to obtain reliability and content validity prior to dissemination and a correlation table was developed in order to cross reference study questions with the survey tool (Table 1). Similarly, focus group questions (Appendix G) were field tested for reliability.

Survey respondents were selected using purposeful, snowball and convenience sampling methods of general education teachers, special education teachers, and behavior interventionist working in inclusive and self-contained K-12 classrooms throughout California. At the conclusion of the survey, respondents were asking if they wished to participate in a focus group session to obtain a richer understanding of their experiences working in the field and provide qualitative data inform or expand upon the quantitative data gathered. The online survey was disseminated through email to school district superintendents, directors of special education, and program specialist with a request that the link to the survey be shared with general education teachers, special education teachers, and behaviorist within their respective regions. The link was also shared with the presidents of the California Association of Applied Behavior Analysis (CalABA) and the California Association of Private Special Education Schools (CAPSES) who were asked to distribute the survey through their respective research portals. The researcher

also complied with any requests for additional information and any additional organization specific IRB approvals for which there was one (Appendix F)

Analysis of data was conducted via IBM SPSS Statistics® software after survey responses had been captured numerically and securely saved within the Survey Monkey online survey platform. Data were initially mined for missing data and outliers. There was a total of 82 responses gathered during the collection period. Missing data were found in 6 cases for which the respondent did not answer enough questions to provide meaningful data and therefore those responses were eliminated from the analysis. Additional data mining procedures indicated that data transformation was necessary for classification of respondents into the categories of profession and educational setting in order to draw further conclusions from the data.

The demographic data collected for the survey was quantified (e.g. level of school: preschool =1; elementary= 2), and these quantified responses were coded to the appropriate question number. Responses to the survey questions were also quantified based on the five-point Likert scale (e.g., never=1; sometimes=2) and each response was coded to the corresponding intervention strategy (1-45). This same procedure was applied to the third section of the survey. Any missing data was analyzed to determine if mean, median, or mode could be substituted or if the entire case was list-wise deleted. Any demographic data that appeared to have a bearing on the survey results were also interpreted.

To address research questions one and three descriptive statistical analysis of simple frequencies, means and standard deviation were calculated and interpreted. Part I of the survey asked respondents to rank each intervention on a five-point Likert scale

according to the availability of empirical evidence to support its use. This question was asked to prime respondents to think critically about their current instructional practice and to gauge their baseline knowledge For question one, two new constructs were created (a) used; (b) not used. Each of the 45 listed interventions were assigned to a category. To answer the research questions two and five correlational analysis was utilized to assess the relationship between knowledge base and implementation. Research question four was addressed through the responses of participants who agreed to be interviewed. Interview sessions were conducted via a secure web-based meeting platform. Each session was recorded for later transcription and coding of themes to aide in the analysis of qualitative data.

Population

The population for this study was general education teachers, special education teachers, and behavior interventionists, currently working with students with EBD in California schools. Ideally, all members of the population would be studied however that was not feasible given the size of the group to be studied, inaccessibility due to geographical location of the researchers and time constraints. Therefore, purposeful, snowball and convenience sampling was used to target a population of general education teachers, special education teachers, and behavior interventionists that serve students with EBD. Initially, purposeful sampling was planned to be obtained from six San Francisco Bay Area counties (Alameda county, Contra Costa County, Marin County, San Francisco County, San Mateo County and Solano County). This target population was selected because these districts represent a wide cross section of the various public and private school programs across California and provided a reasonable snapshot of programs and

services in urban, suburban, and rural areas representing most geographic regions of the state. The target population and area were also selected because of its geographical accessibility to the researcher and professional connections to educators in this region. However, this approach to obtaining study participants yielded a low response rate, therefore researcher employed the snowball method of sampling to encourage greater study participation and reach enough responses to gain statistical power. Snowball sampling is said to occur when study participants are asked to recruit other like-minded individuals to also participate in the study (Patton, 2015). In this manner the study sample was expanded to a much larger portion of the state as the referral process lent itself to accessing educators state-wide.

Sample

A purposeful snowball sampling of general education teachers, special education teachers, and behavior interventionists working in inclusive and self-contained K-12 classrooms across 13 counties in California that serve students with EBD were obtained for this study. These settings included classrooms on public, nonpublic, private, and charter school campuses. Purposeful sampling was used to select individuals who are "likely to be knowledgeable and informative about the phenomenon of interest" (McMillan &Schumacher, 2010 p.489).

Demographic Data

Calculating a response rate is difficult since the survey was designed for dissemination to a wide variety of individuals (e.g., special educators, general educators, behavior interventionist) who provide instructional support to students with EBD. For this study survey responses totaled 86 of which 76 responses were analyzed.

Demographic information for school setting revealed that (a) 59.7% of study participants identified themselves as working in suburban settings, (b) 38.81% of participants identified themselves as working in urban areas, and (c) 1.49% study participants identified themselves as working in rural areas as illustrated in Table 2. Study participants also reported that 73.53% currently worked with students with EBD while 26.47% did not currently work with this student population but have done so within the past three years. Most respondents to the survey indicated that they currently work in middle school programs. Table 3 shows the grade spans represented within this study.

Table 2.

Geographical Educational Settings Based on 67 Responses

Geographical Setting	Frequency	% Responses
Urban	26	38.81
Suburban	40	59.7
Rural	1	1.49

Table 3

Grade Spans of School Program Based on 60 Responses

Level of School	Frequency	% Responses
Preschool	6	10
Elementary	36	60
Middle	45	75
High School	39	65

The large majority of study participants (58.21%) identified themselves as working in non-public school settings. Table 4 displays how the respondents identified their school setting. Other level of school program responses included (a) K-12 program, (b) transition, and (c) post- secondary.

Table 4.

Type of School Based on 67 Responses

Level of School	Frequency	% Responses
Public School	20	29.85
Private School	0	0
Alternative/Charter	2	2.99
Non-Public School	39	58.21
Residential/Juvenile Corrections	1	1.49
Other	10	14.93

While responses were initially elicited from the 6 San Francisco Bay Area Counties (Alameda county, Contra Costa County, Marin County, San Francisco County, San Mateo County and Solano County), snowball sampling procedures utilized in this study resulting in responses from other regions of the state including Santa Clara, Orange, Los Angeles, San Bernardino, Riverside, San Joaquin, and San Diego. Figure 1 displays the location and geographic size of each county in California.

Figure 1. Counties across California represented in the study

Table 5 displays the range of responses based on each of the 13 counties represented in the study. 8 study participants or 12.5% or responded indicated that they worked in programs with more than one location which covered multiple counties. For example, a behavior interventionist may be employed by an organization with locations in both Alameda and neighboring Contra Costa counties or affiliated with a program

which provide services in multiple counties throughout the state. These responses are noted as “other” in the table below.

Table 5.

Range of Responses by County Based on 64 Responses

Map #	County	Frequency	% Responses
1	Alameda	4	6.25
2	Contra Costa	16	25
3	Marin	2	3.12
4	San Francisco	2	3.12
5	San Mateo	1	1.56
6	Santa Clara	6	9.37
7	San Joaquin	1	1.56
8	Solano	3	4.68
9	Los Angeles	8	12.5
10	San Bernardino	5	7.81
11	Riverside	4	6.25
12	San Diego	1	1.56
13	Orange	5	7.81
Other	Multi-County or State-wide programs	8	12.5

The type of service delivery model ranged from a single program type (e.g. full inclusion, partial inclusion, self-contained) to a combination of all program types listed: (a) full inclusion; (b) partial inclusion; (c) self-contained; (d) consultation; (e) resource; (f) day treatment; (g) residential; (h) locked or correctional; (i) other. Other write in responses included (a) NPS; (b)inclusion support on mainstream campus; and (c) diagnostic center.

Respondents were also asked to select a description of their position. The majority of respondents (40%) identified themselves as special education teachers whereas 32.85% indicated that they were behavior interventionist and the remaining 27.14% identified themselves as general education teachers. The survey also asked

respondents to report the number of years of experience supporting students with EBD 44.12% of respondents reported 10 or more years of experience, 19.12% reported 6 to 10 years of experience, 27.94% reported having one to five years of experience, and 8.82% were new professionals with less than one year of experience working with students with EBD.

Likewise, respondents were asked to report on any specialized credentials (e.g., Board Certified Behavior Analyst, Registered Behavior Technician, Marriage and Family Therapist, Emotional Disturbance California Teacher Commission added authorization) they held. 26.67% held Board Certification as a Behavior Analyst, 11.11% held a mental health license such as Licensed Professional Counselor or Marriage and Family Therapist, 11.11% held Emotional Disturbance California Teacher Commission added authorization and 6.67% reported being Registered Behavior Technicians. The remaining 53.33% of responses were unequally dispersed among some combination of each category meaning respondents held multiple advanced credentials such as a mild moderate teaching credential and Behavior Analyst board certification, or combination of teaching credential and speech language pathology license etc. The small amount of missing data did not constitute listwise deletion, however, the quantity of missing data did increase as the survey progressed. Test fatigue may have contributed to the differences in responses for analysis of each research question.

Presentation and Analysis of Data

The presentation of the data analysis consists of two components: analysis of the survey questions followed by an analysis of the interview responses. Descriptive statistics were utilized to interpret the quantitative survey data (frequencies, means, and

standard deviations). Additionally, analysis of qualitative data which emerged from the interview process are reported below as they relate to the research questions.

The survey consisted of three parts that utilized a 5-point Likert scale. The first part of the survey asked respondents to review a list of 45 interventions found within the literature and indicate the degree of evidence available for each strategy listed as either No evidence, Some evidence, Strong evidence, Not sure if there is evidence, and I don't know what this is. The second section asked respondents to indicate how often each of the itemized program components or interventions are utilized in his/her setting. This section is also constructed on a five-point Likert scale with response options of Never, Sometimes, Always, Not Sure if I/We Have This, and I Don't Know What This is. The third section asks respondents to rate how well prepared they perceive themselves to be to implement each of the interventions listed, also based the same five-point Likert scale from section two. Table 6 displays percentages for each intervention as they ranked in part I of the survey with the corresponding Means, Modes and Standard Deviations.

Table 6.

Ranking of Interventions by Percentage of Respondents' Perception of Evidence

Is there evidence to support the use of:	Strong Evidence	Some Evidence	No Evidence	Not sure if there is any evidence	I don't know what this is	Mode	Mean	Standard Deviation
25. Clear rules or expectations	85.3	10.7	1.3	2.7	0.0	3	2.89	0.42
8. Functional Behavioral Assessment (FBA)	78.7	10.7	0.0	5.3	5.3	3	3.05	0.61
1. Positive Behavior Intervention Strategies (PBIS)	76.0	20.0	1.3	1.3	1.3	3	2.81	0.53
7. Social Skills Training	74.7	18.7	1.3	5.3	0.0	3	2.84	0.52
16. Scaffolding of instruction	73.3	13.3	2.7	8.0	2.7	3	2.95	0.65
33. Direct instruction	73.3	16.0	4.0	6.7	0.0	3	2.83	0.60
2. Behavior Specific Praise	72.0	21.3	0.0	5.3	1.3	3	2.87	0.55

31. Differentiated reinforcement	69.3	13.3	1.3	8.0	8.0	3	3.08	0.76
19. Choice making opportunities for students	68.0	29.3	1.3	1.3	0.0	3	2.69	0.52
21. Teaching expected behaviors	68.0	18.7	2.7	9.3	1.3	3	2.88	0.65
11. Goal Setting	66.7	21.3	2.7	9.3	0.0	3	2.83	0.62
17. Small group instruction	62.7	21.3	2.7	13.3	0.0	3	2.87	0.66
3. Frequent opportunities to respond during instruction	56.6	28.9	0.0	14.5	0.0	3	2.86	0.64
30. Point and or level systems	56.0	30.7	2.7	8.0	2.7	3	2.77	0.74
14. Matching instruction to student interest	54.7	30.7	1.3	13.3	0.0	3	2.80	0.67
45. Cultural Responsiveness	52.0	24.0	1.3	22.7	0.0	3	2.96	0.72
5. Self –monitoring	49.3	38.7	2.7	9.3	0.0	3	2.56	0.68
22. Behavior contracts	46.7	37.3	1.3	14.7	0.0	3	2.75	0.71
9. Proximity	45.3	32.0	2.7	17.3	2.7	3	2.85	0.83
42. Trauma-informed approach	45.3	25.3	4.0	10.7	14.7	3	3.07	1.05
13. Front Loading	44.0	28.0	4.0	20.0	4.0	3	2.92	0.89
15. Brief Instructional Intervals	42.7	29.3	2.7	22.7	2.7	3	2.93	0.85
24. Peer-assisted learning	38.7	36.0	2.7	22.7	0.0	3	2.81	0.81
41. Community of care and support	38.7	30.7	2.7	21.3	6.7	3	2.91	0.90
43. Restorative Justice	38.7	30.7	2.7	21.3	6.7	3	2.99	.95
20. Behavior momentum	36.0	21.3	0.0	22.7	20.0	3	3.41	1.03
26. Previewing	34.7	33.3	2.7	21.3	8.0	3	2.99	0.99
28. Mindfulness practices	34.7	48.0	4.0	21.3	8.0	2	2.61	0.86
4. Peer Tutoring	33.3	46.7	0.0	20.0	0.0	2	2.73	0.77
27. Mnemonic devices	29.3	26.7	4.0	33.3	6.7	4	3.12	1.01
10. Response Cards	26.7	41.3	4.0	21.3	6.7	2	2.85	1.02
12. Rapport Building	25.3	2.7	2.7	62.7	9.3	3	2.79	0.64
29. Written feedback	22.7	38.7	8.0	30.7	0.0	2	2.76	0.98
34. Brisk pacing of instruction	22.7	20.0	18.7	34.7	4.0	4	2.85	1.20
37. Peer counseling	22.7	40.0	5.3	30.7	1.3	2	2.83	0.97
6. Story mapping	20.0	37.3	6.7	24.0	12.0	2	2.97	1.17
38. Modeled empathy	20.0	33.3	6.7	36.0	4.0	4	2.97	1.06
32. Opportunities to practice gratitude	18.7	37.3	9.3	32.0	2.7	2	2.81	1.07
44. Challenge Thinking	18.7	24.0	1.3	21.3	34.7	5	3.64	1.22
23. Use of free time	17.3	34.7	10.7	29.3	33.3	2	2.89	1.17
35. Restraint procedures	17.3	26.7	29.3	22.7	4.0	1	2.45	1.24
36. Seclusion/time out rooms	17.3	24.0	32.0	26.7	0.0	1	2.39	1.19
40. Life space interviewing	10.7	12.0	6.7	20.0	50.7	5	3.96	1.30
39. Cubicles/ temporary dividing walls	9.3	36.0	14.7	40.0	0.0	4	2.75	1.13
18. Verbal reprimands or lecture-based consequences	5.3	32.0	36.0	25.3	1.3	1	2.24	1.22

Survey respondents rated "positive behavior intervention strategies" (Intervention 1, 76%, mean = 2.81), "social skills training" (Intervention 7, 74.4%, mean = 2.84), "functional behavioral assessment" (Intervention 8, 78.7%, mean = 3.05), "scaffolding instruction" (Intervention 16, 73.3%, mean = 2.95), and "clear rules/expectations" (Intervention 25, 85.3%, mean = 2.89) as having the most evidence to support their use in instructional practice. Conversely, "verbal reprimands/ lecture based consequences" (Intervention 18, 36% mean = 2.24), " brisk pace of instruction" (Intervention 34, 18.7%, mean = 2.85), "restraint procedures" (Intervention 35, 29.3%, mean = 2.45), "seclusion/time out"(Intervention 36, 32%, mean = 2.39), and "cubicles/dividing walls" (Intervention, 39, 14.7%, mean = 2.75) as having the least amount of supporting evidence.

Research Question 1

Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?

To answer question one, simple frequencies were tallied to first determine which strategy was utilized most frequently. Table 7 shows how each strategy scored. Table 8 shows the evidenced-based strategy most frequently used by profession (e.g. general education teacher, special education teacher, or behavior interventionist).

Table 7.

Frequency of Respondents Who Used Evidence-Based Practices

Evidence-based intervention used	N=72	%
Rapport Building	68	94.40%
Clear Rules/Expectations	68	94.40%
Behavior Specific Praise	67	93.10%
Frequent Opportunities to Respond During Instruction	67	93.10%

Teaching Expected Behaviors	67	93.10%
Social Skills Training	66	91.70%
Choice Making Opportunities for Students	66	91.70%
Matching Instruction to Student Interest	65	90.30%
PBIS	65	90.30%
Goal Setting	65	90.30%
Proximity	64	88.90%
Brief Instructional Intervals	64	88.90%
Scaffolding of Instruction	64	88.90%
Small Group Instruction	64	88.90%
Direct Instruction	63	87.50%
Self-Monitoring	62	86.10%
Cultural Responsiveness	62	86.10%
Use of Free Time	60	83.30%
Differentiated Reinforcement	59	81.90%
Modeled Empathy	57	79.20%
Front Loading	56	77.80%
Point and or Level Systems	55	76.40%
Opportunities to Practice Gratitude	55	76.40%
Functional Behavior Assessment (FBA)	53	73.60%
Behavior Contracts	53	73.60%
Written Feedback	53	73.60%
Mindfulness Practices	52	72.20%
Previewing	50	69.40%
Brisk Pacing of Instruction	50	69.40%
Trauma-Informed Approach	50	69.40%
Peer-Assisted Learning	49	68.10%
Community of Care and Support	49	68.10%
Restraint Procedures	43	59.70%
Peer Tutoring	42	58.30%
Cubicles/Temporary Dividing Walls	42	58.30%
Restorative Justice	42	58.30%
Behavior Momentum	41	56.90%
Response Cards	40	55.60%
Verbal Reprimands or Lecture Based Consequences	36	50.00%
Challenge Thinking	35	48.60%
Story Mapping	28	38.90%
Mnemonic Devices	27	37.50%
Peer Counseling	27	37.50%

Table 8.

Evidence-Based Interventions Used by Profession.

Evidence-based intervention used (N= % of response by profession)	Special Education (n=28)	General Education (n=19)	Behavior Interventionists (n=24)
Rapport Building	96.42	94.73	91.3
Clear Rules/Expectations	96.42	94.73	91.3
Behavior Specific Praise	96.42	89.47	91.3
Frequent Opportunities to Respond During Instruction	96.42	89.47	91.3
Teaching Expected Behaviors	96.42	89.47	91.3
Social Skills Training	96.42	78.94	91.3
Choice Making Opportunities for Students	92.85	89.47	91.3
PBIS	92.85	89.47	96.95
Goal Setting	92.85	78.94	91.3
Matching Instruction to Student Interest	96.42	84.21	96.95
Proximity	92.85	89.47	82.6
Brief Instructional Intervals	92.85	84.21	96.95
Scaffolding of Instruction	92.85	89.47	82.6
Small Group Instruction	92.85	84.21	96.95
Direct Instruction	96.42	89.47	73.91
Self-Monitoring	89.28	84.21	82.6
Cultural Responsiveness	85.71	89.47	82.6
Use of Free Time	92.85	89.47	65.21
Differentiated Reinforcement	89.28	68.42	82.6
Modeled Empathy	85.71	78.94	69.56
Front Loading	78.57	78.94	73.91
Point and or Level Systems	75	78.94	73.91
Opportunities to Practice Gratitude	89.28	78.94	56.52
Functional Behavior Assessment (FBA)	85.71	47.36	82.6
Behavior Contracts	71.42	73.68	78.26
Written Feedback	78.57	73.68	69.56
Mindfulness Practices	85.71	68.42	56.52
Peer-Assisted Learning	78.57	73.68	52.17
Previewing	78.57	73.68	52.17
Brisk Pacing of Instruction	71.42	68.42	65.21
Trauma-Informed Approach	75	73.68	56.52
Community of Care and Support	75	73.68	52.17
Restraint Procedures	67.85	42.1	65.21
Peer Tutoring	67.85	78.94	30.43

Behavior Momentum	60.71	36.31	73.91
Cubicles/Temporary Dividing Walls	64.28	52.63	52.17
Restorative Justice	53.57	68.42	52.17
Response Cards	53.57	52.63	56.52
Verbal Reprimands or Lecture Based Consequences	53.57	54.89	34.78
Challenge Thinking	64.28	42.1	34.78
Story Mapping	42.85	36.31	39.13
Peer Counseling	53.57	31.57	21.73
Mnemonic Devices	28.57	52.63	30.43
Seclusion/Time Out Rooms	46.42	36.31	8.69
Life Space Interviewing	28.57	21.05	8.69

Respondents rated the top five most used interventions as rapport building, clear rules and expectations, behavior specific praise, frequent opportunities to respond and teaching expected behaviors. However, there were some differences in the most frequently used interventions amongst professions. More specifically, special education teachers reporting using rapport building, clear rules and expectations, behavior specific praise, frequent opportunities to respond and teaching expected behaviors, direct instruction and social skills training as the most used strategies with each intervention ranked at 96.42%. Among general education teachers, only rapport building, and clear rules/expectations were the most used strategies at 94.73% of the votes. However, 9 other interventions came in at a close second with 89.47% including behavior specific praise, frequent opportunities to respond, teaching expected behaviors, and direct instruction, similar to the special education teachers, yet the general education teachers also included choice makings, cultural responsiveness, PBIS, proximity, scaffolding of instruction and use of free time in this grouping. Lastly, behavioral interventionists had the biggest difference amongst the different professions in that they rated PBIS, matching instruction to student interests, brief instructional intervals, and small group instruction the highest at

96.95%. Rapport building, clear rules and expectations, behavior specific praise, frequent opportunities to respond, teaching expected behaviors, social skills training, choice making, and goal setting were ranked second at 91.30%. Overall, rapport building, and clear rules and expectations were mostly used among the three professional groups followed by behavior specific praise and providing students with frequent opportunities to respond during instruction.

Research Question 2

Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionists working with students with emotional and behavioral disorders across public, non-public, private, or other alternate education setting?

To answer research question 2 the data was first analyzed using a factorial analysis of variance (ANOVA) between education professionals to determine whether significant difference exists in strategies used by each profession. As illustrated in Table 9, there were no statistically significant differences found between overall strategies used between special education, general education, and behavioral interventionists ($F(2,64) = 2.789$, $p=.069$).

Table 9.

Summary of Factorial Analysis of EBP Implementation by Profession.

Intervention Used by Profession

	Sum of Squares	df	Mean Square	F	p
Between Groups	314.972	2	157.486	2.789	.069
Within Groups	3613.535	64	56.461		
Total	3928.507	66			

Descriptive Statistics -Intervention Used by Profession

position	**Mean**	**SD**	**N**
special ed	36.222	5.402	27
general ed	33.611	8.190	18
behavior intervention	31.136	9.036	22

Further analysis was conducted to explore whether differences could be found in the implementation of the 5 most commonly used interventions as described in question 1 (e.g. rapport building, clear rules and expectations, behavior specific praise, frequent opportunities to respond and teaching expected behaviors) based on educational setting. These analyses are presented in Tables 10- 14. No significant differences were found for rapport building ($F(1,65) = 1.698$, $p=.197$) and setting clear expectations ($F(1,65) = 1.689$, $p=.197$) based on educational setting, however, some differences, although not statistically significant, were found in behavior specific praise ($F(1,65) = 3.543$, $p = .064$), frequent opportunities to respond ($F(1,65) = 3.543$, $p = .064$), and teaching expected behaviors ($F(1,65) = 3.543$, $p = .064$).

Table 10.

Factorial Analysis of Variance for Commonly Used EBP Rapport Building Based on Educational Setting

ANOVA – Rapport Building by Educational Setting

Cases	Sum of Squares	df	Mean Square	F	p	η^2
school	0.025	1.000	0.025	1.698	0.197	0.025
Residual	0.960	65.000	0.015			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs – Rapport Building by Educational Setting

school	Mean	SD	N
public	0.960	0.200	25
non-public	1.000	0.000	42

Table 11.

Factorial Analysis of Variance for Commonly Used EBP Clear Expectations Based on Educational Setting

ANOVA – Clear Expectations by Educational Setting

Cases	Sum of Squares	df	Mean Square	F	p	η^2
school	0.025	1.000	0.025	1.698	0.197	0.025
Residual	0.960	65.000	0.015			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs - Clear Expectations by Educational Setting

school	Mean	SD	N
public	0.960	0.200	25
non-public	1.000	0.000	42

Table 12.

Factorial Analysis of Variance for Commonly Used EBP Behavior Specific Praise Based on Educational Setting

ANOVA – Behavior Specific Praise by Educational Setting

Cases	Sum of Squares	df	Mean Square	F	p	η^2
school	0.100	1.000	0.100	3.543	0.064	0.052
Residual	1.840	65.000	0.028			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -Behavior Specific Praise by Educational Setting

school	Mean	SD	N
public	0.920	0.277	25
non-public	1.000	0.000	42

Table 13.

Factorial Analysis of Variance for Commonly Used EBP Frequent Opportunities to Respond Based on Educational Setting

ANOVA – Frequent Opportunities to Respond by Educational Setting

Cases	Sum of Squares	df	Mean Square	F	p	η^2
school	0.100	1.000	0.100	3.543	0.064	0.052
Residual	1.840	65.000	0.028			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -Frequent Opportunities to Respond by Educational Setting

school	Mean	SD	N
public	0.920	0.277	25
non-public	1.000	0.000	42

Table 14.

Factorial Analysis of Variance for Commonly Used EBP Teaching Expected Behaviors Based on Educational Setting

ANOVA – Teaching Expected Behaviors by Educational Setting

Cases	Sum of Squares	df	Mean Square	F	p	η^2
school	0.100	1.000	0.100	3.543	0.064	0.052
Residual	1.840	65.000	0.028			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs --Teaching Expected Behaviors by Educational Setting

school	Mean	SD	N
public	0.920	0.277	25
non-public	1.000	0.000	42

A mixed 3 (education profession) by 2 (educational setting) ANOVA was used to explore the relationship between strategies most commonly implemented by each profession (e.g., general education teacher, special education teacher, behavior interventionist) based on their educational setting (e.g. public vs nonpublic school). No statistically significant differences were noted between strategies most commonly implemented by profession and or school setting. Table 15-19 illustrates the factorial analysis for this data set and descriptive statistics of mean and standard deviation are also presented.

Table 15.

Mixed Analysis of Variance for Commonly Used EBP Rapport Building by Profession and Educational Setting

Mixed ANOVA – Rapport Building

Cases	Sum of Squares	df	Mean Square	F	p	η^2
position	0.065	2.000	0.032	2.304	0.108	0.064
school	0.032	1.000	0.032	2.283	0.136	0.031
position ∗ school	0.065	2.000	0.032	2.304	0.108	0.064
Residual	0.857	61.000	0.014			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -Rapport Building

position	school	Mean	SD	N
special ed	public	1.000	0.000	7
	non-public	1.000	0.000	20
general ed	public	1.000	0.000	11
	non-public	1.000	0.000	7
behavior intervention	public	0.857	0.378	7
	non-public	1.000	0.000	15

Table 16.

Mixed Analysis of Variance for Commonly Used EBP Clear Expectations by Profession and Educational Setting

Mixed ANOVA – Clear Expectations

Cases	Sum of Squares	df	Mean Square	F	p	η^2
position	0.065	2.000	0.032	2.304	0.108	0.064
school	0.032	1.000	0.032	2.283	0.136	0.031
position ∗ school	0.065	2.000	0.032	2.304	0.108	0.064
Residual	0.857	61.000	0.014			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -– Clear Expectations

position	school	Mean	SD	N
special ed	public	1.000	0.000	7
	non-public	1.000	0.000	20
general ed	public	1.000	0.000	11
	non-public	1.000	0.000	7
behavior intervention	public	0.857	0.378	7
	non-public	1.000	0.000	15

Table 17.

Mixed Analysis of Variance for Commonly Used EBP Behavior Specific Praise by Profession and Educational Setting

Mixed ANOVA – Behavior Specific Praise

Cases	Sum of Squares	df	Mean Square	F	p	η^2
position	1.006	2.000	0.503	1.737	0.185	0.053
school	0.008	1.000	0.008	0.027	0.870	0.000
position ∗ school	0.303	2.000	0.151	0.522	0.596	0.016
Residual	17.667	61.000	0.290			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -– Behavior Specific Praise

position	school	Mean	SD	N
special ed	public	2.857	0.378	7
	non-public	2.850	0.366	20
general ed	public	2.636	0.924	11
	non-public	2.857	0.378	7
behavior intervention	public	3.143	0.900	7
	non-public	3.000	0.000	15

Table 18.

Mixed Analysis of Variance for Commonly Used EBP Frequent Opportunities to Respond by Profession and Educational Setting

Mixed ANOVA – Frequent Opportunities to Respond

Cases	Sum of Squares	df	Mean Square	F	p	η^2
position	0.052	2.000	0.026	0.902	0.411	0.027
school	0.086	1.000	0.086	2.967	0.090	0.044
position ∗ school	0.052	2.000	0.026	0.902	0.411	0.027
Residual	1.766	61.000	0.029			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -Frequent Opportunities to Respond

position	school	Mean	SD	N
special ed	public	1.000	0.000	7
	non-public	1.000	0.000	20
general ed	public	0.909	0.302	11
	non-public	1.000	0.000	7
behavior intervention	public	0.857	0.378	7
	non-public	1.000	0.000	15

Table 19.

Mixed Analysis of Variance for Commonly Used EBP Frequent Opportunities to Respond by Profession and Educational Setting

Mixed ANOVA – Teaching Expected Behaviors

Cases	Sum of Squares	df	Mean Square	F	p	η^2
position	0.052	2.000	0.026	0.902	0.411	0.027
school	0.086	1.000	0.086	2.967	0.090	0.044
position ∗ school	0.052	2.000	0.026	0.902	0.411	0.027
Residual	1.766	61.000	0.029			

Note. Type III Sum of Squares

Descriptive statistics - Means and SDs -Teaching Expected Behaviors

position	school	Mean	SD	N
special ed	public	1.000	0.000	7
	non-public	1.000	0.000	20
general ed	public	0.909	0.302	11
	non-public	1.000	0.000	7
behavior intervention	public	0.857	0.378	7
	non-public	1.000	0.000	15

In comparing EBPs across educational setting (i.e. public school or nonpublic school), a Chi-square test of independence was preformed to test the relationship between categorical variables given the lack of statistical significance found based on profession and educational setting. A relationship between EBP and educational setting was found to be significant for 5 interventions. More specifically, public schools were more likely to use peer tutoring over nonpublic schools ($\chi 2 = 12.67$, p=.002, DF=2). Conversely, non-public schools were more likely to use behavior momentum ($\chi 2=8.15$, p=.02, DF=2); free time ($\chi 2=9.55$, p=.01, DF=2); mindfulness ($\chi 2=5.76$, p=.05, DF=2); and direct instruction ($\chi 2=8.09$, p=.02, DF=2) than public schools. Tables 20-24 illustrate the relationships in EBPs used between public and non-public school settings.

Table 20.

Mixed Analysis of Variance for Commonly Used EBP Frequent Opportunities to Respond by Profession and Educational Setting

Peer Tutoring				
	Total Sample N (% of responses)	EBP Used N (% of responses)	EBP Not Used N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	10 (40)	1 (4)	$\chi 2 = 12.67$, p=.002, DF=2
Special Education Teachers	7 (28)	1 (4)	1 (4)	
Behavior Interventionist	7 (28)	2 (8)	5 (20)	
Non-Public School n= 42				
General Education Teachers	7 (16.66)	5 (11.9)	2 (4.76)	
Special Education Teachers	20 (47.61)	13 (30.95)	7 (16.66)	
Behavior Interventionist	15 (35.71)	5 (11.9)	10 (23.8)	

Table 21.

Significant Relationship Between Public and Non-Public School's Use of EBP Behavior Momentum.

Behavior Momentum				
	Total Sample N (% of responses)	EBP Used N (% of responses)	EBP Not Used N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	8 (32)	9 (36)	
Special Education Teachers	7 (28)	5 (20)	2 (8)	
Behavior Interventionist	7 (28)	5 (20)	5 (20)	
Non-Public School n= 42				

General Education Teachers	7 (16.66)	4 (9.52)	3 (7.14)	$\chi 2$=8.15,
Special Education Teachers	20 (47.61)	12 (28.57)	8 (19.04)	p=.02, DF=2
Behavior Interventionist	15 (35.71)	12 (28.57)	3 (7.14)	

Table 22.

Significant Relationship Between Public and Non-Public School's Use of EBP Use of Free Time

Use of Free Time				
	Total Sample N (% of responses)	EBP Used N (% of responses)	EBP Not Used N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	11 (44)	0 (0)	
Special Education Teachers	7 (28)	7 (28)	0 (0)	
Behavior Interventionist	7 (28)	3 (12)	4 (16)	
Non-Public School n= 42				$\chi 2$=9.55,
General Education Teachers	7 (16.66)	6 (14.28)	1 (2.38)	p=.01, DF=2
Special Education Teachers	20 (47.61)	19 (45.23)	1 (2.38)	
Behavior Interventionist	15 (35.71)	12 (28.57)	3 (7.14)	

Table 23.

Significant Relationship Between Public and Non-Public School's Use of EBP Mindfulness

Mindfulness				
	Total Sample N (% of responses)	EBP Used N (% of responses)	EBP Not Used N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	6 (24)	5 (20)	
Special Education Teachers	7 (28)	7 (28)	0 (0)	
Behavior Interventionist	7 (28)	5 (20)	2 (8)	
Non-Public School n= 42				$\chi 2$=5.76, p=.05, DF=2
General Education Teachers	7 (16.66)	7 (16.66)	0 (0)	
Special Education Teachers	20 (47.61)	17 (40.47)	3 (7.14)	
Behavior Interventionist	15 (35.71)	8 (19.04)	7 (16.66)	

Table 24.

Significant Relationship Between Public and Non-Public School's Use of EBP Direct Instruction

Direct Instruction				
	Total Sample N (% of responses)	EBP Used N (% of responses)	EBP Not Used N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	10 (40)	1 (4)	
Special Education Teachers	7 (28)	7 (28)	0 (0)	
Behavior Interventionist	7 (28)	5 (20)	2 (8)	

Non-Public School n= 42				$\chi 2=8.09$,
General Education Teachers	7 (16.66)	7 (16.66)	0 (0)	p=.02, DF=2
Special Education Teachers	20 (47.61)	20 (47.67)	0 (0)	
Behavior Interventionist	15 (35.71)	12 (48)	3 (12)	

Research Question 3

Which evidence-based interventions do special education teachers, general education teachers and behavior interventionists perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?

To answer research question 3, simple frequencies were tallied to first determine which strategy respondents felt most prepared to implement. Table 25 shows the level of preparedness for each evidenced-based strategy by profession (e.g. general education teacher, special education teacher, or behavior interventionist). Variables were coded as 1= prepared; 0=not prepared. Numbers below indicate the percentage of respondents who felt prepared to implement each strategy.

Table 25.

Strategies Education Professionals Felt Prepared to Implement.

Evidence-based strategies (N= % of response by profession)	Special Education (n=28)	General Education (n=19)	Behavior Interventionists (n=24)
Small Group Instruction	92.85	94.73	95.65
Clear Rules/Expectations	92.85	94.73	95.65
Frequent Opportunities to Respond During Instruction	96.42	89.47	91.3
Goal Setting	92.85	89.47	95.65
Rapport Building	89.28	94.73	95.65
Teaching Expected Behaviors	92.85	89.47	95.65
Direct Instruction	92.85	89.47	95.65

Choice Making Opportunities for Students	92.85	84.21	95.65
Social Skills Training	92.85	84.21	91.3
Point and or Level Systems	89.28	84.21	95.65
Self-Monitoring	89.28	89.47	86.95
Matching Instruction to Student Interest	89.28	84.21	91.3
Behavior Contracts	89.28	84.21	91.3
Written Feedback	92.85	73.68	95.65
Behavior Specific Praise	89.28	78.94	91.3
Scaffolding of Instruction	89.28	89.47	82.6
Proximity	85.71	89.47	82.6
Brief Instructional Intervals	85.71	78.94	91.3
PBIS	85.71	78.94	86.95
Use of Free Time	89.28	84.21	78.26
Differentiated Reinforcement	89.28	68.42	91.3
Cultural Responsiveness	82.14	89.47	82.6
Front Loading	78.57	84.21	86.95
Peer-Assisted Learning	82.14	78.94	82.6
Peer Tutoring	82.14	78.94	78.26
Opportunities to Practice Gratitude	89.28	84.21	65.21
Brisk Pacing of Instruction	78.57	68.42	82.6
Modeled Empathy	85.71	68.42	73.91
Cubicles/Temporary Dividing Walls	78.57	63.15	86.95
Restraint Procedures	82.14	47.36	91.3
Previewing	78.57	73.68	69.56
Community of Care and Support	82.14	78.94	56.52
Functional Behavior Assessment (FBA)	75	52.63	82.6
Mindfulness Practices	75	78.94	60.89
Verbal Reprimands or Lecture Based Consequences	67.85	63.15	73.91
Seclusion/Time Out Rooms	75	47.36	78.26
Response Cards	67.85	68.42	65.21
Trauma-Informed Approach	71.42	73.68	56.52
Behavior Momentum	67.85	42.1	69.56
Mnemonic Devices	53.57	57.89	69.56
Story Mapping	64.28	52.63	47.82
Peer Counseling	60.71	36.84	65.21
Restorative Justice	46.42	68.42	56.52
Challenge Thinking	67.85	36.84	43.47
Life Space Interviewing	46.42	21.05	17.39

All of the survey respondents indicated that they were most prepared to implement the strategies of small group instruction and clear/rules expectations. Likewise, respondents as a whole, also felt prepared to implement frequent opportunities to respond, goal setting, rapport building, teaching expected behaviors, and direct instruction with each gaining 98.48% of responses. However, data from each professional group (i.e. special education teacher, general education teacher, behavior interventionist) indicated some differences in the specific strategies they were prepared to implement.

More precisely, 96.42% of special education teachers felt most prepared to provide students with frequent opportunities to respond during instruction. 92.85% of special education teachers also felt prepared to implement goal setting, teaching of expected behaviors, direct instruction, choice making, social skills, and providing written feedback to students. Data from general education teachers indicated that 94.73% were most prepared to implement the strategies of rapport building, small group instruction, and clear rules/expectations. A smaller percentage, 89.47% of general education teachers also felt prepared to implement frequent opportunities to respond, goal setting, teaching expected behaviors, direct instruction, self-monitoring, scaffolding of instruction, proximity and cultural responsiveness, Behavior interventionists on the other hand, reported 96.65% of respondents felt most prepared to implement small group instruction, clear rules/expectations, goal setting, rapport building, teaching expected behaviors, direct instruction, choice making opportunities, point and level systems, and written feedback. These findings are notably consistent with the top five most commonly used interventions as described above. In consideration of global level of preparation amongst

professional groups, special education teachers were no more prepared than general education teachers than for behavior interventionist.

Research Question 4

What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?

To answer Research Question 4, qualitative data was gathered through a series of 7 semi-structured interview sessions designed to find out in-depth perceptions of preparation to work with students with EBD in general and implementation of evidence-based instructional strategies specifically. Twenty-two participants who completed the survey indicated that they would participate in an interview with the researcher. Of the twenty-two participants only 7 interviews were conducted as other possible interviewees for the research study were unresponsive to scheduling request, unreachable at the contact information provided, or had withdrawn their willingness to participate. Additionally, during the interviews no new pertinent topics emerged thus revealing a point of saturation (Patten, 2012, p. 152). The demographics of the interview participants are shown in Table 26.

Table 26.

Demographic Information of Interview Participants

Participant	Gender	Profession Type	Instructional Setting
1	M	Behavior Interventionist	Non -Public School
2	F	Special Education Teacher	Public School
3	F	Behavior Interventionist	Non-Public School
4	F	Special Education Teacher	Public School
5	F	General Education Teacher	Public School
6	M	General Education Teacher	Public School
7	F	Behavior Interventionist	Non-Public School

As Table 26 indicates, despite the low participation in the interview portion of the study, those who did participate held a good representation of overall survey respondents where all professions, and educational settings were represented in the interviews. Likewise, participant # 2 indicated that she worked in a public elementary school setting, participant # 5 reported working in a public general education, high school classroom, and participants 1,3, and 7 noted that their non-public school settings represented k-12 programs thereby covering all grade spans as well.

The researcher developed 6 questions asked during the interview to better answer the central research question. Additional probing questions were also formulated to help guide the discussion as necessary.

Interview Question 1. *What sort of information did you receive regarding this student population during your teacher or behavioral training/credentialing program?*

a. *Were you presented with specific courses or unit content regarding emotional disturbance?*
b. *What did that content look like?*

The overarching response from participants regarding the information received about students with EBD in their credentialing programs was that while there were some discussion in context of on overview of all student disabilities one may encounter throughout the course of their career, very little information was provided specific to working with students with EBD. One participant (I#4) stated:

> In my credential program I was in a moderate severe program and I don't remember anything being mentioned about students with EBD. And then I started as a Mod severe teacher in a mod severe mostly autism ID classroom, so I continued not to get any information. Then I promoted into a behavioral clinician role at which time I was tasked with supporting more academic classrooms with students with EBD and write BIPs for those students, and I don't recall a whole lot of training on it then either.

Another (I#6) stated, "during my gen ed courses very little if anything was said about ED… in the SPED component, they did touch on it, I can't say it was nearly in depth as it needed to be." This supports the literature that universities are not preparing new teachers to educate students with EBD (Oliver & Reschly, 2010), nor are teachers being adequately prepared to manage the behaviors of students with EBD (Kindzierski, O'Dell, Marable, & Raimondi, 2013). A study of teachers of students with EBD conducted by George and colleagues (George, George, Gersten, & Grosnick, 1995) reported that two-thirds of educators in their study did not feel their teacher preparation program adequately prepared them for working with this student population.

There was one participant (I#5) who received his teaching credential in Kansas where all other participants had received their credentials in California. His response to this question was unique in that "in Kansas at least at that time, they would credential you specifically in ED, so everything was related to ED". This response stood out as the one outlier from other interviewees.

> **Interview Question 2.** *Take a moment to think about some of the specific strategies you use with students with EBD in your classrooms, what led to your decision to use those strategies?*
>
> *a. What sort of training or preparation did you receive to implement those strategies?*
>
> *b. If not, what else do you need to be able to implement?*

As with interview question 1, there were several commonalities among interviewees. Firstly, interviewees reported gaining knowledge of specific strategies from following previously established practices in their school or place of employment. Participant (I#1) said, “my first experience with this population was in residential treatment setting and so I was basically following a program, I went in and they were like, this is what we do, and so I started following what they did.”, Participant (I#7) noted “ when I started at the NPS they already had a lot of systems in place and were very clear that we needed to follow their programs, so I implemented what was already prescribed”. These responses also aligned with the literature in that educators do not access and adapt the available knowledge on evidence-based practices in the classroom (Walker,2004); the strategies they choose to implement in the classroom are not necessarily those learned in college coursework but more informally from observation of colleagues and trial and error approaches (Cook et al, 2003; Oliver & Reschly, 2010, Kindzierski, O’Dell, Marable, & Raimondi, 2013).

Second, both general education and special education teachers commented that their training came from working with behavior interventionists who would consult on student behavior challenges in their classroom and provide strategies for the teacher to implement. Participant (I#5) said, “we had a person who was a behaviorist come in and sit with me and the students, he basically guided us through a program and what our daily schedule should look like”, she went on to say “this person was really instrumental in setting up and utilizing the level system for my class.” Similarly, participant (I#1) noted that he had received some training in principles of Applied Behavior Analysis (ABA) which he was able to generalize working with students with EBD.

When asked what additional information respondents felt they needed to have learned in order to be prepared to implement evidence-based strategies in the classroom, a theme emerged amongst both the general education and special education teachers surrounding the need for pre-service instruction on student engagement, building inter-personal connections and understanding of possible mental health concerns that my present themselves within the EBD student population. The three-behavior interventionists talked about wishing more time had been spent in their courses on the supervisory principles related to coaching teachers and paraprofessionals to implement interventions with fidelity. Participant (I#3) had this to say "my biggest barrier is teaching and supporting teachers to implement those strategies since I am not the main person. I offer suggestions and training on how to implement, but as soon as I walk out the room, fidelity goes out the door with me."

Interview Question 3. *Think back to when you first started working with students with EBD. What were some of the thoughts, feelings, concerns, level of preparation or expectations you had starting out?*

a. What do you feel contributed to those feelings?

b. How have your feelings changed over time?

With the exception of participant # 5 who received specific training in educating the EBD student population, all participants reported feeling intimidated, unprepared, and overwhelmed at the beginning of their experience. Participant #1 said "I remember some fear and anxiety about how I could relate to them" and participant # 4 stated that she remembers "feeling completely unprepared, and very intimidated, felt like I had no clue with to do with this population". When the researcher probed more on what contributed

to these feelings, participants noted cultural differences, knowledge of trauma histories prevalent amongst students with EBD, and as Participant # 4 put it, " interacting with very verbal students with advanced verbal repertories, those students were out of my comfort zone". Participants # 2, #3, and #7 also talked about the student's proclivity to engage in physical aggression and concerns about personal safety.

As a point of curiosity, the researcher also asked how feelings had changed over time as responses to this question may yield some valuable information that could benefit future preservice educators and behavior interventionists. To that end, a major theme that stemmed from this question was that "they are like any other population of students with special need; once you figure out what works for them you can teach anybody" (I#3). Participants noted that once they were able to build confidence in themselves as educators and be authentic, they were able to then build rapport with the students that is when they really began to experience success. One interviewee (I#1) remarked,

> I think it has been a process, I mean one of the things I have learned in working with people in general is that the more comfortable you are with who you are , you don't necessarily have to have experienced the same things and the more open you are towards listening to them and trying to, you know that idea of empathy, just listening and trying to understand their prospective and where they are coming from. so, I think that is really what has helped me is just becoming more comfortable with I am who I am and that the approach I am taking with the students

Interview Question 4. *How do you seek out information regarding serving this student population?*

In asking this interview question, the researcher hoped to gain insight on some measures educators and behavior interventionists are taking to increase their working knowledge of students with EBD and how to better serve them in the school environment. The responses to this question could potentially lend themselves to

additional resources or supports in the preparation of future educators and behaviorist. Question 4 elicited a variety of answers. Participant 1, noted that she regularly reviews journal articles, and attend professional conferences to stay abreast of current trends, and developments in the field. This participant also noted the importance of immersing herself in a professional community where she can gain ideas from other people and talk with colleagues who have similar experiences. Participants # 5, #7, 2, and 4 also noted review of journal articles and attending professional conferences such as those put on by the Association of Applied Behavior Analysis or the Association of Positive Behavior Intervention and Supports. Participant # 3 indicated that "I ask behaviorist that I know, or fellow colleagues or teachers that work with this population". Similarly, Participant #2, noted frequent discussion and collaboration between herself, the behavior analysist, and mental health counselors within her organization as a key source of new information as well as the professional development opportunities provided by the non-public school where she works.

> In our organization, in this NPS system we are constantly trying to learn from one another, we have a curriculum and instruction team, behavior analyst, mental health counselors, these are really skilled people and there is a lot of expertise that can be shared across disciplines and I think our organization is trying to create groups where we can have open discussion across those to bridge the connection between how a student can have academic success and also, have their needs met when it comes to these extreme behaviors (I#2).

Conversely, Participant #6, noted that she did not readily seek out additional information about the student population and had this to say,

> I am trying to think about how much I seek out, I do seek out resources, but what I learned was sometimes it was better to work with the person that is in front of you, and the resources that we have versus seeking out additional resources because if you begin to build trusting relationships with the students and you understand their needs, you understand their triggers, it's kind of better sometimes

> not to introduce additional people, additional programs, it's better to get through what you need to get through with the team that you have, from that, I think the students will be able to build their confidence and self-esteem and then be able to grow to become advocates for themselves, and understanding how to regulate their emotions and ask for what they need. But that usually didn't come from seeking out additional resources, it came from utilizing what we had in the room, and the relationship.

Participant #6's response to this question was most aligned to the sentiment found throughout the literature regarding the degree to which educators review or utilize the literature to guide their instructional practice and may be a contributing factor to the gap between research and implementation (Burns & Ysseldyke, 2009; Wing Institute, 2006; Walker 2004). Interestingly, behavior interventionist who were interviewed seemed to rely more on research and professional discourse from conferences and collaboration from other specialist, whereas, both general education and special education teachers reported relying more on informal methods of acquiring additional knowledge such as following prescribed practices, following the same practices of their colleagues or generalizing personal experience.

This phenomenon can be correlated to the quantitative knowledge of interventions presented in this study as well. As outlined in Table 6 above, when asked about the empirical evidence to support the use of self-mediated and peer mediated interventions, respondents appeared to be less familiar with such strategies and therefore ranked them as having no evidence, were uncertain about the evidence, or indicated that they did not know what the intervention was. These types of strategies were found within the literature as least likely to be utilized by teachers in the classroom as they require additional planning and the teacher must lend instructional control to the student (Jones & Jones, 2004). Likewise, 62.7% of respondents were not sure if there was evidence

supporting the use of Rapport Building and 33% were not sure about the use of free time to support student learning and the overall most frequently used interventions as outlined in Table 7 were limited to small handful suggesting teachers had a limited repertoire of strategies in their arsenal which may be a result of heavy reliance on informal sources of information.

Interview Question 5. *What prevents you from accessing additional information?*

For this question, the common denominators amongst participants was the availability of relevant professional development opportunities and time constraints as well as support from school administration to enhance their efforts. This sentiment speaks to the major criticism of using evidence-based instructional practices in the classroom in that school personnel have noted trainings typically occur at times when they are needed in the classroom and they often have little time throughout the year to attend such trainings. Similarly, they report that training materials are often present concepts in such a way that is not accessible, lack clear descriptions of the process or precise implementation steps (Landrum, Tankersley, Kauffman, 2003; Shernoff et al., 2003).

Interview Question 6. *Is there anything else that you would like to mention or discuss with the group related to this topic, that we have not already covered or anything that you would like to add?*

In response to this question, all the participants had a shared sentiment that above all else, it was essential for those individuals working with the EBD student population that they come from a place of sincerity, be non-judgmental, and be willing to connect with students on a personal level. “this work is not for everybody, you can’t come in with

a savior complex, you have to have genuine interest in these students" (I#6). Participants also noted that this student group is often misunderstood and therefore more research and training is needed for those in the field in addition to having the right supports in place can make all the difference. This thought was exemplified when Participant # 1 shared,

> I just think it is a population with a lot of need and I think there is still a lack of understanding and so in educational settings, there is till that tendency to label them as the bad kids versus addressing this as a disability

Participant #5 said,

> I just think special ed, not just Ed are seen as throw away kids, I think it is really critical to have people that are really motivated to work with this population, it's very difficult and really challenging, and draining, unless people have a real passion for the field they should not go into it.

Regarding having the right supports in place, Participant #3 said

> I feel like behaviorist are so important and some districts don't always have them and don't always have the right trained people…. it's so hard to find people with specialized training in the field. That is my biggest roadblock right now, who do I go to for support when I need it.

Table 27 summarizes the themes that emerged from the semi-structured interviews.

Table 27.

Themes from Semi-Structured Interview Process

Interview Question	Common Responses	Emerging Theme
Initial Training Received What factors influence strategies	• Brief overview in context of all students with disabilities. • Some reference to behavioral challenges or mental health concerns within the population • Generalization of personal experiences into the classroom	• EBD student specific instruction is missing from training programs • Lack of knowledge of

used in instructional practice	• Generalization of broad instructional practice to students with EBD • Prescribed practices continued • Practices directed by specialist (i.e. behavior analyst, mental health counselor	EBP's creates cycle of implementation or ineffective practices • Heavy reliance on specialist to direct instructional practice • EBD student specific instruction is missing from training programs
Level of preparation and expectations from onset of career	• Fear, intimidation, anxiety • Instructional expectations unclear • Lacking procedural knowledge of student engagement • Lacking procedural knowledge of behavior management	• Lack of knowledge of EBP's creates cycle of implementation or ineffective practices • Information on EBPs is not accessible to all
Methods of acquiring additional information regarding students with EBD	• Review of journal articles • Attendance at professional conferences • Collaboration with specialist • Colleagues	• Heavy reliance on specialist to direct instructional practice • Lack of knowledge of EBP's creates cycle of implementation or ineffective practices
Barriers to accessing additional information regarding Students with EBD	• Accessibility of training opportunities • Conciseness of information disseminated • Time constraints	• Information on EBPs is not accessible to all
Additional Comments	• Importance of relationship building • Importance of intrinsic motivation to work with student population	• Strong professional relationships with students increases both student and

	• Need for highly skilled, well trained professionals in the field	teacher confidence and instructional ability

Research Question 5

Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionists working in public, non-public, private and alternative education settings?

To answer research question 5, a factorial analysis of variance was conducted to determine whether statistically significant differences exists between the different education professionals (i.e. general education teachers, special education teachers, and behavior interventionist) and their perceived level of preparation to implement evidence-based instructional strategies. No statistically significant differences were found. Table 28 presents the factorial analysis regarding preparation between groups for this question. Table 28.

Summary of Factorial Analysis of Preparation to Implement EBPs by Profession.

Perceived Preparedness by Profession

	Sum of Squares	df	Mean Square	F	p.
Between Groups	190.190	2	95.095	1.893	.159
Within Groups	3164.795	63	50.235		
Total	3354.985	65			

Descriptive statistics - Means and SDs –Perceived Preparedness by Profession

position	Mean	SD	N
special ed	39.115	6.446	26
general ed	34.889	9.330	18
behavior intervention	37.273	5.548	22

In comparing the perceived preparedness to implement EBPs some differences were detected across educational setting (i.e. public school or nonpublic school), a Chi-square test of independence was preformed to test the relationship between perceived preparedness to implement EBPs and educational setting. A relationship was found to be significant across 5 interventions. More specifically, non-public schools were more likely to be prepared to provide written feedback over public schools ($\chi 2 = 11.35$, p=.004, DF=2). Similarly, non-public schools were more likely to be prepared to provide students with EBD more frequent opportunities to practice gratitude ($\chi 2=7.56$, p=.02, DF=2); utilize life space interviewing practices ($\chi 2=6.61$, p=.04, DF=2), and challenge thinking ($\chi 2=6$, p=.04, DF=2). Lastly, non-public schools were also more prepared to implement restraint procedures when deemed necessary to maintain student safety ($\chi 2=14.74$, p=.00, DF=2) than public schools. Tables 29-33 illustrate the relationships in perceived preparedness to implement EBPs between public and non-public school settings.

Table 29.

Significant Relationship Between Public and Non-Public School's Preparedness to Implement EBP Written Feedback.

Written Feedback				
	Total Sample N (% of responses)	Prepared N (% of responses)	Not Prepared N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	9 (36)	2 (8)	
Special Education Teachers	7 (28)	7 (28)	0 (0)	
Behavior Interventionist	7 (28)	7 (28)	0 (0)	
Non-Public School n= 41				$\chi 2 = 11.35$, p=.004, DF=2
General Education Teachers	7 (17.07)	5 (12.19)	2 (4.87)	
Special Education Teachers	19 (46.34)	19 (46.34)	0 (0)	
Behavior Interventionist	15 (36.58)	15 (36.58)	0 (0)	

Table 30.

Significant Relationship Between Public and Non-Public School's Preparedness to Implement EBP Opportunities to Practice Gratitude.

Gratitude				
	Total Sample N (% of responses)	Prepared N (% of responses)	Not Prepared N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	9 (36)	2 (8)	
Special Education Teachers	7 (28)	7 (28)	0 (0)	
Behavior Interventionist	7 (28)	5 (28)	2 (0)	

Non-Public School n= 41				$\chi 2 = 7.56$,
General Education Teachers	7 (17.07)	7 (17.07)	0 (0)	p=.02, DF=2
Special Education Teachers	19 (46.34)	18 (43.90)	1 (2.43)	
Behavior Interventionist	15 (36.58)	10 (24.39)	5 (12.19)	

Table 31.

Significant Relationship Between Public and Non-Public School's Preparedness to Implement EBP Life Space Interviewing.

Life Space Interviewing				
	Total Sample N (% of responses)	Prepared N (% of responses)	Not Prepared N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	1 (4)	10 (40)	
Special Education Teachers	7 (28)	4 (16)	3 (12)	
Behavior Interventionist	7 (28)	0 (0)	7 (28)	
Non-Public School n= 41				$\chi 2 = 6.61$,
General Education Teachers	7 (17.07)	3 (7.31)	4 (9.75)	p=.04, DF=2
Special Education Teachers	19 (46.34)	9 (21.95)	10 (24.39)	
Behavior Interventionist	15 (36.58)	4 (9.75)	11 (26.82)	

Table 32.

Significant Relationship Between Public and Non-Public School's Preparedness to Implement EBP Challenge Thinking.

Challenge Thinking				
	Total Sample N (% of responses)	Prepared N (% of responses)	Not Prepared N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	4 (16)	7 (28)	
Special Education Teachers	7 (28)	3 (12)	4 (16)	
Behavior Interventionist	7 (28)	3 (12)	4(16)	
Non-Public School n= 41				$\chi 2 = 6$, p=.04, DF=2
General Education Teachers	7 (17.07)	3 (7.31)	4 (9.75)	
Special Education Teachers	19 (46.34)	16 (39.02)	3 (7.31)	
Behavior Interventionist	15 (36.58)	7 (17.07)	8 (19.51)	

Table 33.

Significant Relationship Between Public and Non-Public School's Preparedness to Implement Restraint Procedure.

Restraint				
	Total Sample N (% of responses)	Prepared N (% of responses)	Not Prepared N (% of responses)	Chi square tests of independence
Public School n= 25				
General Education Teachers	11 (44)	2 (8)	9 (36)	
Special Education Teachers	7 (28)	6 (24)	1 (4)	
Behavior Interventionist	7 (28)	6 (24)	1 (4)	

Non-Public School n= 41				$\chi 2 = 14.74$,
General Education Teachers	7 (17.07)	7 (17.07)	0 (0)	p=.00, DF=2
Special Education Teachers	19 (46.34)	17 (41.46)	2 (4.87)	
Behavior Interventionist	15 (36.58)	15 (36.58)	0 (0)	

Summary

The purpose of this mixed method study was to identify and describe the utilization of evidence-based instructional practices for students with EBD in classrooms across California. In addition, it was also the purpose of this study to describe educators perceived preparedness to effectively implement said strategies. This chapter presented the findings of the quantitative analysis of survey responses aligned to four of the five research questions. Additionally, to answer the remaining research question, the chapter included the presentation of the qualitative analysis of the study based on interviews with study participants.

An anonymous online survey was used to explore the implementation of evidence-based instructional practices (EBPs) for students with EBD in California. Data from the survey were coded and analyzed using statistical software to determine knowledge of evidence, frequency of use, and preparation to implement 45 identified EBP for students with EBD. Additionally, data were examined to determine the relationship, if any, between ratings of interventions and frequency of use and preparedness to implement EBP across educational settings and the type of education professional providing service delivery.

Survey respondents included, general education teachers, special education teachers, and behavior interventionists from 13 counties across northern and southern

regions of the state. The largest percentage of respondents identified themselves as special education teachers currently providing direct or indirect services to students with EBD in Suburban non-public schools however public-school settings were represented as well.

Respondents were asked to review a list of 45 instructional practices found throughout the literature and indicate whether or not there was empirical evidence to support the use of said practice using a 5-point Likert Scale. Clear expectations and rules, functional behavioral assessment and positive behavior supports were ranked as having the most evidence to support their use. Respondents were also asked to identify which of the 45 practices they used most frequency in their programs and which they felt most prepared to use. Respondents rated the top five most used interventions as clear rules and expectations, rapport building, teaching expected behaviors, behavior specific praise, and frequent opportunities to respond. Respondents felt most prepared to use small group instruction and clear/rules expectations.

Data were analyzed through factorial ANOVA to determine the degree to which evidence relates to program usage, or usage relates to perceived preparedness to implement the same intervention. Comparisons were also drawn between groups based on setting (i.e. public vs. nonpublic school) and who was implementing the intervention (i.e. general education teacher, special education teacher, behavior interventionist). Descriptive statistics of means and standard deviation were also provided. Additionally, Chi-square test of independence was used to test relationships between educational setting and strategies used, as well as educational setting and perceived preparedness to implement said strategies.

Survey respondents were also asked to volunteer their participation in one on one semi structured interviews. During the interview process, the participants shared their experiences and made frequent reference to what they did in the classroom while working directly with students with EBD. Many of the activities that were shared were directly related to the management of behavior and the academic instruction of students with EBD. Commonalities and differences between the participants are described in the emerging themes and correlated to quantitative findings. A more in-depth discussion of study findings will be presented in chapter V which offers a summary of the study's findings, key conclusions, implications, and suggestions for future research.

CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Chapter V is the conclusion of this mixed methods research study analyzing the use of evidence-based instructional strategies for students with emotional and behavioral disorders in California. Chapter V begins with an overview of the research study, starting with A summary of the research, the purpose statement, research questions, methodology, population, and sample. Major and unexpected findings, conclusions from the findings, implications for action and recommendations for future research are presented. The chapter ends with concluding remarks and reflections.

Overview

By all accounts, students referred to as having an emotional or behavioral disorder or disability are the least successful of all student groups (Bradley, Doolittle, & Bartolotta, 2008; Kern, Hilt-Panahon, & Sokol, 2009). While they represent only one percent of students in U.S. schools (U.S. Dept. of Education. 2015), they represent the largest percentage of students who experience suspension, expulsion, and eventually drop out of school (Osher, Morrison, & Wanda, 2003). Given mandates of Free and Appropriate Education (FAPE) for all students, NCLB (2001), IDEA (2004), and most recently the Every Student Succeeds Act (ESSA, 2015) which provision to need for a structure of professional learning that emphasizes teacher leadership and the use of evidence-based practices several studies have concluded that more research is needed to explore the gap between research and practice.

Simpson et al., (2011) noted that given the dire outcomes for students with EBD, we must improve the quality of education afforded this population, and one way to achieve this goal would be to ensure that educators providing instruction to students with

EBD have the knowledge and skills necessary to address the myriad of challenges associated with this difficult population of students. While researchers have identified a number of evidence-based practices that are applicable to students with EBD (e.g. Landrum et al. 2003; Dunlap et al., 2006; Ryan, Pierce, & Mooney, 2008; Billingsley et al., 2006; Simpson et al., 2011), these studies are in some respects outdated, include relatively small numbers of teachers, and do not allow for comparison of special and general education instructors. Thus, the motivation for this research was to determine to extent to which evidence-based interventions are currently being employed with students with EBD in California, the degree to which educators felt prepared to implement said strategies, and whether or not there was a difference between instructional practices employed by general education or special education professionals. The significance of this research is that through the identification of current instructional practices, policy makers, administrators, and educators will have additional information to base future decisions related to the preparation of teachers and their subsequent the instruction of students with EBD.

Purpose of the Study

The purpose of this mixed methods study was to identify and describe the evidence- based interventions currently being utilized with students with emotional and behavioral disorders by general education teachers, special education teachers, and behavior interventionists, working in K-12 education programs on comprehensive public school, private school, and non-public school campuses in the state of California. The study also examined the respondents' knowledge of evidence-based practices for this

student population and their perceived preparedness to implement these interventions with fidelity.

Research Questions

The research questions for this study are as follows:

1. Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionists use most frequently in working with students with emotional and behavioral disorders?
2. Is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionists working with students with emotional and behavioral disorders across public, non-public, private, or other alternative education setting?
3. Which evidence-based interventions do special education teachers, and behavior interventionists perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?
4. What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?
5. Is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionists working in public, non-public, private and alternative education settings?

Methodology

In the current study a mixed methods research design was employed to investigate the perception of general education teachers', special education teachers', and behavior interventionists' knowledge of evidence based instructional strategies for students with emotional and behavioral disorders as well as their perceived preparedness to implement said strategies. A three-part survey instrument was designed by the researcher to gather quantitative data based on a 5-point Likert scale and interviews were used to enhance the findings through qualitative analysis. The use of survey data allowed the researcher to gain insight into current instructional practices. Patten (2012) stated that "The purpose of surveys is to describe the attitudes, beliefs and behaviors of a population" (p.9). McMillan and Schumacher (2010) suggest that "Scales are used extensively in questionnaires because they allow fairly accurate assessments of beliefs or opinions. This is because many of our beliefs and opinions are thought of in terms of graduations" (p.198).

In addition, follow up semi-structured interviews were conducted to allow the researcher to gather a more in depth understanding of the factors influencing the perceived preparedness to implement evidence-based instructional strategies by using "…detailed descriptions and analyses" (McMillan and Schumacher, 2010, p.325). A pilot test was conducted with a small sample of education professionals employed in similar education assignments as the targeted sample group for this study to check for validity, content errors, and to ensure that questions were designed to elicit information pertinent to this study and research questions. Revisions were made as recommended based on the advice of knowledgeable and professional experts in the field. Each interview was

conducted individually and followed an interviewing protocol with norms established for each interview. The interviews were audio recorded and transcribed to ensure accuracy.

Population and Sample

This research used general education teachers, special education teachers, and behavior interventionists who were currently working with students identified as having EBD or whom had recent (last 3 years) relevant experience with this student population. Study participants were employed in public school, or nonpublic school settings and covered all grade spans from kindergarten through post-secondary education. The survey was disseminated electronically and was available to respondents via the Survey Monkey online platform. A method of snowball sampling was utilized to obtain survey responses therefore it is not possible to determine exactly how many surveys were sent out or to determine a response rate for this study. However, 76 surveys were returned and included in the analysis. Of those returned responses, 22 participants initially volunteered for the follow up interview, however, only 7 individual interviews were completed as possible interviewees for the research were unavailable, had transferred position or had withdrawn their consent to participate in this portion of the study. Qualitative information was gathered from the interviews and coded into themes that identified the deliberate practices of the participants. This portion of the research was guided by the question: What are the factors that general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?

Major Findings

Several major findings resulted from this research study. The findings are outlined below, organized by research question.

Research Question 1

Research question one asked: "Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionist use most frequently in working with students with emotional and behavioral disorders?" In order to gain additional insight into the responses chosen for question one, the researcher provided study participants with a list of 45 interventions found within the literature with varying degrees of supporting evidence to determine whether or not study participants had any working knowledge of evidence-based interventions specific to the EBD student population. Respondents selected from the following descriptors: *No Evidence, Some Evidence, Strong Evidence, Not Sure If There is Any Evidence, and I Don't Know What This is.* The number of responses, the percentages of responses, and the means, modes and standard deviation were then calculated to establish the overall results of the survey by each of the interventions listed.

The first finding indicated that overall, education professionals in California had some knowledge of evidence-based instructional practices for students with EBD. This finding differed from some of the literature which indicated that educators had little to no knowledge of evidence-based strategies specific to this student population. For example, Stormont et al., 2011b, found that participants of their study had not heard of 90% of a list of the evidence-based interventions. Whereas findings from the current study suggest that participants had in fact had some degree of familiarity with 94% of the interventions

listed. This difference maybe reflective of recent educational policy changes and mandates to utilize evidence-based instructional strategies in school. Likewise, there is increasing popularity in the use of multi-tiered systems of support for students with disabilities which encompasses most of the individual strategies outlined in the study creating greater exposure and denser knowledge base for said interventions. However, responses highlight a lack of clear understanding amongst education professionals as to which interventions actually hold empirical weight. For example, respondents ranked social skills training as one of the interventions having the most evidence to support it use when in fact the evidence is only emerging to support its use whereas using a "brisk pace of instruction" was ranked as having the least amount of evidence by survey respondents when there is actually substantial evidence to support this instructional practice.

The second major finding was that despite having some knowledge of evidence-based interventions, the results of this study indicated low reported use of such practices, particularly peer-mediated, and self- mediated strategies. A possible reason for this finding is that the education professionals might think the interventions mediated by teachers versus students could result in better outcomes. Peer mediated interventions could also be perceived as too time consuming for teachers whereas teacher led strategies could save them time and effort since they would not be required to pre- teach expectations of peers, conduct observations of peer implementation, and providing coaching or feedback about their implementation.

Moreover, the results indicated that participants know and used some evidence-based practices more than others. For example, matching instruction to student interests, setting clear rules and expectations as well as rapport building were reported as most

commonly used by study participants. The majority of participants also know and use frequent opportunities to respond during instruction, behavior specific praise, positive behavior supports, and social skills but these interventions scored lower on the Likert rating scale. Rapport building and setting clear expectations and rules are considered primary or universal interventions for students and therefore more likely to be reported by all groups of education professionals. These findings align with previous research such as that of Burns and Ysseldyke (2009) who studied reported use of evidence-based practices among special education teachers and school psychologist and found that some non-evidenced and emerging evidence-based practices such as social skills training were reportedly used with the same frequency as applied behavior analysis which has extensive empirical evidence to support its use. Likewise, Stormont, Reinke, and Herman (2011a) found that the majority of participants in their study had strong agreement ratings for whether or not a practice was indeed evidenced-based for decreasing problem behaviors yet general education teachers had lower agreement ratings for evidence based practices and higher agreement ratings for non-evidenced based practices than did special education teachers as was the case within the current study.

Lastly, another major finding from the results of this study revealed that there are a number of evidence-based practices that are not in common use, if used at all. Participants were presented with a non-exhaustive list of 45 instructional and behavioral strategies of which only 5 were noted as being used consistently across all participants and approximately only ½ of the sampled list of interventions were reported to as being *sometimes* while the remaining half were rarely used or respondents did not have prior knowledge of the intervention. Most general education teachers noted that they rarely

provide students with choice-making opportunities and neither special education or general education teachers made use of other practices such as peer-mediated interventions, conflict resolution, or peer-assisted learning. As the results of the current study indicate, far too few interventions are commonly utilized resulting in a cookie cutter approaches to individualized needs.

Research Question 2

Research question two asked: "is there a significant difference between the evidence-based interventions used most frequently by general education teachers, special education teachers, and behavior interventionist working with students with emotional and behavioral disorders across public or non-public school settings?" study participants were asked to rank the same list of 45 interventions provided in question one by frequency of use in their professional practice. The researcher conducted factorial analysis of variance (ANOVA) between the educational professionals in the study.

A major finding for question two was that there were no statistically significant differences found between education professionals regarding the instructional practices used. This finding is consistent with disagreements found within the literature wherein some previous research found that special education teachers were more knowledgeable of and utilized evidenced-based strategies than general education teachers (Stormont, 2011a), yet other studies such as Alhossein (2016) found no significant difference amongst educators. This finding may be explained by considering that most educators learn about the interventions they use in professional practice from their credentialing and in-service program and are often exposed to the same sets of strategies regardless of their major and intent to teach typical or special education students. For instance, token

reinforcement systems, positive praise, and rapport building, are taught across teacher education paths and therefore general education teachers and special education teachers have similar knowledge based on these practices. Similarly, many behavior interventionists receive their training within schools of education and therefore share coursework within the teacher credentialing program and would likely be exposed to similar content related to instructional strategies.

A second finding for this research question was that although statistically significant differences did not exist globally, the relationship between the school setting (i.e. public vs. non-public) and intervention was significant across five of the 45 interventions identified within this study. More specifically, non-public schools appeared to use a greater number or wider variety of strategies than public schools and were more likely to utilize behavior momentum, free time, mindfulness, and direct instruction over public schools, whereas public schools were more likely to use peer tutoring. These interventions used within the non-public school setting are those which involve greater attention to individual student interests and needs. For example, the practice of using behavior momentum requires the teacher to first allow the learner to complete tasks or assignments that are of interest to them or learner directed activities and gradually build in those which are more teacher directed. This approach may take time and better implemented in a smaller instructional setting than that of a large classroom with 20 or more students. Whereas with peer tutoring a teacher can easily pair learner together to assist each other on a given assignment and requires less individualized attention.

Research Question 3

Research question three asked: "Which evidence-based interventions do general education teachers, special education teachers, and behavior interventionist perceive themselves most prepared to implement in working with students with emotional and behavioral disorders?"

A major finding related to question three was that was that there was a disconnect between the interventions commonly used, and those that education professionals in California were prepared to use. For example, a review of the quantitative data indicates that participants where most prepared to use small group instruction followed by setting clear rules and expectations to students. Small group instruction did not make the top ten evidence-based practices, nor the top ten most frequently used evidence-based practices and yet participants felt most prepared to use this intervention strategy. This finding was mirrored during the qualitative analysis as well, in that participants unanimously felt clear rules and expectations established from the start of the school year, or the time the student entered the classroom, and pairing students into smaller instructional groups was essential to the smooth operation of the classroom throughout the year.

Interestingly, a second major finding, was that while educators felt establishing clear rules and expectations was essential, their comments suggested these interventions enabled them to manage student's challenging behaviors and get through the day versus drawing in connection between the intervention and student educational outcomes or success. This finding is reflective of the historical practice of focusing on maladaptive behaviors often presented by students with EBD. Academic failure and problem behavior are closely related, and strong evidence suggests a reciprocal relationship between them

(Trout et al., 2003; Ryan et al., 2004). However, research has shown that academic underachievement is one of the most influential predictors of challenging behaviors. Conversely, research has also showing that academic success is related to a decrease in challenging behavior (Reid et al., 2004). So much emphasis has been placed on problem behavior within this student population that many evidence-based instructional practices which foster academic achievement continue to be overlooked. In this case, setting clear rules and expectations could also be a means of engaging students in a sense of collaboration and community. Having clear rules provides distinct opportunities to deliver positive praise thereby addressing the reciprocal relationship between problem behavior and school failure and enhancing student performance outcomes.

Despite the overall disconnect between use and preparation, when examining within group comparisons of knowledge and use of evidence-based interventions a third major finding was that no educational professional group appeared to be any more prepared than the other. There are several factors which could be contributing to this finding including that educators receive similar training regardless of profession as previously noted. A second factor could be associated with program structure wherein educators are prescribed a set of instructional practices that they are not able to deviate from and which does not allow for the flexibility to include other practices which the professional may in fact be prepared to implement. Third, many researchers have found that educators tend to rely on more informal sources of information related to instructional practice and other experienced teachers and existing practices in schools are viewed as the most valuable in learning how to teach effectively (Hornby, Gable, & Evans., 2013; Burns & Ysseldyke, 2009). Lastly, researchers such as Test et al., (2015)

have indicated that teachers may express strong support for using evidence-based strategies and be familiar with them, but rarely actually implement these practices in their classrooms.

Research Question 4

Research question four asked "what factors did general education teachers, special education teachers, and behavior interventionists perceive as contributing to their preparation to implement evidence-based interventions?" Study participants were asked a series of semi-structured interview questions about their experiences working with students with EBD, the evidence-based practices they used in their classrooms and preparation they received prior to working with this student population. The interviews were recorded and transcribed, then coded and analyzed for major themes and patterns.

The major findings for question four can be related to the themes which emerged from the interviews. These themes included expressed concern over the lack of EBD student specific content in teacher credentialing programs and that the lack of knowledge of EBP's creates a cycle of implementation of ineffective practices. Another related theme which emerged from the interviews was that educators found the information on EBPs not easily accessible and therefore they were forced to rely heavily on specialists who may not be readily available to inform instructional practice. Lastly, a theme emerged that strong professional relationships with students increases both student and teacher confidence and instructional ability.

The first major finding in relation to question four was that despite the unique characteristics and instructional needs of students with EBD, interviewees reported little to no discussion or course content with instructional practices specific to this student

population. One interviewee indicated that he attended a program in the Midwest that allowed aspiring teachers to specialize in the EBD population but all other participants having been trained in California, did not report having anything similar in their course content. Universities are not preparing new teachers to educate students with EBD as evidenced by the findings of this study and has been reported repeatedly throughout the literature (Cancio & Conderman, 2008; Landrum, Tanskersley, & Kauffman, 2003; Oliver & Reschly, 2010), nor are teachers being adequately prepared to manage the behaviors of student with EBD (Kindzierski, O'dell, Marable, & Raimondi, 2013). Many researchers have argued that improving teacher's knowledge about evidence-based practices could increase their use in schools (Cook & Odom, 2013; Jones, 2009). Researchers have also postulated that the lack of adequate preparation for educators is likely a major contributing factor to the negative outcome data for this particular student population (Simpson et al., 2011) and leads to high rates of teacher burnout and attrition (Cancio& Conderman, 2008).

Study participants indicated that they "relied heavily" (I#6) or were "so grateful to have access to the behavior analyst" (I#3) or other experienced personnel for support in managing behaviors and informing instructional practice. Those with specialized training such as behavior analysts or had years of instruction with the EBD student population under their belt were considered experts. However, these findings signify that as indicated throughout the literature, having more years of teaching experience does not necessarily mean those teachers are more knowledgeable of evidence-based practices (Test et al., 2015). In fact, the opposite may hold true as teachers often stick to the practices learned during their initial training and more seasoned teachers may not be as

familiar with the latest research and information on instructional best practices. Likewise, while behavior analyst may have specialized training to address maladaptive behaviors, they may not have received education on instructional practices and thereby provide inadequate support in that regard.

Another theme or major finding was related to the inaccessibility of information. Several researchers have pointed to teachers' mistrust of educational research as they believe it does not effectively address the needs of their particular students, and does not readily translate from theory to practice in the classroom (Burns & Ysseldke, 2009, Hornby et al., 2013; Cook & Odom, 2013;Cook et al., 2014). Additionally, according to the literature, educators tend to prefer and rely heavily on informal sources of information to identify instructional practice rather than using research which they report to be inaccessible (Hornby et al., 2013). This sentiment that the research was not accessible or applicable to student specific needs was echoed by the participants in the current study as well. Interviewees noted that the research was overly complicated, or they did not feel that the structure, students, environmental factors or some other variable would allow for fidelity in implementation and therefore it was easier and better to "just stick with what I know" (I#6).

The last major finding, which seemed to hold the most significance for participants, was that all interviewees placed great value on building rapport with students and establishing an emotional connection which involves connecting the student to the classroom and curriculum. Whether it was through conversation, direct observation or questioning, the participants reported that they were constantly gauging their student's emotional state during the day. Interviewees noted that simple questions about how the

student was feeling or life events seemed to be an explicit way of gathering information about their emotional well-being. Participants reported observing students' body language, speech patterns, volume, and location in the classroom as a means of gauging their emotional state and predicting level of connectivity and engagement in classroom activity. Furthermore, participants indicated that peer interactions could also be used to conduct informal assessment of emotional connectivity. For example, I # 6 and I # 3 noted that conflicts between peers could impact instruction and understanding how students were feeling could help them predict dangerous and disruptive behaviors or anticipate the need to change their instructional plan for the day or class period based on student's emotional needs at the time.

Participants also shared a genuine care for their students, wanting to be available to help them process their feelings and problem solve conflict. Some of the interviewees referred to Mindfulness based practices which they have incorporated into their daily routine of the classroom such as refocusing or calming breaks following a transition, use of soft background music or guided daily mediation or reflection exercises to address this need. I# 1 and I# 5 were able to label some of their activities as Mindfulness and were able to name specific activities that fell under the umbrella of this emerging evidence-based strategy. Other interviewees talked about incorporating activities that they "just made up" such as the use of soft background music, use of essential oils in the classroom, or writing prompts related to their emotional state, some of which could be considered Mindfulness based strategies but did not label them as such. The phenomenon is again reflective of the literature in that educators are using instructional tools without verifying their efficacy, not aware of current research on best practices, and making things up on

their own (Burns & Ysseldke, 2009, Hornby et al., 2013; Cook & Odom, 2013; Cook et al., 2014).

The participants in this study often described having a structured lesson plan that could be easily modified based on the needs of the students. If students became frustrated with the assignment or was in emotional distress for some other reason, participants indicated that having structured lesson plans helped them to easily prepare a variety of alternative activities that the student could engage in. Student engagement and participation seemed to be the goal of this practice. Some of the participants felt that when a student with EBD was engaged in learning activities, comprehension of content increased and opportunities for negative behavior decreased. Therefore, teachers kept a variety of activities for the students to engage in. When one activity was not working, they could quickly switch to something more appropriate for the given moment. They reported this practice as being influenced by instructional assessment and knowledge of the student's present level of performance on that content and strengthened by building the emotional connection.

The participants described this practice as constant. Due to the volatility of students they taught, and the behaviors associated with EBD, teachers felt they needed to have an inventory of materials to employ at any given moment. Classroom activities reported could include self-paced computer lessons, artistic content items, content related games, group discussion activities, individualized assignments, low level comprehension check assignments, standardized worksheets, quiet reading time, and classroom decoration activities. The activity selected was chosen by the teacher to fit the given situation. A great deal more information is needed about this teaching practice.

Reflecting back on the literature review conducted for the current study, no researchers have looked at the specific classroom activities or presentation of instructional materials with the exception of a few studies which noted the importance of the pace of instruction. Further research on this topic of exploring the effect of specific classroom activities could potentially be expanded into a wide array of diagnostic and prescriptive teaching techniques.

Rules, expectations, patterns of behavior and rituals reported by the interviewees all point to normalized behavior on the part of the student and teacher. Comments from participants suggested that predictability in the environment likely relieves the stress of being in school for all members of the classroom community and they noted several ways of created structure and routine in their classrooms. These structures included creating procedures for entering the classroom, seating arrangements, gathering of materials, participating in classroom activities, and the organization of student work. These structures were communicated clearly to students, and teachers worked towards constantly reinforcing and reminding students of these structures.

Similarly, the teachers in this study actively worked to display themselves authentically to their students and challenged students to do the same in order to identify commonalities. Building a relationship between student and teacher is a practice that likely eases tensions between students and teachers. Some of the participants went out of their way to be flexible and accommodating to their students, which seemed to also ease potential tensions. Participants worked to facilitate relationships amongst the students as well. The classroom set up, seating arrangements, and furnishings providing opportunity for group tasks and discussions and setting community norms for behavior all enhanced

the opportunity for peer relationship building. While these activities all seemed to ease tensions within the classroom, the participants reported the main goal was to foster active student engagement with the curriculum and teach appropriate social conventions. The participants actively worked to create a comfortable and fun place to learn. They sought curriculum relevant to their student's lives and created a sense of community and belonging within their classrooms. These sorts of connections elicited emotional responses to the curriculum that could be very empowering for the students.

Research Question 5

Research question 5 asked "is there a significant difference between the perceived preparedness to implement evidence-based interventions between general education teachers, special education teachers, and behavior interventionist working in public or nonpublic school settings?" The researcher conducted a 3x 2 factorial analysis of variance (ANOVA) between the educational professionals in the study and the educational setting.

A major finding for question five was that there were no statistically significant differences found between education professional's perceived level of preparation to implement evidence-based interventions and educational setting. These findings mirrored those of the previous research questions. Because educators all had similar training and maintained the same instructional practices overtime, there did not appear to be any significant differences between setting. Using the Chi-square test of independence to test the relationship between perceived preparedness to implement EBPs and educational setting, a relationship was found to be significant across 5 specific interventions and it was evident that non-public school environments were more likely to use a larger array of

interventions over public school settings. Given the nature of the non-public school environment this finding is not surprising. Non-public schools tend to have smaller class sizes than found in public school settings and smaller student to staff ratios make it easier to provide more individualized instruction and support to students. Likewise, non-public schools tend to have greater flexibility in the pacing of instruction which lends itself to the opportunity to embed a wider array of instructional strategies to support student's needs. The research regarding instructional practices in non-public schools is vastly limited if not nonexistent. Future researchers may want to expand upon this line inquiry regarding differences in instructional practices utilized in differing educational settings.

Unexpected Findings

The most unexpected finding from this study was that there were no significant differences amongst educators regarding their instructional practice and or level of preparation. Youth with EBD are often the most difficult to reach and the most challenging to teach. Academic, behavioral, and emotional interventions are necessary in order for these students to experience success which often come in the form of specialized classroom environments. In theory, educators in this specialized learning environment are well trained and knowledgeable individuals well equipped to carry out the support needs of the students. This study found that that may not be the case, and potentially explains the outcome data for students with EBD in secluded settings being only slightly better than those in inclusion programs (Vannest et al., 2009).

Conclusions

The purpose of this study was to identify the knowledge and use of evidenced based instructional practices for students with emotional and behavioral disorders across

California. The medium for the collection of this data was semi-structured one on one interviews and survey responses. During the interview process, the participants shared their experiences and made frequent references to what they did in the classroom. Many of the activities that were shared were directly related to behavior management and the instruction of students with EBD. Due to the behavior that students with EBD can display, teachers may rely on emotional connections to classroom and content to encourage participation in the classroom environment and ease the stress of academics among student with EBD and rely heavily on the expertise of others and other informal information sources to inform instructional practices versus referring back to available research.

The common practices among this unique population of educators who participated in this study, suggest that their actions are similar. Many of the participants shared similar experiences and practices when it came to work with students with EBD. These participants worked in a variety of educational environments and in differing context. The themes identified in the qualitative analysis portion of this study support some of the literature that was examined for this dissertation. No conflicting information became evident through the study. The themes indicated a relationship between research and participant practice. Teachers of students with EBD need a large range of skills and practices to successfully educate their students (Chong & Ng, 2011). The educators who participated in this study were unique in their prospective and their shared experiences can be used to inform future decision making about classroom practices. The practices identified in this study could be taught to future educators and provides a new line of inquiry for researchers.

Implications for Action

The ultimate goal of this dissertation was to improve educational outcomes for students with EBD. The goal was not just to identify current instructional practice in California schools but to gain insight which could enhance instructional practices and ultimately increase student success. If the practices outlined, do yield higher rates of student engagement and increased academic performance among students with EBD, then there will likely be a decrease in violence in schools, disciplinary exclusion and a decrease in dropouts.

Implications for Stakeholders

A significant finding of the research highlights a desperate need for comprehensive professional development. Administrators and school leaders should explore opportunities for further development of their instructors in special education programs. It would appear that there continues to be a substantial gap in research-to-practice with regard to both special education teachers, general education teachers and the knowledge of behavior interventionists. That is, the present study suggests that few teachers who work with students with EBD rely on strategies that most likely will produce positive outcomes for their students (Kauffman & Landrum, 2010; Wagner et al., 2006). The findings of the current study mirror the results of previous investigations which regrettably suggest that most students with EBD do not receive an education based on empirically supported practices (Landrum et al., 2003; Simpson et al., 2011). As Scott, Alter, and Hirn (2011) asserted, "in the absence of effective intervention practices, both teachers and the student [with EBD] tend to experience failures that often result in burnout and attrition for teachers and school failure for the student" (p. 620). Inadequate

teacher preparation comes at the expense of student's loss of critical learning opportunities because their teachers possess little or no knowledge of evidence-based practices (Billingsley et al., 2006; Gable, 2004; Kern et al., 2009). Undoubtedly, fundamental changes in initial teacher preparation and on-going supports are necessary if either special educators or general educators and or behavior interventionist are to meet the academic, behavioral, and social emotional needs of this exceptional student population.

An entire course if not a series of courses, could be developed for teachers who educate students with EBD. University systems also need to incorporate greater content related to the specific needs of this challenging student population. The literature review revealed a startling lack of preparation for teachers of students with EBD. Study participants echoed the lack of content in their training programs during the interviews and survey responses. Coursework needs to be developed that prepares teachers for the unique challenges of educating students with EBD. Perhaps this coursework can encompass some of the instructional practices that were highlighted during this study. However, further research is needed to correspond with said practices and the development of enhanced course content. Coursework should also include content specific to culturally responsive instructional practices and understanding the influences of trauma and toxic stress on the developing child as well as the impact on the integration of social emotional learning strategies into the teaching practice.

In addition, we must find ways to make what we know about evidence-based practices more trustworthy, accessible, transportable, and more likely to be incorporated into the everyday instructional practice of our classrooms (Cook, Landrum, Tankersley,

& Kauffman, 2003). Simply exposing school personnel to various practices is not enough; school personnel must be instructed directly and systematically to a mastery level on each specific skill and demonstrate their competency in applied settings (Gable, 2004). A related issue is the fact that many research-based strategies do not meet the criterion of acceptability voiced by some teachers in this study. More specifically, strategies must be easy to implement, not too time intensive, viewed as effective, and compatible with current practices (Gable, Hendrickson, & Van Acker, 2001; Landrum et al., 2003; Gresham, 1989).

In a vast number of the helping professions, such as doctors, nurses, mental health counselors, social workers and the like, there is a mandatory commitment to ongoing professional development and learning of new skills. As our understanding of the human experience continues to rapidly expand, these professionals understand the importance of updating their knowledge base and remaining abreast of the least scientific discoveries regarding biological functions, neurological processes, skill acquisition, and the interplay of environmental factors on human growth and development to inform their practice and remain effective. The licensing boards of these professions set minimum requirements to document set hours of continued professional development annually in order to maintain an active license or credential to practice in their respective fields. Furthermore, before these professionals can begin independent practice, they are required to complete anywhere from 1200 to 3000 or more hours of supervised field work in order to demonstrate their ability to generalize coursework to application with clients. Mentors are assigned to coach new professionals through demonstrated needed skill sets through a variety of different tasks and conditions until they have met mastery.

In effort to increase teacher competency by exposing teachers to current research-based strategies, providing opportunity for teachers to see said theories in practice in both clinical and applied settings, the teaching profession should adopt such mandates. At present, California does not have any such requirements of its teachers. Aside from the initial completion of a teacher commission approved education specialist credential program, and brief mentorship with sometimes a few as one to two direct observations of instructional practice during an induction program, there are no set requirements for educators to continue to access information beyond the scope of their university program. Many universities and private organizations have begun to offer one day workshops and mini courses for educators but without mandates this approach to continued learning is narrow in its reach.

Prior to being tasked with leading a classroom on their own, teachers should be paired with a highly skilled instructional coach where they are provided opportunity to shadow and co-teach a classroom for at least a year before branching out on their own. This practice will provide new teachers an opportunity to build learn from other more experienced professionals and build their confidence as instructional leaders. New teachers would have the benefit of having a knowledgeable colleague available to provide immediate feedback and support as needed, reinforce their authority with students, and provide opportunities for enhanced student learning. Additionally, teachers should be required to renew their teaching credential annually and show documentation of continuing education related to addressing the needs of the whole child in a manner that approaches instruction from a Developmental Psychopathology Model as outlined in the framework presented by Wicks-Nelson and Israel (2003). Because no one person is an

island, a set number of hours should be dedicated to cultural responsiveness, trauma informed instructional practices, utilization of multitiered systems of support, content specific interventions such as reading, writing and math, and behavior management strategies across multiple tiers of support in addition to innovations in instructional practice such as flipped or Google classrooms.

In this manner, teachers can use the practices revealed within this study to modify their classrooms and instructional practices to better suit the needs of students with EBD. With such limited progress in the actual instruction of students with EBD, there is an obvious need for improvement. Teachers should consider how they go about incorporating instructional practices into their classrooms and the sources of that information. Mandating continued education with varied content expectations for annual renewal of teaching credentials could go a long way to improving effective instructional practice and decreasing the gap between research and theory.

Personal Implications

In my professional roles as an educational leader, mentor, and supervisor I will work to ensure that the practices from this dissertation as well that that of others, will be implemented with students with EBD. As I guide others to become instructional leaders, and classroom teachers I will make every effort to bridge the research to practice gap by making sure that I remain abreast of future developments in the field, and disseminate newfound information to those under my charge in relevant, timely, and manageable chunks as well as linking them to empirically validated resources such as the What Works Clearing House or the Collaborative for Academic, Social and Emotional Learning (CASEL). I will also encourage others to build relationships with their students,

which will inform many types of emotional assessment or connectivity and lead to engaging instruction. With permission from my school leadership team, I will present the findings of this dissertation to my colleagues both within and outside of our organization.

Study Limitations and Recommendations for Further Research

In addition to the aforementioned opportunities for exploration, replication of the current study should be considered by future researchers. Future replication studies would benefit from improved data collection procedures and target specific groups of practitioners individually to improve the rate of response. Additionally, participants in this current study voluntarily completed the survey. As a result, participants may have more knowledge of the EBD student population and evidence-based practices specific to this student group than other educators who did not complete the survey. As this study reflects self-reported knowledge and use of evidence based instructional strategies of the participants, it may not be a true reflection of the actual behavior of participants in the classroom. Some participants may have reported high use of interventions, but actually rarely use them. Educators may know general knowledge about the practice and use them, but the fidelity of the intervention might be questionable. With that in mind, future research should consider using classroom observation to see what actually occurs in the classroom and to assess fidelity of implementation.

As more and more schools move towards the integration of MTSS, future studies may wish to explore each PBIS tier of interventions individually rather than as a collective unit. More information could be unlocked by delving into which level of interventions appear to have to most profound effect on implementation of EBPs in California classrooms. Moreover, future studies could also explore the various

components of MTSS in terms of their degree of effectiveness. Because the implementation of EBPs is still a national mandate, it is imperative that educational leaders have a clear picture of how these interventions are being implemented across classrooms in California and the degree to which they are actually improving student outcomes.

The practices abstracted from the interview portion of this study need validation. There is a need for greater understanding of the details of these practices and how they actually look in the natural environment. What does a classroom that has emotional connectivity look like? what specific items, tools, curricula help spark emotional connections? What are the structures, expectations, and norms in the classroom for students with EBD? How do these structures affect behavioral data and disciplinary exclusion? A future phenomenological study could explore all of these avenues of inquiry. Similarly, future researchers could seek to identify an exemplary school and or district with a proven track record of positive growth and outcomes for their students with EBD to examine what are the unique characteristics of their programs, structures, resources, and instructional practices that make them stand out and how can those practices be replicated on a larger scale.

Furthermore, in 2016, the California Commission of Teaching Credentials was responsible for setting standards for teacher preparation and licensing, adopted new credential program standards for teacher candidates receiving preliminary multiple subject and preliminary single subject credentials. The new standards are not specific to students with EBD, but they are essential standards and competencies designed to elicit greater attention to skills and knowledge in an effort to better support all students with

disabilities. It is recommended that a future research study would assess the perceptions of teachers who have successfully completed the new requirements that were adopted in 2016, to determine whether or not those teachers feel as though they were adequately prepared with the knowledge to competently utilize effective strategies to manage classroom environments, and provide the support and structure necessary for students with EBD to experience success in general education classes as the push for full inclusion remains constant.

This dissertation has spawned many more questions and suggests the need for additional research on the practices of educating students with EBD. Further research in the qualitative methods should be applied as both case study and phenomenological inquiry. These practices also need quantitative validation in the form of student academic performance data, behavioral data, and positive attendance.

Concluding Remarks and Reflections

The students with EBD who are in schools now needed change decades ago. We as a community, not just the educational community, but all those who seek social justice and change in our society, need to focus on these young people. The teachers interviewed during this study shared some of their current practices which placed more emphasis with providing structure, consistent routines and expectations for students with EBD over specific instructional practices. While these practices have yet to be validated with empirical evidence, they may still be worth implementing. Considering the current outcomes for students with EBD, drastic changes are necessary. These practices do not represent anything particularly groundbreaking but as they have been routinely adopted across the sample of educators who participated in this study it is up to the educational

research community and administrators to take stock in current practice and validate their lived experiences and successes that these practices might be shared with others in achieving similar results. Teachers are doing the job of educating students daily, yet researchers prefer to look at single case studies or bodies of erroneous data. We need to ask the teachers what they think works for students and support them in the implementation of practices that work for students. Teachers may have the answers to many of the questions that plague the modern education system. Perhaps if research informed practices more closely resembled teachers' lived experience they would be more apt to utilize them in their teaching.

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APPENDICES

APPENDIX A

Types of Evidence-based Instructional Strategies by Grade Span

Peer-Mediated Interventions

Types of Peer Mediated Interventions		Evidence Base	
Intervention	Description	Elementary	Secondary
Class wide Peer Tutoring (CWPT)	All students within a given class participate in tutoring groups of two or three students simultaneously. During each tutoring session, students take turns being the tutor and tutee.		X
Cooperative Learning	Students of differing levels of ability are paired in small groups to complete a range of instructional tasks designed to improve the group's understanding of content matter. Every student is responsible for learning key concepts as well as assisting others in the group to gain understanding of the subject.		X
Cross-Age Tutoring	Students are paired with another student with at least a two-year age difference. There does not need to be a significant difference in skill level in order for this technique to be effective.	X	X
Peer Tutoring	Students who need remediation are paired with either highly skilled peer, peers also in need of remediation, or cross –age tutors). Each student in the dyad may receive and provide tutoring in the same content area, or the area for which they are highly skilled.	X	X
Peer Assisted Learning Strategies	An adaptation of CWPT in which educators identify students who need assistance gaining particular skills and the best peers to assist them in learning the desired skills. As students work on various skills over time, student	X	

	pairings are changed regularly, and all students take turns being the "coach" or the "player".		
Peer Assessment	Students of similar status or learning ability assess each other's work to determine whether the skill was learned (i.e. correcting each other's spelling test).	X	
Peer Modeling	Teachers provide direct instruction of desired behaviors to a set of teacher selected peer models. The models then demonstrate these behaviors in front of peers deficient in these areas while the teacher draws the learner's attention to model and points out the target behaviors that student is to follow.	X	X
Peer reinforcement	Students look for opportunities throughout the day to provide positive reinforcement to each other when they observe a peer engaged in desired or expected behaviors. This can include verbal praise, high fives, or tangible items rather than receiving this feedback from the teacher.	X	

Adapted from Ryan, J.B., Pierce, C.D., & Mooney, P. (2008).

Self-Mediated Interventions

Type of Self Mediated Interventions		Evidence Base	
Intervention	Description	Elementary	Secondary
Self-monitoring	Students are responsible for discriminating between the occurrence and nonoccurrence of a desired behavior and self-reporting some component of the identified desired behavior.	X	X
Self-Evaluation	Students monitor progress by comparing current performance to pervious performance usually with a		X

	set target in mind (i.e. set aim for words read per minute) reinforcement is provided with student performance exceeds previous performance or target aim is met.		
Self – instruction	Students uses self-statements to direct their own behavior		X
Goal Setting	Students select a performance target (i.e. completion of a term paper) for which the student can monitor their on progress, structure their time and efforts and motivate themselves towards said target.		X
Strategy instruction	Students are taught a sequence of action to complete on their own to reach a desired outcome or solve a presented problem.	X	X

Adapted from Ryan, J.B., Pierce, C.D., & Mooney, P. (2008).

Teacher-Mediated Antecedent Focused Interventions

Type of Teacher-Mediated Antecedent Focused Interventions		Evidence Base	
Intervention	Description	Elementary	Secondary
Verbalize Math Problems	Students are instructed to say a given math problem out loud before attempting to solve the equation	X	
Cubicles	Teachers instruct students to work at desks that have been set up with a permanent or temporary enclosure on three sides to reduce environmental distractions.	X	
Structured Academic Tasks	Teacher determines the order in which specific academic tasks are completed by the students	X	

Modeling, rehearsal, and feedback	Teachers provide a model of a desired skill, students practice the skill, and are given direct feedback from the teacher about their performance	X	X
Teacher planning strategies	Teachers analyze student performance data for trends and errors then use this information to plan instruction for the day		X
Life Space Interviewing	This is a behavioral crisis intervention technique in which the teacher and student engage in discussion regarding the displayed behavior(s) of concern as the behavior(s) occurs. Proponents of this technique argue that the student is most open to ideas for behavioral improvement when he or she is experiencing the crisis situation.	X	X
Adjusting Task difficulty	Teachers monitor students' rate of success on academic tasks and adjust the level of difficulty accordingly.		X
Previewing	A reading comprehension strategy that involves the teacher asking questions to activate the student's prior knowledge, having the student predict what will happen in the passage, and establishing a purpose to increase reading comprehension skills.	X	
Sequential prompting	Teachers use a series of leveled prompts to increase academic performance starting with the least amount of assistance as possible to elicit the correct response.		X
Adjusting presentation and point-delivery rate	Teachers vary the rate of instructional delivery and reinforcement of student engagement to determine the best pacing to achieve greater academic performance gains	X	
Teach Test-taking skills	Teachers front load students before administering an exam by teaching test-taking skills such as how to	X	X

	identify specific determiners, absurd options, similar options, and stem options to narrow down the correct response.		
Mnemonic instruction	Students are taught to connect new information being taught to something they already know and is easy to recall in order help students remember key components of the information being taught	X	
Taped words and drill instruction	Students are instructed to read lists of words at a rate of 80 WPM along with a recording of the same speed		X
Trial-and-error versus time delay	Teacher presents students with a word and directs the students to either read the word following its presentation or to repeat the word after it has been read by the teacher	X	
Personalized system of instruction	Instructors use a variety of techniques based on student specific needs to increase spelling skills. Techniques include teaching small units of material, visuals of the written word, student self-pacing through the material, a high mastery for advancement to the next unit of material, immediate feedback for exams, and use of student tutors	X	
Structured instructional system	Teachers utilized a modified version of the School Survival Skills Curriculum to guide instruction	X	X
Inter-trial interval duration	Teachers adjust amount of time by zero to five seconds that between a student reading a word and the presentation of the next word	X	
Incorporating student interest	Teacher designs lesson content around student interests	X	
Teacher vs. Child control of	Teachers either allowed students to select which task they would complete and what reward they would receive,	X	

choice task and reinforcement	or the teacher dictated which tasks and rewards were available from a prearranged list.		
Story mapping	Teachers create a visual representation of the characters in a story, the setting, and major events. This process is said to aid in increasing students' comprehension by helping them to identify the key literary components of a given narrative.	X	
Choice-making opportunities	Teachers follow a six-step procedure to allow for student choice throughout the instructional day. Teachers offer student multiple options to choose from, ask students to pick one, allow students some time to make a decision, wait for the student's response, give student the desired option, and prompt student to make a decision if one is not made within a reasonable timeframe.	X	
Individual curricular modification	Educators use results of Functional Behavioral Assessments to make individualized modifications to the curriculum or instructional delivery.	X	

Adapted from Ryan, J.B., Pierce, C.D., & Mooney, P. (2008).

Teacher-Mediated Consequence Focused Interventions

Type of Teacher-Mediated Consequence Focused Interventions		Evidence Base	
Intervention	Description	Elementary	Secondary
Token reinforcement system	Points or tokens are issued to students for retention of skills, meeting or beating performance targets, or displaying desired behaviors		X
Contingency reinforcers	Teachers assessed the effect of student-specified contingencies as opposed to teacher-specified	X	

	contingencies to enhance academic performance		
Use of free time	Students earn increased amounts of free time based on a predetermined contingency such as meeting or beating a words per minute reading fluency target	X	
Academic contracting	Teachers establish an agreement for a specific reinforcer such as a tangible item or preferred activity if the student meets a predetermined academic performance target.	X	
Written Feedback	Feedback on reading accuracy is provided by the Teacher in written format.	X	
Bonus contingency in token program	Bonus points or tokens are awarded by the teacher when a student scored 80% or higher on a given academic task.		X

Adapted from Ryan, J.B., Pierce, C.D., & Mooney, P. (2008).

APPENDIX B

Synthesis Matrix

Understanding Students with Emotional and Behavioral Disorders

Sources	Historical Context	Characteristics of Students with EBD	Academic Needs	Behavior Needs	Mental Health/ Socio-Emotional Needs	Outcomes	Educational Setting
American Psychiatric Association (2000)					X		
American Psychiatric Association (2013).					X		
Arcia, E. (2006).						X	
Bateman, B.D., & Chard, D.J. (1995).							X
Bettelheim, B. (1950).	X						X
Bradley, R., Henderson, K., Monfore, D.A. (2004).		X	X				X
Brigham, A. (1994).	X						
California Department of Education (2015).		X				X	X
Cheney, D., & Bullis, M. (2004).						X	
Cicchetti, D., Toth, S.L. (1991).					X		
Clark, H.B., & Davis, M. (2000).						X	
Coie, J. D., Miller-Jackson, S., & Bagwell, C. (2000).					X		
Coleman, M.C., & Webber, J. (2007).						X	
Colvin, G. (2004).	X	X		X	X		
Cook, M.N. (2005).				X			
Coutinho, M.J. (1986).		X	X			X	
Coutinho, M.J., Oswald, D.P., Best, A.M., & Forness, S.R. (2002).		X					
Cox, S. (1999).							X
Crockett, J.B. & Kauffman, J.M. (1999).		X	X				X
Crundwell, R.C., & Killu, K. (2007).		X			X		
Cullinan, D. (2004).		X			X		
D'Amico, R., & Marder, C. (1991).		X					
Doll, B. (1996).		X		X			
Doll, B., & Lyon, M.A. (1998).		X				X	

Sources	Historical Context	Characteristics of Students with EBD	Academic Needs	Behavior Needs	Mental Health/ Socio-Emotional Needs	Outcomes	Educational Setting
Dupper, D.R., & Bosch, L.A. (1996).						X	
Eber, L. & Keenan, S. (2004)		X		X	X		
Eddy, J.M., Reid, J.B., & Curry, V. (2002).		X			X		
Epstein, M.H., Kinder, D., & Bursuck, B. (1989).		X	X			X	
Epstein, M.H., Nelson, J.R., Trout, A.L., & Mooney, P. (2005).			X				
Epstein, M.H., Nordness, P.D., Kutash, K., Duchnowski, A., Schrepf, S., Benner, G.J., & Nelson, J. R. (2003).					X	X	
Falk, K.B., & Wehby, J.H. (2001).			X	X			
Farmer, T.W. (2000).	X	X			X	X	
Farmer, E.M. & Farmer, T.W. (1999).						X	X
Farmer, T.W., & Quinn, M.M., Hussey, W., & Holahan, T. (2001).				X	X		
Fenichel, C. (1966).	X						X
Fleming, J.E., & Offord, D.R. (1990).		X			X		
Franklin, C. (1992).							X
Freiberg, H.J. (2005).							X
Furlong, M.J., Morrison, G.M., & Fisher, E.S. (2005).		X	X				
Garmezy, N., Mastern, A.S., & Tellegen, A. (1984).		X			X	X	
Glassberg, L.A., Hooper, S.R., & Mattison, R.E.(1999).		X	X			X	
Goodlad, 1997							X
Gregg, S. (1999).							X
Gresham, F.M. (2002).					X		
Gresham, F.M., & Kern, L. (2004).		X		X	X		
Gunter, P.L., & Denny, R.K. (1998).		X					
Hallahan, D.P., Kauffman, J.M., & Pullen, P.C. (2009).					X	X	
Hallenbeck, B.A., & Kauffman, J.M. (1995).			X		X		X
Hallenbeck, B.A., Kauffman, J.M., & Lloyd, J. W. (1993).			X				X
Hammen, C., & Rudolph, K.D. (2003).		X			X		
Hayling, C., Cook, C., Gresham, F.M., State, T., & Kern, L. (2008).			X				X

Sources	Historical Context	Characteristics of Students with EBD	Academic Needs	Behavior Needs	Mental Health/ Socio-Emotional Needs	Outcomes	Educational Setting
Hendrickson, J. M., Smith, C. R., & Frank, A.R. (1998).			X	X		X	X
Henley, M. & Long, N. (1999).					X		
Henley, M., Ramsey, R.S., & Algozzine, F., (2002).					X		
Hester, P.P., Baltondano, H.M., Hendrickson, J.M., Tonelson, S.W., Conroy, M.A., & Gable, R.A. (2004).		X	X				
Ishii-Jordan, S.R. (2000).		X					
Jolivette, K., Stichter, J.P. & McCormick, K.M. (2002).			X	X	X		
Kandel, D.B., Raveis, V.H., & Davies, M. (1986).		X			X		
Kanner, L. (1962).	X						
Kauffman, J.M. (1999).					X		
Kauffman, J.M. (1976).	X						
Kauffman, J. M., & Hallahan, D. P. (Eds.). (2005).							X
Kauffman, J.M., & Landrum, T.J. (2009).		X	X			X	
Kazdin, A.E. (1997).		X			X		
Knopf, D., Park, M.J., & Mulye, T.P. (2008).		X			X		
Kohn, A. (1993).		X					
Kohn, A. (September 1993).		X					
Kritsonis, W.A., & Cloud, M. (2006).						X	
Landrum, T.J., & Kauffman, J. M. (2003).		X	X				
Landrum, T.J., Tankersley, M. & Kauffman, J.M. (2003).		X	X			X	
Lane, K.L., Wehby, J.H., Little, M.A., & Cooley, C. (2005).		X					X
Lange, C.M., & Sletten, S.J.(2002).							X
Leone, P.E., Rutherford, R.B., & Nelson, C.M. (1991).							X
Masia, C.L., Klein, R.G., Storch, E.A., & Corda, B. (2001).		X			X		
Moffitt, T.E., Caspi, A., Rutter, M., & Silva, P.A. (2002).		X			X		
Mooney, P., Epstein, M.H., Reid, R., & Nelson, J.R. (2003).			X				

Sources	Historical Context	Characteristics of Students with EBD	Academic Needs	Behavior Needs	Mental Health/ Socio-Emotional Needs	Outcomes	Educational Setting
Morrison, G.M., Anthony, D., Storino, M., & Dillion, C. (2001).						X	
Nelson, C.M. (2004).	X						
Nelson, C.M. (2000).						X	
Nelson, J.R., Benner, G.J., Lane, K., & Smith, B.W. (2004).		X				X	X
Nelson, J.R., Benner, G.J., & Mooney, P. (2008).			X			X	X
Nolen-Hoeksema, S., Girgus, J.S., & Seligman, M.E. (1992).		X			X		
Owens, L., & Konkol, L., (2004).							X
Patterson, G.R., Reid, J.B., & Dision, T.J. (1992).	X	X		X	X		
Reid, R., & Nelson, J.R. (2002).							X
Rhode, G., Jensen, W.R., & Reavis, H.K. (1992).					X		
Robinson, T.R. (2007).		X	X				
Roby, D.E. (2004).						X	
Rock, Rosenberg, & Carran (1994).		X				X	X
Rosenberg, M., Westling, D., & McLeskey, J. (2008).						X	
Rothman, D.J. (1971).	X						X
Rumberger, R.W. (1987).		X		X			
Schinke, S.P., & Gilchrist, L.D. (1984).					X		
Silver, S.E., Duchnowski, A.J., Kutash, K., & Friedman, R.M. (1992).			X			X	X
Skiba, R.J., Peterson, R.L., & Williams, T. (1997).							X
Slotkin, J., Forehand, R., Fauber, R., McCombs, A., & Long, N. (1988).		X			X		
Smith, S.M., & Thomases, J., (2001).							X
Snyder, H. (2000).		X				X	
Stainback, W.C., & Stainback, S.B. (1996).	X						X
Stein, M., & Davis, C.A. (2000).			X	X			
Stevenson, J., & Goodman, R. (2001).						X	
Suh, S., & Suh, J. (2007).						X	
Sutherland, K.S. (2000).					X		

Sources	Historical Context	Characteristics of Students with EBD	Academic Needs	Behavior Needs	Mental Health/ Socio-Emotional Needs	Outcomes	Educational Setting
Sutherland, K.S., & Wehby, J.H. (2001).			X	X			
Sutherland, K.S., Wehby, J.H., & Yoder, P.J. (2002)		X					
Tobin, T., & Sprague, J. (2000).							X
Trout, A., Nordness, P.D., Pierce, C.D., & Epstein, M.H. (2003).		X	X			X	
U.S. Department of Education, (2014).		X					
U.S. Department of Education, National Center for Education Statistics (2012).		X				X	
Utley, C.A., & Mortweet, S.L.(1997).		X					
Van Acker, R. (2010).						X	
Visser, J., Cole, T., & Daniels, H. (2002).						X	
Wagner, M. (2003).		X					X
Wagner, M., Friend, M., Bursuck, W.D., Kutash, K., Duchnowski, A.J., Sumi, W.C., & Epstein, M.H. (2006)							X
Wagner, M., Marder, C., Blackorby, J., Cameto, R., Newman, L., Levine, P., et al. (2003).		X					
Wagner, M., Newman, L., Cameto, R., Levine, P., & Garza, N. (2006).		X					
Walker, H.M. (1995).		X	X		X		
Walker, H.M. (2004).						X	
Walker, H.M., Forness, S.R., Kauffman, J. M., Epstein, M.H., Gersham, F. M., & Nelson, C.M. (1998)	X	X			X	X	
Walker, H.M., Ramsey, E., & Gresham, F.M. (2004).	X	X	X	X	X	X	
Webber, J., & Plotts, C.A. (2008).						X	X
Wiley, A.L., Siperstein, G.N., Brountree, K.E., Forness, S.R., and Brigham, F.J. (2008).			X			X	
Wolf, M.M., Braukmann, C.J. & Ramp, K.A. (1987).		X			X	X	

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Alexander, P., & Judy, J. (1988). Fenstermacher, G.D., & Richardson, V. (2005).	X						
Algozzine, R. (1990).	X				X		X
Algozzine, B., Audette, B., Ellis, E., Marr, M., & White, R. (2000).		X	X				X
Allen, L.J., Howard, V.F., Sweeney, W. J., & McLaughlin, T.F. (2016).		X	X			X	
American Association for Employment in Education (AAEE).	X						
Andrews, L. & Kozma, A. (1990).	X						
Barbetta, P. (1990).					X		X
Bauer, A.M. & Shea, T.M. (1988).					X		X
Berlinger, D.C. (2005).	X						
Beuchert-Klotz, M.E. (1987).					X		X
Blanton, L.P., Sindelar, P.T., & Correa, V.I. (2006).	X						
Blood, E., & Neel, R.S. (2007).			X	X	X		X
Bradley, R.E. (2001).					X		X
Bradley, R., Henderson, K., Monfore, D.A. (2004).	X					X	
Brownell, M., Bishop, A. G., Gersten, R., Klinger, J., Penfield, R., Dimino, J., Haager, D., Menon, S., Sindelar, P. (2009)	X						
Brown, F. D. (2004).	X						
Brownell, M.T., Smith, S.W., & Miller, M.D. (1994).	X						
Buck, G.H., Polloway, E.A., Kirkpatrick, M.A., Patton, J.R., Fad, K.M. (2000).		X			X		X
Bullock, L.M., & Whelan, R.J. (1971, March)	X						
Burke, M.D., Vannest, K., Davis, J., Davis, C., & Parker, R. (2009).				X			
Cancio, E.J. (2007).					X		X
Cancio, E.J. (2008).			X		X		X
Carlson, E., Lee, H., & Schroll, K. (2004).	X						

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Carnine, D.W. (1976).			X				
Carr, E. G., & Durand, V. M. (1985).		X					X
Carr, E.G., Dunlap, G., Horner, R.H., Koegel, R.L., Turnbull, A.P., Sailor, W., Anderson, J.L., Albin, R.W., Koegel, L.K., (2002).			X				X
Carr, E.G., Taylor, J.C., & Robinson, S. (1991).	X						
Carr, S.C., & Punzo, R. P. (1993).			X				
Center, D.B., & Steventon, C. (2001, August).	X						
Cheney, D., & Barringer, C. (1995).	X	X					
Cochran, L., Feng, H., Cartledge, G., & Hamilton, S. (1993).			X				
Coffee, G., & Ray-Subramanian, C.E. (2009).				X			X
Connor F. P. (1976).	X						
Conroy, M.A., & Harader, D. (1995)					X		
Conroy, M., Fox, J., Crain, L., Jenkins, A., & Belcher (1996).					X		
Cook, B.G., Landrum, T.J., Tankersley, M. & Kauffman, J.K.(2003).		X					
Cook, B.G., Schirmer, B.R. (2003)	X	X					
Cook, L., & Friend, M. (1995).	X						
Cook, M.N. (2005).				X	X		X
Cooper, J.O., Heron, T.E., & Heward, W.L. (1987).					X		X
Coutinho, M.J. (1986).						X	
D'Amico, R., & Marder, C. (1991).						X	
Daly, E.J., Martens, B.K., Kilmer, A., & Massie, D.R. (1996).			X	X		X	
Deci, Koestner, & Ryan, 2001					X	X	
De Martini-Scully, D., Bray, M.A., & Kehle, T.J. (2000).	X		X	X			X
Dorward, B.A. (1963)	X						
Duda, M.A., Dunlap, G., Fox, L., Lentini,R., & Clarke, S. (2004)			X				X

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Dunlap, G., DePerczel, M., Clark, S., Wilson, D., Wright, S., & White, R., et al. (1994).			X				
Dunlap, G., Strain, P.S., Fox, L., Carta, J.J., Conroy, M., Smith, B.J., & Sowell, C. (2006).		X					
Eber, L., Sugai, G., Smith, C.R., & Scott, T. M. (2002).	X						X
Epstein, M.H., Kinder, D., & Bursuck, B. (1989).						X	
Ervin, R.A., Radford, P.M., Bertsch, K., Piper, A.L., Ehrhardt, K.E., & Poling, A. (2001).					X		X
Falk, K.B., & Wehby, J.H. (2001).			X				
Farely, C., Torres, C., Wailehua, C.T., Cook, L. (2012).		X				X	
Farely et. al. (2001)					X		
Farmer, T.W., & Quinn, M.M., Hussey, W., & Holahan, T. (2001).	X						
Farrell, D.T. (1997).			X		X		X
Farrell, D.T., Smith, S.W., & Brownell, M.T. (1998).	X		X		X		X
Fenstermacher, G.D., & Richardson, V. (2005).	X						
Fitzpatrick, M., & Knowlton, E. (2009).	X	X	X	X	X		
Fitzsimons-Lovett, A. (1998).			X				
Forness, S.R., Freeman, S.F.N., & Paparella, T. (2006)					X		X
Gable, R.A. (2010).	X	X	X	X	X	X	X
Gable, R.A., Butler, C.J., Walker-Bolton, I., Tonelson, S.W., Quinn, M.M., Fox, J.J (2003).	X	X					X
Gable, R. A., Quinn, M.M., Rutherford, R.B., & Howell, K. (1998).					X		X
Gagnon, J.P., Rockwell, S.B., Scott, T.M. (2008).					X		X
George, N.L., George, M.P., Gersten, R., & Grosenick, K.K. (1995).	X						
Glassberg, L.A., Hooper, S.R., & Mattison, R.E. (1999).						X	
Greenwood, C.R., & Abbott, M. (2001)	X						
Guerin, G., & Denti, L. (1999).		X					

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Guetzloe, E. (1999).		X					
Gunter, P. L., Coutinho, M. J., & Cade, T. (2002).						X	
Gunter, P.L., & Denny, R.K. (1998).						X	
Hagan-Burke, S., Burke, M.D., & Sugai, G. (2007).						X	
Hanley, G.P., Iwata, B,A., & McCord, B.E. (2003).					X		X
Haselkorn, D., Calkins, A. (1993).	X						
Hathcote, A. R.D. (2011).	X	X					
Hayling, C., Cook, C., Gresham, F.M., State, T., & Kern, L. (2008).	X	X					
Hester, P.P., Baltondano, H.M., Hendrickson, J.M., Tonelson, S.W., Conroy, M.A., & Gable, R.A. (2004).	X	X	X	X	X	X	X
Hewitt, F.M. (1968).					X		X
Higgins, J.W., Williams, R.L., & McLaughlin, T.F. (2001).	X		X	X			
Hodge, J., Riccomini, P.J., Buford, R., & Herbst, M.H. (2006).				X			
Hoff, K.E., & DuPaul, G.J. (1998)			X				
Hoff, K.E., & Robinson, S.L. (2002).			X				
Horner, R. H. (2000).							X
Horner, R., Freeman, R., Nelson, C.M., & Sugai, G. (2010).		X	X				
Horner, R.H., & Sugai, G. (2000).			X				
Ishii-Jordan, S.R. (2000).		X					
Iwata, B.A., Dorsey, M.F., Slifer, K.J., Bauman, K.E., & Richman, G.S. (1994).					X		
Jack, S.L., Shores, R.E., Denny, R.K., & Gunter, P. (1996).	X					X	
Jolivette, K. (2005).					X		
Jolivette, K., Stichter, J.P. & McCormick, K.M. (2002).	X						
Kamps, D., Wendland, M., & Culpepper, M. (2006).						X	
Kauffman, J.M., Bantz, J., & McCullough, J. (2002).	X	X					

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Kauffman, J.M. & Landrum, T.J. (2013).		X					
Kauffman, J.M., & Landrum, T.J. (2009).		X					
Kavale, K.A., Mathur, S.R., & Mostert, M.P.(2004).				X			
Kern, L., Childs, K.E., Dunlap, G., Clarke, S., & Falk, G.D. (1994).					X		
Kern, L., Hilt, A.M., & Gresham, F.M. (2004)			X	X	X		
Kern, L., Hilt-Panahon, A., & Sokol, N.G. (2009).					X		X
Kern, L., Mantegna, M.E., Vorndran, C.M., Bailin, D., & Hilt, A. (2001).			X				
Kern, L., O'Neil, R., Starosta, K. (2005).							X
Kerr, M.M., & Nelson, C.M. (2005).					X		X
Kerr, M.M., & Nelson, C.M. (1989).					X		X
Kohn, A. (September 1993).			X				
Lago-Delello, E. (1998).	X						
Landrum, T.J., & Kauffman, J. M. (2003).		X					
Landrum, T.J., & Sweigart, C.A. (2014).		X	X				
Landrum, T.J., Tankersley, M. & Kauffman, J.M. (2003).	X	X	X				
Lane, K.L. (2004)		X	X				
Lane, K.L., Eisner, S.L., Kretzer, J., Bruhn, A.L., Crnobori, M., Funke, L., & Casey, A. (2009).					X		
Lane, K.L., Kalberg, J.R., & Shepcaro, J.C. (2009).					X		
Lane, K.L., Wehby, J.H., Little, M.A., & Cooley, C. (2005).						X	
Lee, D.L. (2005).		X					
Lee, D.L. (2006).		X					
Lewis, T.J., Hudson, S., Richter, M., Johnson, N. (2004).		X	X	X	X		
Lewis, T.J., & Sugai, G. (1999).			X				X
Lohrmann, S., & Talerico, J. (2004).	X		X				
Mace, F.C., Hock, M.L., Lalli, J.S., West, B.J., Belfore, P., & Pinter, e., et al. (1988).		X	X				

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Martin, N.T., Gaffan, E.A., & Williams, T. (1999).					X		X
McConaughy, S.H., Kay, P. J., & Fitzgerald, M. (2000).			X				
McLaughlin, T.F. (1991).			X				
Meadows, N.B., & Stevens, K.B. (2004).				X			
Meyer, K.A. (1999).						X	X
Mohr, W.K., & Pumariega, A.J. (2004).					X		X
Mooney, P., Ryan, J.B., Uhing, B.M., Reid, R., & Epstein, M.H. (2005).			X			X	
Mruzek, D.W., Cohen, C., & Smith, T. (2007).							X
Musser, E.H., Bray, M.A., Kehle, T.J., & Jenson, W.R. (2001).	X		X	X			
Nelson, C.M. (2004).	X						
Nelson, J.R., Benner, G.J., Lane, K., & Smith, B.W. (2004).						X	
Nelson, J.R., Benner, G.J., & Mooney, P. (2008).						X	
Nelson, J.R., & Roberts, M.L. (2000).	X						
Nichols, J.D., & Utesch, W.E. (1998).		X					
Odom, S., Brantinger, E., Gersten, R., Horner, R., Thompson, B., & Harris, K. (2005).		X					
Pierce, C.D., Reid, R., & Epstein, M.H. (2004).			X				
Polsgrove, L., & Smith, S.W. (2004).				X			
Ramsey, M.L., Jolivette, K., Patterson, D., & Kennedy, C. (2010).			X				
Raywid, M. (1998).		X					
Raywid, M. (1990).		X					
Reid, R., & Nelson, J.R. (2002).					X		X
Rispoli, M., Lang, R., Neely, L., Camargo, S., Hutchins, N., & Davenport, K., et al. (2013).			X				
Robinson, T.R. (2007).	X						
Rock, Rosenberg, & Carran (1994).					X		X
Romaniuk, C., Miltenberger, R., Conyers, C., Jenner, N., Jurgens, M., & Ringenberg, C. (2002).			X				X

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Ruth, J.W. (1996).							X
Rutherford, R.B., Quinn, M.M., & Mathur, S.R. (2004).		X					
Ryan, J.B., Pierce, C.D., & Mooney, P. (2008).	X	X	X	X	X		
Ryan, J.B., Reid, R., & Epstein, M.H. (2004).			X			X	X
Scheuermann, B.K., & Hall, J.A. (2012).			X	X	X		
Scott, T.M., Park, K.L., Swain-Bradway, J., & Landers, E. (2007).			X	X	X		
Shernoff, E.S., Kratochwill, T.R., & Stoiber, K.C. (2003).	X	X					
Shogren, K.A., Faggella-Luby, M.N., Bae, S., & Wehmeyer, M.L. (2004).			X				X
Shores, R.E., Jack, S.L., Gunter, P.L., Ellis, D.N., DeBriere, T.J., & Wehby, J.H. (1993).	X						
Simonsen, B., Fairbanks, S., Briech, A., Myers, D., & Sugai, G. (2008).		X					X
Simpson, R., Peterson, R., & Smith, C. (2010).	X	X					
Singh, K., & Billingsley, B.S. (1996).	X						
Skiba, R.J, & Peterson, R.L. (2005).			X				
Skinner, C.H., Belfiore, P.J., & Pierce, N (1992).			X				
Skinner, C.H., Ford, J.M., & Yunker, B.D. (1991).			X				
Spencer, T. D., Detrich, R., & Slocum, T. A. (2012).		X					
Stage, S. A., Jackson, H.G., Moscovitz, K., Erickson, M.J., Thurman, S.O., Jessee, W., & Olson, E.M. (2006).							X
Strain, P.S., Lambert, D.L., Kerr, M.M., Stagg, V., & Lenkner, D.A. (1983a).	X		X				
Strain, P.S., Lambert, D.L., Kerr, M.M., Stagg, V., & Lenkner, D.A. (1983b).	X						
Sugai, G, & Horner, R.H. (2005).			X				X
Sugai, G., Lewis-Palmer, T., & Hagan-Burke, S. (2000).							X
Sutherland, K.S. (2000).			X				

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Sutherland, K.S., & Wehby, J.H. (2001).	X		X			X	X
Sutherland, K.S., Wehby, J.H., & Yoder, P.J. (2002)	X		X			X	X
Taylor, E.D., Hewitt, F.M., Artourso, A.A., Quay, H.C., Soloway, M.M., & Sttukkwekkm, R.J. (1972).					X		X
Tobin, T., & Sprague, J. (2000).					X		X
Treptow, M.A., Burns, M.K., & McComas, J.J. (2007).						X	
Trout, A., Nordness, P.D., Pierce, C.D., & Epstein, M.H. (2003).						X	
Trussell, R.P. (2008).			X				
Turnbull, A., Edmonson, H., Griggs, P., Wickham, D., Sailor, W., Freeman, R. et. al. (2002).			X		X		
Ulke-Kurkcuoglu, B., & Kircaali-Iftar, G. (2010).			X				
Utley, C.A., & Mortweet, S.L. (1997).			X				
Van Acker, R. (2010).			X				
Van Acker, R. (2005).	X		X	X	X		
Van Acker, R., & Grant, S. H. (1996).	X		X				
Van Acker, R., Grant, S.H., & Henry, D. (1996).	X						
Wagner, M., Marder, C., Blackorby, J., Cameto, R., Newman, L., Levine, P., et al. (2003).						X	
Wagner, M., Newman, L., Cameto, R., Levine, P., & Garza, N. (2006).						X	
Walker, H.M. (2004).	X	X					
Walker, H.M., Ramsey, E., & Gresham, F.M. (2004).	X						
Wehby, J.H., Lane, K.L., & Falk, K.B. (2003).	X					X	
Wehby, J.H., Symons, F.J., & Shores, R.E. (1995).	X						
Wehby, J.H., Symons, F.J., Canale, J., & Go, F. (1998).	X		X				
West, R. P., & Sloane, H.N. (1986).	X		X			X	X
Wiley, A.L., Siperstein, G.N., Brountree, K.E., Forness, S.R., and Brigham, F.J. (2008).	X						
Wing Institute, (2010).		X					

Sources	Educator Preparation	Use of Evidence-based Practices	Primary or Universal Interventions	Secondary Interventions	Tertiary Interventions	Learning Specific Interventions	Behavior Specific Interventions
Workman, E.A., Kindall, L.M., & Williams, R.L. (1980).	X						
Yell, M.L., Meadows, N.B., Drasgow, E., & Shiner, J.G. (2009).		X					
Zabel, R., & Zabel, M. (2001).	X						

APPENDIX C

Communications with Special Education Directors and Study Participants

Letter mailed to special educator directors and program personnel

September 19, 2018

Dear Director of Special Education

My name is Thelmisha Vincent and I am a doctoral student engaging in a study of services for students with emotional and behavioral disorders in the state of California. More specifically, I am interested in understanding what evidence-based interventions for this student population are being employed in your schools and programs, and how school professionals rate their preparedness to implement evidence-based interventions for students with emotional and behavioral disorders across California.

I am seeking participants to respond to an online survey which should take no more than 10 to 15 minutes to complete. Participants should currently provide some type of service(s) to students with emotional and behavioral disorders or have done so within the past 3 years. Your assistance in securing study participants would be greatly appreciated as participation in this survey may help school professionals, staff developers, and researchers identify the most frequently used interventions for students with emotional and behavioral disorders in California, and assist in the guidance of future development of service provisions for this student population in our state.

The survey is confidential and in no way will responses be linked to any individual or particular school program or district. Participation is voluntary, and participants may stop the survey at any time without penalty.

Please forward this letter to any school personnel (teachers, supervisors, administrators, behavior analysts, therapist etc.) in your district who provide direct or indirect services to students with emotional and behavioral disorders. You may also complete the survey as your opinion is valuable to me and this study as well.

Link to Survey:
https://www.surveymonkey.com/r/ProgramsforstudentswithEBDinCA

If you have any questions regarding this survey, please contact Vinc5702@brandman.edu or call (510) 367-7040.

Thank you in advance for your assistance.

Respectfully submitted,
Thelmisha N. Vincent, M.S., BCBA, M.Ed.
Doctoral Candidate
Brandman University

Sample Email Sent to Study Participants

Hello, my name is Thelmisha Vincent and I am currently conducting dissertation research on the use of Evidenced based instructional practices for students with Emotional and Behavioral disorders in effort to complete a Doctor of Education in Organizational Leadership from Brandman University.

I am looking for support from General Education Teachers, Special Education Teachers, Behavior Analyst, RBTs or related service providers and or administrators who work or have previously worked with students with emotional or behavioral disorders within the past 3 years.

It would also be a tremendous help to me if you would be willing to participate in the study by completing a 15-minute online survey by clicking the link below.

Please also share this link with the teachers at your school site, friends and colleagues who fall within those categories as well as the more responses I am able to gather, the greater impact this study is likely to have on better understanding and meeting the needs of this unique student population.

Link to Survey:
https://www.surveymonkey.com/r/ProgramsforstudentswithEBDinCA

Thank you for your participation in support of this research project.

Additional information including copies of IRB approval letters are available upon request.

Thelmisha Vincent, M.S., BCBA, M.Ed.

APPENDIX D

Survey of Programs for Students with Emotional and Behavioral Disorders in California

Informed Consent Notice

- The purpose of this survey is to accrue information regarding the usage or and preparedness to implement evidence-based interventions for students with emotional and behavioral disorders
- Participation in this survey is completely voluntary. You have the right to withdraw at any time without explanation with no penalty or loss of rights or benefits.
- The survey will take approximately 15 minutes to complete
- All data obtained will remain confidential. Data collected will not be linked to any particular person, specific school program or district. The confidentiality of your information will be maintained in any publications or presentations regarding this study.
- Data from the survey will be stored on the online survey platform under password protection until it is coded for analysis by the researcher. Printed copies of data sets will be stored under double lock in a locked file cabinet accessible only by the researcher and separate from focus group responses and other study information.
- There are no foreseeable risks for completing this survey
- The possible benefits of participation in the survey and or focus group include (a) identifying the most frequently used interventions for students with emotional/behavioral disorders in California; and (b) assisting in the guidance of the future development of service provisions for students with emotional and behavioral disorders in California.
- This research study will be reviewed and likely approved by the Brandman University Institutional Review Board (IRB). The Brandman University IRB may be contacted at (949) 341-7641 with questions regarding the rights of research subjects.
- For those of you who complete the survey, there is an opportunity to provide more in-depth insight regarding your professional experiences working with this student population in California via a small focus group session (4 people max) with the researcher. At the end of the survey you will be asked to include contact information if you wish to participate in the focus group portion of this study. Please note that any personal information given will in no way be connected to your survey responses and is a separate component to the survey set up by the researcher to protect confidentiality of responses to survey questions.
- You may print a copy of this notice for your records

  By clicking continue you agree that you have read and understand the informed consent and are ready to proceed to the survey. If at any time you would like to withdraw from research study, please close your browser.

Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

1. Introduction

Thank you for participating in this survey of evidence based programs for students with emotional and behavioral disorders. Your feedback is important. This survey consists of four parts and should take approximately 15 minutes to complete.

1

Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

2. Informed Consent Notice

The purpose of this survey is to gain information regarding the usage of evidence-based interventions for students with emotional and behavioral disorders as well as educators perceived preparedness to implement these strategies with students. Participation in this survey is completely voluntary. You have the right to withdraw at anytime without explanation, penalty, loss of rights or benefits. This survey will take approximately 15 minutes to complete and all information obtained from your responses will remain completely confidential. Data collected from this survey will be secured in a separate location away from focus group responses and other study information. Likewise, the confidentiality of your information will be maintained in any publications or presentations regarding this study.

There are no foreseeable risks for completing this survey

The possible benefits of participation in the survey and or focus group include (a) identifying the most frequently used interventions for students with emotional/behavioral disorders in California; and (b) assisting in the guidance of the future development of service provisions for students with emotional and behavioral disorders in California.

This research study has been reviewed and approved by the Brandman University Institutional Review Board (IRB). The Brandman University IRB may be contacted at (949) 341-7641 with questions regarding the rights of research subjects.

For those of you who complete the survey, there is an opportunity to provide more in depth insight regarding your professional experiences working with this student population in California via a focus group session with the researcher. At the end of the survey you will be asked to include contact information if you wish to participate in the focus group portion of this study. Please note that any personal information given will in no way be connected to your survey responses.

You may print a copy of this notice for your records

By clicking Next you agree that you have read and understand the informed consent and are ready to proceed to the survey. If at any time you would like to withdraw from research study please close your browser.

2

Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

3. Part I: Strategies

1. Please review the list of strategies provided below. Please indicate whether there is evidence to support the use of each strategy with students with Emotional and behavioral Disorders.

	No Evidence	Some Evidence	Strong Evidence	Not sure if there is any evidence	I don't know what this is
1. Positive Behavior Intervention Strategies (PBIS)	◯	◯	◯	◯	◯
2. Behavior Specific Praise	◯	◯	◯	◯	◯
3. Frequent opportunities to respond during instruction	◯	◯	◯	◯	◯
4. Peer Tutoring	◯	◯	◯	◯	◯
5. Self –monitoring	◯	◯	◯	◯	◯
6. Story mapping	◯	◯	◯	◯	◯
7. Social Skills Training	◯	◯	◯	◯	◯
8. Functional Behavioral Assessment (FBA)	◯	◯	◯	◯	◯
9. Proximity	◯	◯	◯	◯	◯
10. Response Cards	◯	◯	◯	◯	◯
11. Goal Setting	◯	◯	◯	◯	◯
12. Rapport Building	◯	◯	◯	◯	◯
13. Front Loading	◯	◯	◯	◯	◯
14. Matching instruction to student interest	◯	◯	◯	◯	◯
15. Brief Instructional Intervals	◯	◯	◯	◯	◯
16. Scaffolding of instruction	◯	◯	◯	◯	◯
17. Small group instruction	◯	◯	◯	◯	◯
18. Verbal reprimands or lecture based consequences	◯	◯	◯	◯	◯

	No Evidence	Some Evidence	Strong Evidence	Not sure if there is any evidence	I don't know what this is
19. Choice making opportunities for students	○	○	○	○	○
20. Behavior momentum	○	○	○	○	○
21. Teaching expected behaviors	○	○	○	○	○
22. Behavior contracts	○	○	○	○	○
23. Use of free time	○	○	○	○	○
24. Peer-assisted learning	○	○	○	○	○
25. Clear rules/expectations	○	○	○	○	○
26. Previewing	○	○	○	○	○
27. Mnemonic devices	○	○	○	○	○
28. Mindfulness practices	○	○	○	○	○
29. Written feedback	○	○	○	○	○
30. Point and or level systems	○	○	○	○	○
31. Differentiated reinforcement	○	○	○	○	○
32. Opportunities to practice gratitude	○	○	○	○	○
33. Direct instruction	○	○	○	○	○
34. Brisk pacing of instruction	○	○	○	○	○
35. Restraint procedures	○	○	○	○	○
36. Seclusion/time out rooms	○	○	○	○	○
37. Peer counseling	○	○	○	○	○
38. Modeled emphathy	○	○	○	○	○
39. Cubicles/ temporary dividing walls	○	○	○	○	○
40. Life space interviewing	○	○	○	○	○
41. Community of care and support	○	○	○	○	○
42. Trauma-informed approach	○	○	○	○	○

4

	No Evidence	Some Evidence	Strong Evidence	Not sure if there is any evidence	I don't know what this is
43. Restorative Justice	◯	◯	◯	◯	◯
44. Challenge Thinking	◯	◯	◯	◯	◯
45. Cultural Responsiveness	◯	◯	◯	◯	◯

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Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

4. Part II: Frequency of Implementation

Please read each of the following items carefully and check the column that best describes your perception of the frequency of use for each item

2. In my **program** we have:

	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
1. Positive Behavior Intervention Strategies (PBIS)	◯	◯	◯	◯	◯
2. Behavior Specific Praise	◯	◯	◯	◯	◯
3. Frequent opportunities to respond during instruction	◯	◯	◯	◯	◯
4. Peer Tutoring	◯	◯	◯	◯	◯
5. Self –monitoring	◯	◯	◯	◯	◯
6. Story mapping	◯	◯	◯	◯	◯
7. Social Skills Training	◯	◯	◯	◯	◯
8. Functional Behavioral Assessment (FBA)	◯	◯	◯	◯	◯
9. Proximity	◯	◯	◯	◯	◯
10. Response Cards	◯	◯	◯	◯	◯
11. Goal Setting	◯	◯	◯	◯	◯
12. Rapport Building	◯	◯	◯	◯	◯
13. Front Loading	◯	◯	◯	◯	◯
14. Matching instruction to student interest	◯	◯	◯	◯	◯
15. Brief Instructional Intervals	◯	◯	◯	◯	◯
16. Scaffolding of instruction	◯	◯	◯	◯	◯
17. Small group instruction	◯	◯	◯	◯	◯
18. Verbal reprimands or lecture based consequences	◯	◯	◯	◯	◯

	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
19. Choice making opportunities for students	○	○	○	○	○
20. Behavior momentum	○	○	○	○	○
21. Teaching expected behaviors	○	○	○	○	○
22. Behavior contracts	○	○	○	○	○
23. Use of free time	○	○	○	○	○
24. Peer-assisted learning	○	○	○	○	○
25. Clear rules/expectations	○	○	○	○	○
26. Previewing	○	○	○	○	○
27. Mnemonic devices	○	○	○	○	○
28. Mindfulness practices	○	○	○	○	○
29. Written feedback	○	○	○	○	○
30. Point and or level systems	○	○	○	○	○
31. Differentiated reinforcement	○	○	○	○	○
32. Opportunities to practice gratitude	○	○	○	○	○
33. Direct instruction	○	○	○	○	○
34. Brisk pacing of instruction	○	○	○	○	○
35. Restraint procedures	○	○	○	○	○
36. Seclusion/time out rooms	○	○	○	○	○
37. Peer counseling	○	○	○	○	○
38. Modeled emphathy	○	○	○	○	○
39. Cubicles/ temporary dividing walls	○	○	○	○	○
40. Life space interviewing	○	○	○	○	○
41. Community of care and support	○	○	○	○	○
42. Trauma-informed approach	○	○	○	○	○

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	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
43. Restorative Justice	◯	◯	◯	◯	◯
44. Challenge Thinking	◯	◯	◯	◯	◯
45. Cultural Responsiveness	◯	◯	◯	◯	◯

3. In my program/ classroom **I use**:

	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
1. Positive Behavior Intervention Strategies (PBIS)	◯	◯	◯	◯	◯
2. Behavior Specific Praise	◯	◯	◯	◯	◯
3. Frequent opportunities to respond during instruction	◯	◯	◯	◯	◯
4. Peer Tutoring	◯	◯	◯	◯	◯
5. Self –monitoring	◯	◯	◯	◯	◯
6. Story mapping	◯	◯	◯	◯	◯
7. Social Skills Training	◯	◯	◯	◯	◯
8. Functional Behavioral Assessment (FBA)	◯	◯	◯	◯	◯
9. Proximity	◯	◯	◯	◯	◯
10. Response Cards	◯	◯	◯	◯	◯
11. Goal Setting	◯	◯	◯	◯	◯
12. Rapport Building	◯	◯	◯	◯	◯
13. Front Loading	◯	◯	◯	◯	◯
14. Matching instruction to student interest	◯	◯	◯	◯	◯
15. Brief Instructional Intervals	◯	◯	◯	◯	◯
16. Scaffolding of instruction	◯	◯	◯	◯	◯
17. Small group instruction	◯	◯	◯	◯	◯
18. Verbal reprimands or lecture based consequences	◯	◯	◯	◯	◯

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	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
19. Choice making opportunities for students	○	○	○	○	○
20. Behavior momentum	○	○	○	○	○
21. Teaching expected behaviors	○	○	○	○	○
22. Behavior contracts	○	○	○	○	○
23. Use of free time	○	○	○	○	○
24. Peer-assisted learning	○	○	○	○	○
25. Clear rules/expectations	○	○	○	○	○
26. Previewing	○	○	○	○	○
27. Mnemonic devices	○	○	○	○	○
28. Mindfulness practices	○	○	○	○	○
29. Written feedback	○	○	○	○	○
30. Point and or level systems	○	○	○	○	○
31. Differentiated reinforcement	○	○	○	○	○
32. Opportunities to practice gratitude	○	○	○	○	○
33. Direct instruction	○	○	○	○	○
34. Brisk pacing of instruction	○	○	○	○	○
35. Restraint procedures	○	○	○	○	○
36. Seclusion/time out rooms	○	○	○	○	○
37. Peer counseling	○	○	○	○	○
38. Modeled emphathy	○	○	○	○	○
39. Cubicles/ temporary dividing walls	○	○	○	○	○
40. Life space interviewing	○	○	○	○	○
41. Community of care and support	○	○	○	○	○
42. Trauma-informed approach	○	○	○	○	○

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	Never	Sometimes	Always	Not sure if I/we have this	I don't know what this is
43. Restorative Justice	◯	◯	◯	◯	◯
44. Challenge Thinking	◯	◯	◯	◯	◯
45. Cultural Responsiveness	◯	◯	◯	◯	◯

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Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

5. Part III: Perception of Individual Preparedness

Please read each of the following items carefully and check the column that best describes your perception of how prepared you are to implement each of the interventions listed below.

4. Based on the education and training you have received so far, please rank how prepared you are to implement each of the following interventions listed below

	Not at all prepared	Somewhat prepared	Well prepared	Very well prepared	I don't know what this is
1. Positive Behavior Intervention Strategies (PBIS)	◯	◯	◯	◯	◯
2. Behavior Specific Praise	◯	◯	◯	◯	◯
3. Frequent opportunities to respond during instruction	◯	◯	◯	◯	◯
4. Peer Tutoring	◯	◯	◯	◯	◯
5. Self –monitoring	◯	◯	◯	◯	◯
6. Story mapping	◯	◯	◯	◯	◯
7. Social Skills Training	◯	◯	◯	◯	◯
8. Functional Behavioral Assessment (FBA)	◯	◯	◯	◯	◯
9. Proximity	◯	◯	◯	◯	◯
10. Response Cards	◯	◯	◯	◯	◯
11. Goal Setting	◯	◯	◯	◯	◯
12. Rapport Building	◯	◯	◯	◯	◯
13. Front Loading	◯	◯	◯	◯	◯
14. Matching instruction to student interest	◯	◯	◯	◯	◯
15. Brief Instructional Intervals	◯	◯	◯	◯	◯
16. Scaffolding of instruction	◯	◯	◯	◯	◯
17. Small group instruction	◯	◯	◯	◯	◯
18. Verbal reprimands or lecture based consequences	◯	◯	◯	◯	◯

	Not at all prepared	Somewhat prepared	Well prepared	Very well prepared	I don't know what this is
19. Choice making opportunities for students	◯	◯	◯	◯	◯
20. Behavior momentum	◯	◯	◯	◯	◯
21. Teaching expected behaviors	◯	◯	◯	◯	◯
22. Behavior contracts	◯	◯	◯	◯	◯
23. Use of free time	◯	◯	◯	◯	◯
24. Peer-assisted learning	◯	◯	◯	◯	◯
25. Clear rules/expectations	◯	◯	◯	◯	◯
26. Previewing	◯	◯	◯	◯	◯
27. Mnemonic devices	◯	◯	◯	◯	◯
28. Mindfulness practices	◯	◯	◯	◯	◯
29. Written feedback	◯	◯	◯	◯	◯
30. Point and or level systems	◯	◯	◯	◯	◯
31. Differentiated reinforcement	◯	◯	◯	◯	◯
32. Opportunities to practice gratitude	◯	◯	◯	◯	◯
33. Direct instruction	◯	◯	◯	◯	◯
34. Brisk pacing of instruction	◯	◯	◯	◯	◯
35. Restraint procedures	◯	◯	◯	◯	◯
36. Seclusion/time out rooms	◯	◯	◯	◯	◯
37. Peer counseling	◯	◯	◯	◯	◯
38. Modeled emphathy	◯	◯	◯	◯	◯
39. Cubicles/ temporary dividing walls	◯	◯	◯	◯	◯
40. Life space interviewing	◯	◯	◯	◯	◯
41. Community of care and support	◯	◯	◯	◯	◯
42. Trauma-informed approach	◯	◯	◯	◯	◯

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	Not at all prepared	Somewhat prepared	Well prepared	Very well prepared	I don't know what this is
43. Restorative Justice	◯	◯	◯	◯	◯
44. Challenge Thinking	◯	◯	◯	◯	◯
45. Cultural Responsiveness	◯	◯	◯	◯	◯

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Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

6. Part IV: Demographic Information

5. Where is your school or program located?

City

County

Name of school district (Optional)

6. What is the Level of your school or program? (Please select all that apply)

- [ ] Preschool
- [ ] Elementary
- [ ] Middle
- [ ] High school

Other (please specify)

7. What is the instructional environment of your school or program?

- [ ] Public school/ general education classroom
- [ ] Private School
- [ ] Alternative/ Charter School
- [ ] Non- Public School
- [ ] Residential treatment or correctional facility
- [ ] Other (please specify)

8. What is the geographical setting of your school or program

- ◯ Urban
- ◯ Suburban
- ◯ Rural

9. I am currently working with students with emotional and behavioral disorders (ED/EBD)

- ◯ Yes
- ◯ No

10. I am not currently working with students with ED/EBD, but I have worked with this student group in the past three years (if currently working with this population please skip to question 11).

- ◯ Yes
- ◯ No

11. What is the type of service delivery system employed by your school or program (check all that apply)

- ☐ Full inclusion
- ☐ Partial inclusion
- ☐ Self-contained
- ☐ Consultation
- ☐ Resource
- ☐ Day treatment
- ☐ Residential
- ☐ Locked or Correctional
- ☐ Other (please specify)

12. What position did you currently hold or did you hold (if not currently working with) when working with students with ED/EBD?

- ☐ Site administrator administrator/coordinator
- ☐ Special education teacher
- ☐ Site leadership (i.e principal, assistant principal, program director)
- ☐ General education teacher
- ☐ Other (i.e. curriculum and instruction specialist, behavior analyst, mental health counselor) (please specify below)
- ☐ Please specify "other" answer choice

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13. How many years experience do you have working with this student population?

- ◯ Less than 1 year
- ◯ 1 to 5 years
- ◯ 6 to 10 years
- ◯ more than 10 years

14. Do you have any professional licenses or certifications? (Please select all that apply)

- ☐ BCBA, BCaBA, BCBA-D
- ☐ MSW, MFT, LPCC
- ☐ Emotional Distrubance CTC approved added authorization
- ☐ RBT or Other relevant certification (Please specify below)
- ☐ Please specify response of "Other"

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Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

7. Optional Contact Information for Focus Group Participation

Please complete the the following contact information if you are interested in participating in the focus group portion of the study.

15. Address

Name	
City/Town	
Email Address	
Phone Number	

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Survey of Programs for Students with Emotional and Behavioral Disorders in California-BETA

8. Thank you

This concludes the survey of programs for students with emotional and behavioral disorders in California. Thank you so much for your time and participation.

APPENDIX E

Focus Group Script/ Interview Questions

Interview for Students with Emotional and Behavioral Disorders in California

Informed Consent Notice

Introduction:

You are being asked to participate in an interview as part of a dissertation study conducted by Thelmisha Vincent, a doctoral candidate from Brandman University. You have been recruited as a possible participant in this focus group. Please read this form carefully. Your participation is completely voluntary, and you may withdraw consent at any time without explanation with no penalty or loss of rights or benefits until the final data analysis portion of the study has been completed in which individual responses will be aggregated and no longer able to be separated. At the completion of data analysis, you will receive an email notification from the researcher indicating that the window in time to withdraw from the study has closed.

Purpose of Interviews:

The purpose of the interviews is to determine how prepared general education teachers, Special education teachers, and behavioral interventionists perceive themselves to work with students with emotional and behavioral disorders (EBD). The session will last between 30 to 45 minutes but not longer than one hour and will take place virtually using a web conferencing platform such as Zoom Meeting. Participants will be asked a variety of questions regarding, their experiences working with students with EBD, prior knowledge of this student population before working with them, and specific trainings received.

If a participant does not feel comfortable with a question for any reason, then he or she does not need to answer the question. Sessions will be recorded to provide record of participant responses for future analysis. The confidentiality of your information will be maintained in any publications or presentations regarding this study. Only the researcher will have access to the data collected. Recordings of interview sessions will be stored in an encrypted electronic file that only the researcher will be able to access. Any recordings and transcripts will be destroyed after one year or at the end of the study.

Potential Risks:

It is minimal risk associated with participation in the interview. However, it is possible that one might experience some level of embarrassment in discussing their experience and instructional practices with others in a such an intimate setting. In effort to alleviate this potential risk, the researcher will monitor and redirect conversations as necessary to avoid any such conflict.

Benefits:

Possible benefits of participation in the interview include (a) identifying the most frequently used interventions for students with emotional/behavioral disorders in California; (b) gaining insight in the preparation and training of educational professionals working with this student populations which may in turn help to identify additional professional development opportunities; (c) provides an opportunity for participants to converse with other educators and engage in an exchange of ideas which may yield some useful ideas they can use in their respective classrooms; and (d) assisting in the guidance of the future development of service provisions for students with emotional and behavioral disorders in California.

This research study has been reviewed and approved by the Brandman University Institutional Review Board (IRB). The Brandman University IRB may be contacted at (949) 341-7641 with questions regarding the rights of research subjects. You may retain a copy of this notice for your records. By signing below, you agree that you have read and understand the informed consent and are ready to proceed to the interview. If at any time you would like to withdraw from research study, please submit your request to withdraw in writing via email to the researcher.

This agreement states that you have received a copy of this informed consent. Your signature below indicates that you agree to participate in this study.

Signature of Participant: _____ Date: _____

Participant name (printed): _____

The researcher for this study would also like to record sessions to ensure important information from the discussion is not missed. The recordings will only be used for the purpose of data collection of information shared throughout the session that pertains to the study itself and will not be shared with anyone else. By signing below, you agree to audio recording during the interview session.

Signature of Participant: _____ Date: _____

Interview Session is being held on _____ at _____ am/pm and researcher has obtained verbal consent at the onset of the interview session to record.

_____ (Researchers Initials)

Sample Script of Research Focus Group Session

Introduction: Hello and welcome to this group discussion. My name is Thelmisha Vincent and I am a doctoral candidate from Brandman University program in Organizational Leadership conducting a research study on the evidence-based strategies utilized with students with emotional and behavioral disorders in California. I will also be the facilitator for this focus group session. My role is to help get a conversation going and make sure that we cover a number of important topics that they would like your input on.

Introductions

Purpose: First of all, I would like to thank you all for taking time out of your day to come here and discuss your ideas. The overall goal is to hear your thoughts about your experiences working with students with emotional and behavioral disorders**.**

In particular, I am interested in your views about the instructional and behavior management strategies you have utilized with students with emotional and behavioral disorders, and your overall preparation to work with this student group.

I am asking you because you have all indicated that you have direct experience working with this student population and therefore can share some insight into instructional practices occurring in California schools and programs.

This focus group session was set up in effort to be able to hear from education professionals who are working with this student group on a daily basis and learn from your expertise.

As indicated in the consent forms you signed before joining this session, your participation in this focus group is strictly voluntary and you are welcome to leave at any time throughout the session should you no longer wish to participate.

I will be taking some notes later on but would also like to record what you say so that I don't miss anything important and so that I can go back and revisit the information later if needed.

On the previous consent form, you signed I also asked for permission to record the session and asked you to initial in agreement. I will now take a moment to ask each of you to give a verbal consent before we proceed. I will initial on your consent forms that you are still in agreement and can send you another copy of your consent forms with my initials as well if you would like.

- If there are participants who do not wish to be recorded I will either contact them separately to set up an unrecorded session at a time and place that is mutually

agreed upon by the group, or if only one or two persons does not want to be recorded, I will thank them for their time and they will be dismissed.

Thank you all for agreeing to be recorded during this session. The recordings will be invaluable to ensuring that I do not miss important information from our session.

A bit of housekeeping before we begin, please note that the total length of time for this session is expected to be about 45 minutes to an hour. As far as the focus groups are concerned, there are a few "ground rules"

- I might move you along in conversation. Since we have limited time, I'll ask that questions or comments off the topic be answered after the focus group session
- I'd like to hear everyone speak so I might ask people who have not spoken up to comment however you may pass on any given question if you don't want to respond.
- Please respect each other's opinions. There's no right or wrong answer to the questions I will ask. I want to hear what each of you think and it's okay to have different opinions.
- I'd like to stress that I want to keep the sessions confidential, so I ask that you not use names or anything directly identifying when you talk about your personal experiences. I also ask that you not discuss other participants' responses outside of the discussion. However, because this is in a group setting, the other individuals participating will know your responses to the questions and we cannot guarantee that they will not discuss your responses outside of the focus group.

DO YOU HAVE ANY QUESTIONS SO FAR?

Again, your participation here today is totally voluntary, and you are free to leave at any time if you no longer wish to participate. So, if you are okay with moving forward, let's begin.

The following list of questions will be utilized to facilitate the focus group sessions.

1. What sort of information did you receive regarding this student population during your teacher or behavioral training/credentialing program?
   * *If participants have difficulty answering question 1 the following probing questions will be asked to help facilitate the discussion*
      a. Were you presented with specific courses or unit content regarding emotional disturbance?
      b. What did that content look like?
2. Take a moment to think about some of the specific strategies you use with students with EBD in your classrooms, what led to your decision to use those strategies?
      a. What sort of training or preparation did you receive to implement those strategies?
      b. If not, what else do you need to be able to implement?

3. Think back to when you first started working with students with EBD. What were some of the thoughts, feelings, concerns, level of preparation or expectations you had starting out?
    a. What do you feel contributed to those feelings?
    b. How have your feelings changed over time?
    c. How do you seek out information regarding serving this student population?
    **If participants are not seeing additional information the following question bay be asked.*
    d. What prevents you from accessing additional information?

4. Is there anything else that you would like to mention or discuss with the group related to this topic, that we have not already covered or anything that you would like to add?

I think we've come to the end of our questions. Let me be the first to say thank you for your honest feedback and discussion – you were tremendously helpful in providing insight to current instructional practices for students with EBD.

Again, thank you very much for your participation today. We really appreciate your help. Should you want to reach out to me for follow up, I can be reached at Vinc5702@brandman.edu.

APPENDIX F

Institutional Review Board Approval Notices

11/12/2018 Brandman University Mail - BUIRB Application Approved As Submitted: Thelmisha Vincent

BRANDMAN University

Thelmisha Vincent <vinc5702@mail.brandman.edu>

BUIRB Application Approved As Submitted: Thelmisha Vincent

MyBrandman <my@brandman.edu> Thu, Nov 1, 2018 at 2:53 PM
To: vinc5702 Student <vinc5702@mail.brandman.edu>
Cc: "Spillane, Anne" <spillane@brandman.edu>, buirb <buirb@brandman.edu>, "Devore, Douglas" <ddevore@brandman.edu>

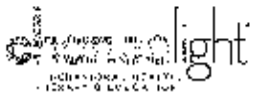
Dear Thelmisha Vincent,

Congratulations, your IRB application to conduct research has been approved by the Brandman University Institutional Review Board. This approval grants permission for you to proceed with data collection for your research. Please keep this email for your records, as it will need to be included in your research appendix.

If any issues should arise that are pertinent to your IRB approval, please contact the IRB immediately at BUIRB@brandman.edu. If you need to modify your BUIRB application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at the following link: https://irb.brandman.edu/Applications/Modification.pdf.

Best wishes for a successful completion of your study.

Thank you,
Doug DeVore, Ed.D.
Professor
Organizational Leadership
BUIRB Chair
ddevore@brandman.edu
www.brandman.edu



Research & Analytics
1524 South Summit Avenue
Sioux Falls, SD 57105

To: Thelmisha Vincent

From: John M. McLaughlin, Ph.D., Committee Administrator
Institutional Review Board

Org. No.: IORG0005084

IRB No.: IRB00008357

Date: November 14, 2018

Re: "Educator Knowledge of and Usage of Evidence-based Interventions for Students with Emotional and Behavioral Disorders in Special Education Programs Across California", Project 18-1.22

On behalf of ChanceLight's Institutional Review Board, I am pleased to inform you that the above named project has been approved. Should there be significant changes in the protocol for this project, it will be necessary for you to resubmit the protocol for review by the IRB. Your approval is good for one year from the date above. Should your project take longer than one year, you will need to re-apply to the ChanceLight IRB.

Best of wishes for a successful research endeavor.

John M. McLaughlin, Ph.D.

APPENDIX G

National Institutes of Health Certificate

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Thelmisha Vincent** successfully completed the NIH Web-based training course "Protecting Human Research Participants."

Date of Completion: 04/29/2018

Certification Number: 2808442

NIH National Institutes of Health
Office of Extramural Research

APPENDIX H

Brandman University Institutional Review Board: Research Participant's Bill of Rights

BRANDMAN University

BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

Research Participant's Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.
3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.
4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.
5. To be told what other choices he/she has and how they may be better or worse than being in the study.
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.
7. To be told what sort of medical treatment is available if any complications arise.
8. To refuse to participate at all before or after the study is started without any adverse effects.
9. To receive a copy of the signed and dated consent form.
10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92618.

Brandman University IRB Adopted November 2013