

PROGRAMMING FOR STUDENTS WITH EMOTIONAL/BEHAVIORAL DISORDERS:
THE IMPORTANCE, USAGE, AND PREPAREDNESS FOR IMPLEMENTATION
OF EVIDENCE-BASED INTERVENTIONS BASED ON
PRACTITIONER PERCEPTIONS

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Implementation of evidence-based practices in Texas schools was examined through a survey disseminated through 495 special education directors in 20 state educational service centers. The district-level directors were asked to forward the survey to all personnel providing direct or indirect services to students with EBD. Survey participants were asked to rate 27 evidence-based interventions for students with EBD in three categories on a 5-point Likert scale: (a) importance of the intervention; (b) frequency of use of the intervention; and (c) preparedness to implement the intervention.

With a response rate of 32% and representation from all 20 educational service center areas, data were analyzed through simple frequency statistics to determine that most respondents were public school special educators who had been in their current position for 5 years or less. They identified a climate that supports successful teaching and learning and clear rules/expectations as very important. They reported using procedures for the use of physical restraint most frequently, and being most well-prepared to implement clear rules/expectations. A canonical correlation analysis revealed an inverse relationship between importance ratings of tertiary level interventions and frequency of use and preparedness to implement primary level interventions which implies that while practitioners rate tertiary level interventions as important, they are more likely to be well-prepared to implement primary level interventions and to do so with more frequency. Additionally, a review of literature is provided and results and analysis of the survey are discussed as well as recommendations for the future.

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CHAPTER 1

INTRODUCTION

Students with emotional/behavioral disorders (EBD) often face great difficulty in school. Of the 464,000 students with EBD reported in 2006-2007, only 19,000 actually graduated from high school with a diploma while almost 23,000 dropped out of high school (U.S. Department of Education, Office of Special Education Programs, 2008). The number of students with EBD being served in Texas schools will continue to increase in the next few years, mirroring a national trend. The U.S. Surgeon General's report on children's mental health stated that, in any given year, one out of every five children and adolescents in the United States experience the signs and symptoms of a diagnosable mental health disorder (U.S. Department of Health and Human Services, 2000). This means that there are almost four million American youths who suffer from an emotional and/or behavioral disorder that disrupts their lives. Of these children and youth, two-thirds will not receive the appropriate supports and services necessary to address their mental health needs; therefore, schools will need to ensure that appropriate, evidence-based interventions are being implemented with fidelity in order to change the outcome statistics for this population.

Most students will be able to learn and acquire the requisite skills necessary to be successful in school and in life through traditional teaching methods, but students with EBD often do not acquire these skills in the same ways as their nondisabled peers (Robinson, 2007). Many students with EBD do not enter school ready to learn (Hester et al., 2004), so they will need specific instruction and specialized teaching methods in order to learn and develop both their academic and behavioral skills. Teachers and schools have an obligation to effectively

instruct students with EBD so that when they exit school, they are able to lead productive adult lives (Robinson, 2007).

Statement of the Problem

The study of EBD is a young field (Nelson, 2004). To-date, there is insufficient research in the area of intervention and treatment. In addition, considerable disagreement exists among professionals as to which interventions will lead to more favorable outcomes for students with EBD. Because the number of students with EBD in schools continues to rise (U.S. Department of Education, National Center for Education Statistics, 2009), it is vital that teachers and school personnel are adequately prepared to meet the unique and challenging needs. Practitioners have a moral and legal responsibility to implement effective and appropriate 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). Teachers and other school personnel involved with the student with EBD must understand the vital role they play in appropriate service provision. At present, there is an inadequate statewide snapshot of intervention implementation for students with EBD in schools. The present study provides valuable insight into which interventions for students with EBD are currently being used in classrooms and the perceived value of these interventions by school personnel.

Purpose of the Study

Evidence-based practices (EBP) have become a national priority in education since their inclusion in such laws as No Child Left Behind (2001) and the Individuals with Disabilities Education Act (2004). Despite the insistence that educational curriculum and policy be

evidence-based, many schools and educators have had difficulty translating the science into practice (Fitzpatrick & Knowlton, 2009; Wing Institute, 2006). There appears a distinct need for intervention and implementation research in the area of fidelity with students with EBD (Nelson, 2004; Walker, 2004). This study adds to the research by examining evidence-based interventions utilized by school personnel in Texas schools. Specifically, the study investigated the perceived importance of 27 identified evidence-based interventions for students with EBD. The interventions were categorized into three main types: (a) primary interventions designed to benefit all students; (b) secondary interventions, delivered in small group settings, designed to benefit students who continue to present challenging academic or behavioral needs; and (c) tertiary interventions individualized to benefit students who continue to display significant needs despite the two previous levels of intervention (Office of Special Education Programs, 2010). In addition, the survey demonstrated how frequently these interventions are implemented in the programs of the respondents as well as how well-prepared the practitioners perceive themselves to implement the strategies with fidelity.

Contextual Framework for the Study

The contextual framework of this study is based on the tenets of positive behavioral interventions and supports which has been legally mandated via the Individuals with Disabilities Education Improvement Act (2004). This framework is appropriate in that it incorporates a three-tier system of intervention (i.e., primary, secondary, and tertiary), which if implemented appropriately will ensure that all students, including those with EBD, receive evidence-based interventions as legally mandated.

Significance of the Study

Isolated studies have been published that examine intervention implementation for students with EBD, but statewide programming studies are lacking. In addition, Walker (2004) states that research continues to be necessary to develop EBP within school settings, especially for practices that can be easily translated from one setting to another. The present study captured a current and relevant snapshot of the implementation practices for interventions with students with EBD in Texas. In addition, the data collected regarding the implementation of EBP for students with EBD in Texas classrooms provides a more accurate statewide picture to be used as a basis for future studies on the use of EBP for this population.

Research Questions

The research questions for this study are as follows:

1. Which interventions do practitioners rate as being most important?
2. Which interventions do practitioners report using most frequently?
3. Which interventions do practitioners perceive themselves most well-prepared to implement?
4. To what degree does the importance rating of an intervention category (i.e., primary, secondary, and tertiary) relate to the program usage of the same intervention category?
5. To what degree does the importance rating of an intervention category (i.e., primary, secondary, and tertiary) relate to the perceived preparedness to implement interventions of the same category?

Limitations

Although the sample population was open statewide, the participants were volunteers and were only be contacted through the Regional Educational Service Center (ESC) system in Texas. Therefore, if one ESC did not choose to participate in the survey, there is a potential gap in the

research results. An additional limitation involves the nature of the study. Since responses were collected through an online survey, data are merely perceptions of the respondents and cannot be construed as hard and scientific. Additionally, the survey instrument is not exhaustive or inclusive. Further, because so few secondary interventions have been identified in the literature, results for secondary interventions in research questions 4 and 5 do not account for much of the variance.

Definition of Terms

- Behavior intervention plan: Refers to written strategies, included in a child's individualized education plan, outlining tactics for dealing with problem behavior including the roles of school personnel, and lists of appropriate, individualized rewards and consequences to be used with the student (e.g., Killu, 2008; Scott & Nelson, 1999).
- Emotional/behavioral disorder: A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) Inappropriate types of behavior or feelings under normal circumstances; (d) A general pervasive mood of unhappiness or depression; 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: An educational policy, strategy, and/or program derived through empirical evidence of efficacy based on (a) promoting best-practices research and development, (b) facilitating review and evaluation of scientific research, (c) disseminating

scientific research, and (d) developing and supporting “evidence-based culture” (Wing Institute, 2010). Program success can be reported as reliable, trustworthy, and valid based upon the scientific evidence used to evaluate the program with a particular group of children (International Reading Association, 2002).

- Fidelity: The quality or state of faithfully implementing an intervention while being accurate in details with a particular attention to exactness (Fidelity, 2010).
- Functional behavioral assessment: A systematic process for gathering information regarding the purpose of a student’s behavior in relation to its context with the goal of developing appropriate, proactive, positive, and individualized interventions to meet the unique needs of the student (e.g., Fox & Gable, 2004; Scott & Nelson, 1999).
- Intervention: An evidence-based strategy implemented to assist a student struggling with academic or behavioral issues (Witt, VanDerHeyden, & Gilbertson, 2004b).
- Positive behavioral interventions and supports: School-wide positive behavioral supports (PBIS) is the emphasis on systems of support that include proactive strategies for defining, teaching, and supporting appropriate student behaviors to create positive school environments (OSEP, 2010). This system should be a continuum of support for all students within a school’s classroom and non-classroom settings. PBIS is a behaviorally based system designed to effectively enhance environments with research-validated practices in which teaching and learning can occur. The goal for PBIS is to make problem behavior less effective, efficient, and relevant, and desired behavior more functional.
- Practitioner: Individuals who provide direct or indirect services to students with EBD within the school district, including teachers, related service providers, and administrators (Practitioner, 2010).

CHAPTER 2

REVIEW OF THE LITERATURE

“Not all children begin their schooling ready to learn,” (Hester et al., 2004, p. 5). This is often the case for students with disabilities, particularly those with behavioral issues. In 1976, there were 283,000 students identified as having an emotional/behavioral disturbance (EBD) being served in federally supported programs, representing 0.6% of the total student enrollment. (U.S. Department of Education, National Center for Education Statistics, 2009). By 2007, that number grew to 464,000, representing 0.9% of the total student enrollment. In 2004, 32.3% of students with EBD spent more than 79% of their time in a placement setting other than a general education classroom. Although the amount of time students with EBD are segregated from their non-disabled peers decreased to 64.9% in 2006, by far the largest placement setting in regular schools for students with EBD is outside of a general education setting (U.S. Department of Education, Offices of Special Education Programs, 2008). Within the United States, the number of children with disabilities served under the Individuals with Disabilities Education Improvement Act (IDEIA) rapidly grew between 1991 and 2001 (U.S. Department of Education, Office of Special Education Programs, 2008). After the 1991-2001 period of rapid growth, the number of children with disabilities being served under IDEIA leveled off and remained static through 2007. The state of Texas has followed an identical trend in the growth of the number of children being served under IDEIA.

The U.S. Surgeon General’s report on children’s mental health stated that, in any given year, 1 out of every 5 children and adolescents in the United States experience the signs and symptoms of a diagnosable mental health disorder (Knopf, Park, & Mulye, 2008; U.S. Department of Health and Human Services, 2000). Nearly 1 in 10 adolescents meet the

diagnosis for being emotionally impaired (Knopf et al., 2008). Of these children and youth, two-thirds will not receive the appropriate supports and services necessary in order to address their mental health needs. Additionally, many students with EBD have not successfully completed high school. Of the 47,519 students with EBD in the United States who left high school in 2006: (a) only 19,093 graduated from high school with a diploma; (b) 4,740 received a certificate of attendance; (c) 595 aged out of school; (d) 22,975 dropped out of high school, and 199 died (U.S. Department of Education, Office of Special Education Programs, 2008).

Ultimately, educators work to prepare students for independent, productive lives (Robinson, 2007). For most students, this objective is easily accomplished through teaching requisite skills and helping them make wise behavioral choices. However, many students with EBD do not naturally acquire these abilities and need specific instruction for skill development. These interventions then become essential for providing the skills students with EBD will need for later success in life.

Utilizing a web-based search via EbscoHost with the search terms emotional behavioral disorders, EBD, program implementation, and intervention, literature was acquired. The review of literature examines the implementation of interventions for students with EBD or at-risk for academic failure and behavioral problems, focusing specifically on (a) describing and utilizing evidence-based practices, (b) reviewing primary or universal interventions, (c) examining secondary or small-group interventions, and (d) analyzing tertiary or individualized interventions.

Describing and Utilizing Evidence-based Practices

School personnel do not access and adapt the available knowledge on evidence-based

practices (EBP) for use in the classroom (Walker, 2004). There are continuing unmet needs for students with or at-risk of EBD who are not served or underserved by schools. Educators often fail to access and use EBP for those students who are served. Using EBP in education means that stakeholders are using empirical evidence to make evaluations regarding educational programming and interventions (Wing Institute, 2006). Evidence collected through utilization of EBP is used to connect research to day-to-day practice in education, relying on testing and scientific rigor rather than opinions and personal approaches (Wing Institute, 2006). EBP rely on research-based, structured interventions that have been tested using randomized trials with experimental and control groups to establish causation and assess the effect of a program (Walker, 2004).

Three major criticisms have been raised to the use of EBP in the classroom. First, the literature base and, therefore, the concepts behind EBP are not easily accessible to school personnel (Bridges4Kids, 2007-2008; Cook, Landrum, Tankersley, Kauffman, 2003; Shernoff, Kratochwill, & Stoiber, 2003). Teachers report needing trustworthy, useable, and accessible information (Cook et al., 2003) that can be grasped quickly and easily and describes the practice, the students with whom it is effective, implementation steps, and reliability of the program (Bridges4Kids, 2007-2008). School personnel have cited that training materials are not always conducive to good training, and that there is often too little time for adequate training (Shernoff et al., 2003). Teachers generally rate informal sources of information as more trustworthy and useable than research-based information provided in traditional sources. However, EBP literature and concepts can be made accessible to teachers. Teachers can access the information through professional development events like conventions and conferences, educational journals, and some websites (Bridges4Kids, 2007-2008). Researchers need to consider the stakeholders in

their research and write so that these stakeholders can grasp and use the information (Cook et al., 2003). In addition, researchers need to be consistently and meaningfully conversing with teachers, families, and students with disabilities in order to effectively implement EBP.

The second criticism of EBP is being able to correctly implement the strategy (Bridges4Kids, 2007-2008; Cook et al., 2003; Shernoff et al., 2003). Teachers may find it difficult to implement a strategy if their only contact with that strategy has been through reading about it (Bridges4Kids, 2007-2008). School personnel, without administrative and systemic support, will often lose their initial zeal and retreat to previous teaching habits (Cook et al., 2003), such as adapting the EBP in ways not prescribed by the training manual, thereby, affecting the validity of the intervention (Shernoff et al., 2003). Despite these difficulties, teachers can correctly implement EBP in their schools and classrooms. Teachers need support as they try something new (Bridges4Kids, 2007-2008). Some researchers (e.g., Cook et al., 2003) suggest that the best way for teachers to implement EBP in their classrooms is through supportive and professional peer interactions. In this way, teachers are more likely to accept change, and school-based support is seen as steady work. Planning and problem-solving during implementation also needs to focus on real-world application. Teachers must have the ability to adapt their instruction to fit the needs of their students, especially those with disabilities, and they need evaluation techniques in place that are easy to use so that progress can be charted to keep positive momentum.

Finally, school personnel often find it difficult to combine EBP with the craft of teaching due to their training (Bridges4Kids, 2007-2008; Cook et al., 2003). EBP have been criticized for being too specialized and scripted, leaving no room for the professional to make adjustments or decisions during implementation, thereby, reducing the professional to that of a robotic manual-

reader (Shernoff et al., 2003). Additionally, many teachers do not feel that their teacher preparation programs adequately equipped them for the demands of being in the classroom (Cook et al., 2003). The strategies they choose to implement in the classroom are not necessarily those learned in college coursework based on lecture. Teacher preparation programs that should be teaching how to implement EBP are often, instead, focused on the personal preferences and experiences of teacher educators. There often comes a point when every strategy must be adjusted for an individual student or situation, and teachers may skip the implementation of the strategy altogether (Bridges4Kids, 2007-2008). There are ways, though, that teachers can combine EBP with the craft of teaching through supportive teacher preparation programs. Teachers should begin by using a strategy exactly as it is proposed, then they can see where adaptations need to occur and craft those into the EBP (Bridges4Kids, 2007-2008). Teachers need to develop a three-step process for implementing EBPs in the classroom. First, teachers should focus on a limited number of EBPs. Second, a notation of their success needs to be documented, and third, teachers should use them repeatedly before giving up on EBP altogether (Cook et al., 2003). Repetition of the three-step process for implementation will give teachers the confidence they need in their abilities to implement EBP. Teacher trainers at the college and university level need to be critical consumers of research, reliable and collaborative with their students, and train teachers on how to access the literature.

Looking to the future, three areas of innovation and development are necessary to continue to develop EBP within school settings: (a) study implementation and treatment integrity, (b) scale up diffusion and sustainability of EBP, and (c) improve transportability of interventions from efficacy to effectiveness within usual practice settings (Walker, 2004). As researchers, the results of the study must be meaningful and applicable to the classroom or

school system at-large. Researchers also must be able to take results from small populations and apply the results to more universal populations with validity while maintaining the user-friendliness of the intervention. For example, PBIS and the Effective Behavioral Support program is now being implemented over 1,500 school districts within 23 states (Horner, Freeman, Nelson, & Sugai, 2010). The translation of this well-researched program to the school districts is an example of a successful implementation of research-to-practice.

PBIS occurs on three levels: primary, secondary, and tertiary (Blood & Neel, 2007; Kern, Hilt-Panahon, & Sokol, 2009; Lewis, Hudson, Richter, & Johnson, 2004; OSEP, 2010; Scott, Park, Swain-Bradway, & Landers, 2007; Van Acker, 2005). Primary prevention should focus on all students (OSEP, 2010). Rules, routines, and procedures should be clearly stated and taught to all students. At the primary level, the goal is to prevent new cases of problem behavior for all children. Secondary prevention should be targeted toward a smaller number of students who display added risk for academic failure and/or challenging behaviors with more intensive interventions. At the secondary level, the goal is to provide intensive or targeted interventions to support students who are not responding to primary prevention efforts. Finally, tertiary prevention should focus on only those individuals who exhibit patterns of problem behaviors that appear resistant to primary and secondary prevention strategies. Typically, tertiary interventions will involve the use of functional behavioral assessment (FBA) and development of a behavior intervention plan (BIP).

When initiating a school-wide system of discipline, several steps are necessary (OSEP, 2010). First, schools should establish a school-wide leadership or behavior support team comprised of an administrator, grade level representatives, support staff, and parents. Second, schools should secure administrator agreement for active support and participation. Third,

schools should secure a commitment and agreement from at least 80% of the staff for active support and participation. Next, a self-assessment of the current school-wide discipline system should be conducted. Then, an implementation action plan based on the data should be created. Finally, schools should establish a way to accrue office referral (and other) data on a regular basis to evaluate effectiveness of the system.

It is recommended that a school-wide discipline system have specific key components in place to be effective (OSEP, 2010). There must be an agreed upon and common approach to discipline, and a positive statement of purpose (Lewis & Sugai, 1999; OSEP, 2010). Expected behaviors should be clearly defined, and the system requires a small number of positively stated expectations for all students and staff, and procedures for teaching these expectations to students. There must be a continuum of procedures for encouraging the expected behavior and maintenance of the behavior. A second continuum of procedures for discouraging displays of rule-violating behavior should also be in place. Finally, procedures for monitoring and evaluating the effectiveness of the system should be followed regularly and frequently. In addition, a visible and supportive principal, active involvement of all stakeholders, clear and enforceable rules, a warm school climate, and a strong commitment by all staff to reinforcing appropriate behavior lead to effective schools as well (Van Acker, 2005).

Other major areas of PBIS implementation occur on the district-wide and state-wide levels (OSEP, 2010). There are four components to successful implementation of PBIS on these levels. First, a leadership team must be created to coordinate implementation efforts. Second, an organizational umbrella composed of adequate funding, broad visibility, and consistent political support must exist. Third, sustained implementation means that there must be groups of individuals who can provide coaching and support for local implementation, team training, and

evaluation. Finally, there must be demonstration schools that provide support for the viability of the approach. While the components of successful implementation will be the same for each level, the state-wide level leadership team should invite a representative from the Department of Education, and other agencies (e.g., mental health, child welfare) to participate.

Interventions for Students With or At-Risk of EBD

Interventions for students with EBD can be subdivided into the same three basic categories as PBIS: (a) primary or universal interventions; (b) secondary or small-group interventions; and (c) tertiary or individualized interventions. Table 1 displays the relationship of these interventions for students with EBD.

Primary or universal interventions.

According to Hester et al. (2004), understanding how behavior problems develop in children is a complex process and no one factor can be singled out as causative. Many factors play a role in the behavioral development of a child: (a) the child's characteristics and temperament; (b) parental characteristics, such as educational level, degree of stress; and (c) the interaction between the parent and child. School factors also play a role in the behavioral development of a child including: (a) the quality of the classroom instruction, (b) the quality of the teacher-child interaction, (c) peer influences, and (d) the child's social communication abilities. When discussing these school factors, it is often difficult for teachers to admit that they might be a contributing factor to students' behavioral problems. However, if those same teachers choose to become a part of the solution, some of the problems may be mediated.

Table 1

Interventions for Students with EBD

Intervention Level	References		
Primary or Universal Interventions	Campbell-Whatley & Gardner, 2002	Kern, Hilt-Panahon, & Sokol, 2009	Scott, Park et al., 2007
	Cartledge et al., 2002	Lambros, Culver, Angulo, & Hosmer, 2007	Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008
	Conroy & Harader, 1995	Lane, 2004	Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008
	Davis et al., 2004	Lechtenberger, Mullins, & Greenwood, 2008	Trussell, Lewis, & Stichter, 2008
	Fitzpatrick & Knowlton, 2009	Lewis et al., 2004	Unruh et al., 2006
	Fitzsimons-Lovett, 1998	Liaupsin, Jolivette, & Scott, 2004	Van Acker, 2005, 1995
	Gagnon, Wehby, Strong, & Falk, 2006	Regan, 2009	Vannest, Temple-Harvey, & Mason, 2009
	Guetzloe, 1995	Rice, Merves, & Srsic, 2008	Witt, VanDerHeyden, & Gilbertson, 2004a
	Hester et al., 2004	Ryan, Pierce, & Mooney, 2008	
	Johns & Guetzloe, 2004	Ryan, Reid, & Epstein, 2004	
	Kea & Campbell-Whatley, 2005		
Kendizora, 2004			
Secondary or Small-Group Interventions	Burke, Vannest, Davis, Davis, & Parker, 2009	Lewis et al., 2004	Simonsen et al., 2008
	Fitzpatrick & Knowlton, 2009	Maag, 2006	Sutherland & Snyder, 2007
	Hodge, Riccomini, Buford, Herbst, 2006	Meadows & Stevens, 2004	Unruh et al., 2006
	Kavale, Mathur, & Mostert, 2004	Patterson, Jolivette, & Crosby, 2006	Vannest et al., 2009
	Kern et al., 2009	Polsgrove & Smith, 2004	Verden & Hickman, 2009
	Lane, Wehby, & Barton-Arwood, 2005	Rivera, Al-Otaiba, & Koorland, 2006	
Tertiary or Individualized Interventions	Blood & Neel, 2007	Robinson, 2007	
	Cheney & Bullis, 2004	Kern et al., 2009	Quinn & Lee, 2007
	Council for Children with Behavioral Disorders, 2009	Konopasek & Forness, 2004	Schoenfeld & Mathur, 2009
	Eber & Keenan, 2004	Lambros et al., 2007	Simonsen et al., 2008
	Forness, Freeman, & Paparella, 2006	Lane et al., 2009	Trussell, Lewis, & Stichter, 2008
	Hagan-Burke, Burke, & Sugai, 2007	Lane, Kalberg, & Shepcaro, 2009	Vannest et al., 2009
		Lewis, Hudson, Richter, & Johnson, 2004	

To utilize evidence-based programming, Elliott (2007) recommends several steps. First, funding of unproven programs must include an evaluation component. Fiduciary responsibility is an essential component of ensuring high quality implementation (Wing Institute, 2006). Second, federal programs that do not work should be discontinued (Elliott, 2007). Third, Elliott states the need for a collective definition of the constituent components of an EBP must be established. One model for a rigorous definition of EBP exists in the Blueprints for Violence Prevention program (University of Colorado at Boulder, Center for the Study and Prevention of Violence, 2010). According to the Blueprints model, to be identified as a model, a program must have two random control trials or very rigorous quasi-experimental trials. Either trial used must demonstrate positive effects in addition to evidence that the effect is sustained for at least one year after leaving the program. Finally, widespread implementation of cost effective evidence-based programs should be promoted (Elliott, 2007).

There are a number of research-supported practices that may benefit all students in a classroom, but particularly those with EBD. For example, contingent positive reinforcement following a desired behavior has been found to increase task engagement and reduce problem behaviors (Lewis et al., 2004). Further, Lewis et al. indicate that when teacher praise, one form of contingent positive reinforcement, consistently occurs in the classroom, desired behaviors are more likely to occur. Another research-supported practice that has been shown to benefit students with EBD is increased opportunities to respond during instruction. By permitting high levels of correct on-level academic responding, teachers increase task engagement, improve academic responding, and as a result a decrease in inappropriate or disruptive behaviors occurs (Skiba & Peterson, 2005).

Some students with EBD may demonstrate behavior that is aggressive or violent. At the

classroom level, there are specific strategies and interventions that teachers may use to prevent outbursts of violence and aggression. First, students should be actively involved in making decisions about classroom rules and the curriculum (Conroy & Harader, 1995; Jolivette, Stichter & McCormick, 2002). The classroom should be well-structured with appropriate rewards for appropriate behavior. These rewards should outnumber punishments for negative behaviors. Socialization and normalization skills should be taught as well as alternative behaviors and strategies. Teachers should care about their students and provide evidence of this caring through positive teacher behaviors and attitudes (Conroy & Harader, 1995; Kea & Campbell-Whatley, 2005). The instruction should be well-paced and smooth (Van Acker, 2005). Teachers must remain aware of what students are doing in the class at all times, despite how much is actually occurring at one time. Group alerting strategies and stimulating seatwork at a level to engage students will help eliminate behavior problems in the classroom (Van Acker, 2005; Witt et al., 2004a). Clear expectations for behavior should be taught and expected as well as the consequences for not displaying appropriate behavior (e.g., Witt et al., 2004a). Finally, feedback and reinforcement should be promptly provided for both appropriate academics and behavior.

In addition to classroom-level interventions, school-wide safety must be addressed to prevent aggressive and violent acts. A safe school is “one where students, teachers, and staff are protected from violence and aggression,” (Conroy & Harader, 1995, p. 24). Making schools safer is an issue facing all educational personnel today. Elliot (2007) testified that the Center for the Study and Prevention of Violence found that in over 600 programs used in schools to prevent or deter violence, drug use, or delinquent behavior, only 20% had any rigorous evaluation to document success. There were many reasons cited by Elliot for the lack of scientific analysis. First, the new evidence-based policy is typically only a guideline and is not mandated or

enforced. Many new programs are selected based on informal methods (e.g., who has a good relationship with whom). Scientific evidence of effectiveness is often not one of the selection criteria. Elliot also described a relatively strong aversion to adopting programs developed outside of a local area. Second, many of the lists of approved programs provided by funding agencies have little, if any, scientific standard for selection. Finally, few programs listed have the capacity to be delivered with fidelity on a wide scale. Often, Elliot reported that the examined programs continue to be implemented with no plans for evaluation.

Best practices are emerging in programs to reduce aggression and violence. Effective programs identify and implement actions that promote success (Cantrell & Cantrell, 1995). The first action is to plan for crisis management (e.g., Bullock & Fitzsimons, 1996; Cantrell & Cantrell, 1995; Poland, 1994). The most significant step in planning for crisis management is to prepare the environment and declare the school a neutral zone. Graffiti removal, analysis of security needs, and a universal declaration that the school is a neutral zone for gangs will help promote a safer school environment. Bullock and Fitzsimons (1996) identified several elements recommended for inclusion in violence prevention or intervention programs: (a) develop and maintain a positive and safe school climate; (b) focus on classroom management for prevention and conflict resolution within the classroom; (c) identification of gang techniques; and (d) establish methods for defusing potentially dangerous confrontations between students and faculty. Collaboration among the school, community members and agencies, local police and parents is necessary to fully enforce the school neutral zone (Cantrell & Cantrell, 1995). Staff will need training for crisis response, as well as debriefing techniques for youth and colleagues following a crisis. As much as possible, youth and their family members should be involved in developing and implementing any safety plans at the school. The curriculum must deglamorize

violence and the criminal lifestyle while providing experiences to teach empathy and altruism, prosocial skills and job preparation. The crisis and safety plans should be collaboratively reviewed on a regular basis to ensure relevance and efficacy.

Meeting the mental health needs of all students, particularly those with EBD, will help mitigate aggressive and violent acts, and schools should employ certain strategies for prevention and intervention (Lambros et al., 2007; Lechtenberger et al., 2008). First, schools should strengthen and expand the role of schools to promoting social and emotional well-being within the existing PBIS system (Lechtenberger et al., 2008). Additionally, school-based mental health resources for students, families, and professionals should be supported (Lambros et al., 2007; Lechtenberger et al., 2008). Schools may benefit from forming partnerships among school personnel, community agencies, and families. Finally, schools should ensure that special education and related services are available and accessible to students with EBD and their families.

Teachers who are reflective practitioners may be able to more effectively teach all students with EBD (Regan, 2009). As a reflective practitioner, teachers examine their own belief systems regarding instruction and classroom management in addition to establishing appropriate goals for learning and behavior expectations. Second, teachers develop a relationship with every student. Relationship-building may establish trust and a joint commitment to upholding the established classroom rules and routines. Third, teachers of students with EBD establish clearly defined roles for learning, playing and participating. Students with EBD need to know the expectations and understand well-established boundaries. It is the teacher's responsibility to ensure that expectations and boundaries are explicitly taught. Finally, teachers provide and use creative resources. Teaching students with EBD requires a great deal of planning and

individualization. The teacher will differentiate not only instruction, but resources, to ensure that all students are receiving what they need.

Academic primary interventions.

Effective academic instruction should be systematic, moving the child toward annual goals with sensitivity to children's cultural differences. A culturally responsive instructor uses information the student already knows to teach what needs to be learned (Campbell-Whatley & Gardner, 2002). Using culturally sensitive language allows the student to concentrate on the academic skill rather than spend time trying to decode majority culture information. Incorporating literature into the classroom that is culturally representative of the country is another way to build diversity in the classroom. Using novels that represent the diverse cultural backgrounds of the students within the class lets them know that their culture is valued and respected.

Academic interventions at the primary or universal level can easily be sub-categorized into three primary categories: (a) peer-mediated interventions, (b) self-mediated interventions, and (c) teacher-mediated interventions (Ryan, Pierce, & Mooney, 2008; Ryan et al., 2004).

Peer-mediated interventions.

A student's peers are responsible for providing instruction in peer-mediated interventions. Peer tutoring is one way to promote student participation and academic achievement (Campbell-Whatley & Gardner, 2002; Fitzsimons-Lovett, 1998; Lane, 2004). According to Fitzsimons-Lovett (1998), peer tutoring has been accepted as an effective intervention for developing and enhancing healthy self-respect in children and youth for both the

tutor and tutee. Students who have high self-respect present a more favorable attitude toward school, more positive behavior in class, and greater peer acceptance. Peer tutoring can occur: (a) class-wide, where the whole class is divided into tutoring groups for various subject areas; (b) individually, where specific individuals within a group are selected to be tutored by others; and (c) cross-age, where older students tutor younger students. Other examples of peer-mediated interventions include peer modeling, peer monitoring, peer network strategies, reverse-role tutoring, peer-assisted learning strategies, peer counseling, and cooperative learning. According to research (e.g., Ryan et al., 2008), peer-mediated interventions have strongly positive findings relative to improving academic performance. Social validity was also found to be high for both teachers and students.

Self-mediated interventions.

The student is responsible for implementing the strategy in self-mediated interventions (Fitzpatrick & Knowlton, 2009; Ryan et al., 2008; Ryan et al., 2004). Examples of self-mediated interventions include self-monitoring, self-evaluation, self-instruction, goal setting, and strategy instruction. Self-management programs have been found to increase overall positive behavior, on-task behaviors, and increase the probability that more adaptive behaviors will generalize to other settings (Lewis et al., 2004).

Teacher-mediated interventions.

Teacher-mediated interventions are provided by the teacher through academic instruction or manipulation of antecedents and consequences (Ryan et al., 2008; Ryan et al., 2004). These interventions range from story mapping and mnemonics to curricular accommodations and life

space interviewing. Instruction should be delivered at a brisk pace that promotes student engagement, as well as frequent opportunities for response and high rates of success (Campbell-Whatley & Gardner, 2002). When students are actively engaged in a lesson, and their correct response level is high, appropriate classroom behavior is promoted (Campbell-Whatley & Gardner, 2002; Cartledge et al., 2002; Witt et al., 2004a). Feedback should be given as close to the event as possible. Using response cards, either preprinted or write-on, is another way to promote student engagement (Campbell-Whatley & Gardner, 2002; Cartledge et al., 2002;). Cooperative learning will promote student roles and responsibilities when appropriately applied within a classroom setting (Campbell-Whatley & Gardner, 2002). Ultimately, teacher-mediated interventions are designed to help teachers determine the reinforcers that elicit appropriate student responses to instruction.

Secondary or small-group interventions.

Because students with EBD often do not exhibit behaviors that are conducive to academic and social success, they may not respond to the universal interventions provided at the primary level (Burke, Vannest, Davis, Davis, & Parker, 2009; Kavale et al., 2004; Meadows & Stevens, 2004; Polsgrove & Smith, 2004). Students not responding to universal interventions are in need of more intensive, small-group interventions provided at the secondary level. To increase positive social behaviors in students with EBD, social skills training and direct instruction may be beneficial (Kavale et al., 2004). Social skills training involves teaching alternative behaviors to students with EBD utilizing differential reinforcement (e.g., Meadows & Stevens, 2004), and teaching self-control through self-monitoring, goal setting, strategy selection and implementation, self-evaluation, and self-reinforcement (e.g., Polsgrove & Smith, 2004).

Instruction in social skills is effective for all children from preschool through adolescence, those with internalizing behaviors, and those with externalizing behaviors resulting in more prosocial behaviors being demonstrated, improved social competence, and increases in academic engagement (Lewis et al., 2004).

To facilitate social skills instruction, students with EBD need to be taught socially acceptable problem-solving strategies (Van Acker, 1995). Systematic, overt instruction in problem-solving provides planned opportunities for students to practice newly acquired skills and receive feedback on their performance, as well as taking advantage of incidental learning opportunities. Within instruction, teachers guide students through introspective activities examining why certain behaviors are not appropriate in light of current social values.

Consequences are also an essential element to help children learn, but these consequences must be presented consistently to be successful (e.g., Liaupsin et al., 2004; Van Acker, 1995).

Because behavior change is a process, and not a singular event teachers need to find ways to weave social skill instruction throughout existing curricula (Van Acker, 1995).

Behavioral progress monitoring is a critical part of social skills service delivery (Burke et al., 2009; Coffee & Ray-Subramanian, 2009). Daily behavior report cards, home-school notes, or good behavior notes can be used as tools for progress monitoring and fulfill the need for periodic reports and monitoring of goals under IDEIA. Burke and colleagues (2009) discovered that these progress monitoring tools proved to have high reliability. They also demonstrated their efficacy when used for students at-risk of developing behavior problems within a Response to Intervention framework.

Cognitive behavioral interventions (CBI) may provide students with EBD the means necessary to interact appropriately in various environments (Gresham & Kern, 2004; Polsgrove

& Smith, 2004; Robinson, 2007). CBIs teach students the skills they need in order to control their own behavior by giving these students tools to exhibit self-control (Polsgrove & Smith, 2004) and to address academic and interpersonal problems (Robinson, 2007). CBIs can also be used for students with internalizing behavior issues (Gresham & Kern, 2004). Often times, CBIs will include “the principles of behavior therapy to modify underlying cognitions and thought processes that affect observable behavior” (Robinson, 2007, p. 8).

Often times, the behavior needs of students with EBD appear much more pressing than do their academic needs. Teachers may focus on teaching adaptive behavior skills and neglect to address the academic deficits, particularly in the area of reading (Lane, 2004; Rivera et al., 2006). Rivera and colleagues (2006) found that current reading practices involving small-group and differentiated instruction are much more effective instructional practices than previous undifferentiated, whole-group instruction. Additionally, all successful reading interventions reviewed by Rivera and colleagues contained some of all of the five components of effective reading instruction deemed important under No Child Left Behind legislation: (a) phonemic awareness; (b) phonics; (c) vocabulary; (d) fluency; and (e) comprehension. Conversely, small-group and differentiated instruction interventions for math are not widely researched (Hodge et al., 2006). A recent review of research by Hodge and colleagues found a lack of empirical studies relating particularly to problem-solving skills and teacher-directed interventions. Academic success has also been achieved through mentoring by adults or the students themselves to help other students in the class (Conroy & Harader, 1995).

Tertiary or individualized interventions.

Some students with EBD may prove resistant to both universal interventions at the

primary level and small-group interventions at the secondary level (e.g., Jolivette, 2005; Van Acker, 2005). In such cases, it is necessary to provide individualized interventions within the tertiary level of support (Turnbull et al., 2002). One very effective method of individualizing interventions includes the use of a functional behavior assessment (FBA). The use of FBAs for students demonstrating high levels of problem behavior is well-documented in the literature (e.g., Blood & Neel, 2007; Kern et al., 2009; Lane, Eisner, et al., 2009; Lane, Kalberg et al., 2009; Lewis et al., 2004).

When a FBA has been conducted, it is more likely that a behavior intervention plan will be developed and written into a child's Individualized Education Plan (IEP; Blood & Neel, 2007; Buck, Polloway, Kirkpatrick, Patton, & Fad, 2000; Gable, Quinn, Rutherford, & Howell, 1998; Sugai, Lewis-Palmer, & Hagan, 1998). However, Blood and Neel (2007) found that Tier 3 students with a fully developed FBA were rare, and most FBAs developed for Tier 3 students were missing major components. Teachers demonstrated a significant lack of knowledge regarding both FBAs and behavior intervention plans, viewing them more as a compliance document rather than a behavioral training aide. Additionally, most of the FBAs examined by Blood and Neel found that they were based on teacher judgment rather than data, and that parent and student involvement were non-existent in most cases. While FBA has not yet been identified as an evidence-based practice based on the current criteria, it is undoubtedly a useful intervention at the tertiary level (Lane, Eisner et al., 2009; Lane, Kalberg et al., 2009).

For many students with EBD, one form of intervention alone, such as psychopharmacology, may not be enough (Konopasek & Forness, 2004). In some cases, combination treatment approaches incorporating cognitive behavioral treatments with psychopharmacologic intervention may be more effective (Forness et al., 2006). In 2006,

Forness and colleagues found that behavioral interventions or CBIs produced normalized responses in nearly 32% of students studied, as opposed to 52% for students receiving medication treatment alone. However, 48% of students in the study demonstrated no normalized response to medication treatment. Therefore, teachers should be aware that every child is unique, and their treatment program must also be uniquely designed. When students are receiving a medicinal treatment, it is imperative that all school personnel involved with the student (e.g., general and special educators) have open dialog with the medical practitioners overseeing the psychopharmacologic intervention.

The academic needs of students with EBD are important at the tertiary level as well. For many students with or at-risk of EBD, academics can function as aversive stimuli (Hagan-Burke et al., 2007). However, instructional and curricular modifications, applied appropriately, can increase positive academic behavior responses while simultaneously decreasing problem behavior thereby avoiding the stigma of academic aversion.

In addition to meeting behavioral and academic needs of students with EBD at the tertiary level, assistance in planning for the school-to-community transition is also important (Cheney & Bullis, 2004). While a transition plan may only include school-based services, many students with EBD need a more comprehensive coordinated, collaborative, multiagency approach to service provision, possibly including the use of a systems of care approach, like wraparound (Eber & Keenan, 2004). Many students with EBD and their families have struggled to obtain services from a fragmented mental health system, juvenile justice, special education, and child welfare. Each system operates under different philosophies and governance structures, often resulting in different eligibility criteria, definitions, policies and interventions for students with EBD and their families. Since students with EBD have poor outcomes after leaving high

school (U.S. Department of Education, Office of Special Education Programs, 2008), it is important to provide as comprehensive a service as possible to encourage a successful transition into life.

For students who demonstrate continued and/or severe incidents of aggressive and violence, physical restraint or seclusion may be necessary for some students with EBD. In this case, certain principles and should be followed. The Council for Children with Behavioral Disorders (CCBD; 2009) in its position on the use of physical restraint and seclusion in school settings, strongly recommends that all staff should be well-trained on conflict management, de-escalation techniques and crisis management. Additionally, it should be ensured that all educational settings are appropriate and least restrictive. All children for whom these measures may be necessary should have a FBA and a behavior intervention plan completed. Physical restraint or seclusion should only take place in the case of threats to physical safety or in situations of immediate danger. All incidents of restraint or seclusion should be conducted by trained professionals, and must be reported to the proper supervisory individuals or boards. However, Democratic Representative George Miller of California recently introduced a bill into Congress that will reduce the use of restraint and seclusion in schools (Diament, 2009). The bill, if passed, will create a federal oversight committee designed to scrutinize restraint and seclusion tactics and ensure that restraint or seclusion only occur in situations where there is imminent danger. Additionally, a trained professional must be the one to administer the restraint or monitor the seclusion. Under this legislation, all mechanical and chemical restraints would be banned.

Conclusion

Students with EBD face many challenges in the school setting. Because the number of students with EBD in schools continues to rise (U.S. Department of Education, National Center for Education Statistics, 2009), it is vital that school personnel are adequately prepared to meet the unique and their challenging needs. The implementation of interventions for students with EBD, or at-risk for academic failure and behavioral problems, was examined through a discussion of evidence-based practices. A discussion of academic and behavioral interventions demonstrated the importance and usefulness of these approaches for students with disabilities in general, and students with EBD in particular. Interventions were discussed based upon the concept of PBIS. Primary or universal interventions included those peer-mediated, self-mediated and teacher-mediated interventions. Secondary interventions focused on more intensive instruction in smaller group settings. Finally, interventions at the tertiary level examined ways to support students in need of individualization.

Practitioners have a moral and legal responsibility to implement effective and appropriate 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). School personnel involved with students with EBD must understand the vital role they play in appropriate service provisions. While teaching students with EBD may be challenging for school personnel, success can be achieved. “...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 hiding underneath these behaviors, a positive learning environment and a positive student-teacher relationship ensues,” (Regan, 2009, p. 61). Positive outcomes can be possible for students with EBD.

CHAPTER 3

METHODOLOGY

Chapter 3 discusses the methodology and presentation of data including (a) the purpose of the study, (b) contextual framework for the study; (c) the research questions, (d) the selection of participants, (e) instrumentation to be used, (f) data collection procedures, and (g) data analysis procedures.

Purpose of the Study

Evidence-based practices (EBP) have become a national priority in education since their inclusion in such laws as No Child Left Behind (2001) and the Individuals with Disabilities Education Act (2004). Despite the insistence that educational curriculum and policy be evidence-based, many schools and educators have had difficulty translating the science into practice (Fitzpatrick & Knowlton, 2009; Wing Institute, 2006). There appears a distinct need for intervention and implementation research in the area of fidelity with students with emotional/behavioral disorders (EBD; Nelson, 2004; Walker, 2004). This study adds to the research by examining evidence-based interventions utilized by school personnel in Texas schools. Specifically, the study investigated the perceived importance of 27 identified evidence-based interventions for students with EBD. The interventions were categorized into three main types: (a) primary interventions designed to benefit all students; (b) secondary interventions designed to benefit students who continue to present challenging academic needs or behavioral needs and delivered in small group settings; and (c) tertiary interventions individualized to benefit students who continue to display significant needs despite the two previous levels of intervention (Office of Special Education Programs, 2010). In addition, the survey demonstrated

how frequently these interventions are implemented in the programs of the respondents as well as how well-prepared the practitioners perceive themselves to implement the strategies with fidelity. Further analysis of the data examined the inter-relationships, if any, between the importance rating and the ratings of program usage and preparedness.

Contextual Framework for the Study

The contextual framework of this study is based on the tenets of positive behavioral interventions and supports which has been legally mandated via the Individuals with Disabilities Education Improvement Act (2004). This framework is appropriate in that it incorporates a three-tier system of intervention (i.e., primary, secondary, and tertiary), which if implemented appropriately will ensure that all students, including those with EBD, receive evidence-based interventions as legally mandated.

Research Questions

The research questions for this study are as follows:

1. Which interventions do practitioners rate as being most important?
2. Which interventions do practitioners report using most frequently?
3. Which interventions do practitioners perceive themselves most well-prepared to implement?
4. To what degree does the importance rating of an intervention category (i.e., primary, secondary, and tertiary) relate to the program usage of the same intervention category?
5. To what degree does the importance rating of an intervention category (i.e., primary, secondary, and tertiary) relate to the perceived preparedness to implement interventions of the same category?

Selection of Participants

Directors of special education throughout Texas were contacted via letters of introduction and a description of the study (see Appendix A). They were asked to forward the link to the survey to all the special educators, administrators, general educators, and other practitioners who provide direct or indirect services to students with EBD in their service area. Survey participation was voluntary. In total, 725 responses were elicited, however, the total number varied within survey parts as some respondents did not answer each question.

Instrumentation

The survey instrument employed in the study is based upon the Survey of Services for Students with Emotional Disabilities in Virginia developed by Dr. Robert Gable and a team of individuals involved in the Virginia Technical Assistance network (Gable, 2010). The Virginia survey instrument has been extensively pilot tested and critiqued by a number of professionals, including individuals within the Virginia Department of Education and the Virginia Commissioner of Education. The survey instrument was adapted for dissemination in Texas by altering only the necessary demographic data questions, removal of the categorical answer “Does not apply,” and converted into an electronic format. The first page of the electronic survey contains the informed consent information, and only when the participant agrees to the terms of the informed consent will s/he be able to complete the survey.

The survey contains five sections (see Appendix B). In the first section, demographic data are collected through a series of questions and choice options. The demographic data includes (a) level of school, (b) type of school, (c) school setting, (d) whether or not the individual has worked with students with EBD either presently or in the past three years, (e) type

of service delivery system in the school, (f) position of the person completing the survey, and (g) the number of years in that position. The second section of the survey lists 27 program components or interventions and requests the respondent to rate how they perceive the importance of the program components using a five-point Likert-based scale ranging from *very unimportant* to *very important*. The third section of the survey instrument requests the respondent to evaluate how often each of the 27 program components are used in his/her school. It is also based on a five-point Likert scale ranging from *never* to *always*. The fourth section of the survey requests a rating of how well-prepared the practitioner perceives him/herself to be to implement each of the 27 program components, also based on a five-point Likert scale ranging from *not at all prepared* to *very well prepared*. The final section of the survey allows the respondent to enter his/her email address in a drawing to win a gift certificate.

Data Collection Procedures

A letter of introduction and invitation to participate in the study was sent to 495 directors of special education in Texas. After the initial letter of introduction and invitation to participate, a link to the survey instrument was provided to the special education director who then sent the link to the targeted individuals in the district who provide direct or indirect services to students with EBD. Field test data indicated that the survey should take no longer than 10-15 minutes to complete. At the end of the second week of data collection, a reminder email was sent to the directors to forward to those who had not responded. As the data were returned electronically, they were stored in a database for categorization and analysis. In sum, data collection occurred for three weeks.

Data Analysis Procedures

The demographic data collected for the survey were 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 quantified based on the five-point Likert scale (e.g., *very unimportant* = 1, *unimportant* = 2) and each response was coded to the corresponding program component (1-27). This procedure applied to the second, third, and fourth sections of the survey. Data were analyzed using PASW Statistics 17 software. Data mining procedures took place initially. Any missing data was analyzed to determine if a 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 was also interpreted.

To address Research Questions 1, 2 and 3, simple frequencies, means and modes were calculated and interpreted. To address research questions 4 and 5, categorization of responses were conducted. Three new constructs were created: (a) primary interventions; (b) secondary interventions; and (c) tertiary interventions. Each of the 27 listed interventions were assigned to a category. Table 2 lists the categorical organization of the listed interventions with their coordinating survey position. Categorization occurred based upon where the literature ascribes the intervention (see Table 1).

Quantified and coded responses for each individual intervention were assigned to that category. Synthetic variables were created as representative data points for each of the categorical classifications. A canonical correlation analysis (CCA) was used to determine results to Research Questions 4 and 5. CCA was chosen to analyze data because CCA limits the probability of committing Type I error anywhere within the study (Sherry & Henson, 2005). Additionally, CCA examines multiple causes and effects simultaneously.

Table 2

Categorization of 27 Interventions on the Survey

Intervention Category	Interventions on Survey
Primary Interventions	(1) a climate that supports successful teaching and learning
	(2) a program of peer-mediated intervention to promote positive behavior skills
	(3) a conflict resolution program
	(6) mental health services as appropriate
	(8) a system of positive behavior support
	(11) a crisis intervention plan for emergency situations
	(14) materials that reflect gender, cultural, and linguistic differences among students
	(15) the use of peer-reinforcement to promote appropriate student behavior
	(16) instruction in self-monitoring of student academic performance
	(17) instruction in self-monitoring of non-academic behavior
	(18) a systematic approach to cooperative learning
	(19) choice making opportunities for students
	(23) group-oriented contingency management
Secondary interventions	(24) peer-assisted learning
	(25) clear rules/expectations
	(26) precorrection instructional strategies
	(4) an anger management program
Tertiary interventions	(5) social skills instruction taught as part of regular class instruction
	(10) specialized instruction to promote learning and study skills
	(7) a behavior support/management plan as appropriate
	(9) academic support and curricular/instructional modifications
	(12) procedures for the use of physical restraint
	(13) procedures for the use of seclusion
	(21) a systematic approach to data collection, graphing, and analysis for intervention plans
(22) behavior contracts	
	(27) a program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment

CHAPTER 4

ANALYSIS OF DATA AND DISCUSSION

The present study was conducted to obtain a current snapshot of the state of EBP in Texas public school programs for students with EBD. The data were collected via an anonymous online survey based upon the Survey of Services for Students with Emotional Disabilities in Virginia developed by Dr. Robert Gable and a team of individuals involved in the Virginia Technical Assistance network (Gable, 2010). The online survey was disseminated through email to all special education directors in Texas. Survey responses were captured numerically and saved in a database. Analysis of data was conducted via PASW Statistics 17 software.

Data were initially mined for missing data and outliers. Missing data were found in 221 cases under the Importance (Part II) ratings, 261 cases under the Frequency (Part III) ratings, and 290 cases under the Preparedness (Part IV) ratings. The pattern of missing data is most likely the result of test fatigue, where participants chose to close their browser and not complete the remainder of the survey. Removing entire cases of data through listwise deletion was eliminated as a possibility because every piece of data was valuable, and the data generally followed a normal curve with no skewed data (outside of the 3 to -3 range) and only slight leptokurtic data under the Importance (Part II) results. Additional data mining procedures indicated that no data transformation was necessary due to the relatively normal distribution of data points.

Demographic Information

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, central office personnel,

administrators) who provide direct or indirect services to students with EBD. For the study, survey responses totaled 725.

Demographic information for school setting revealed that (a) 18.3% of respondents identified themselves as working in an urban setting, (b) 38.9% of respondents identified themselves as working in a suburban setting, and (c) 28.3% of respondents identified themselves as working in a rural setting. Respondents also reported that 65.7% currently work with students with EBD, and 25.7% of respondents do not currently work with students with EBD but have done so in the past three years. Most respondents (29.1%) indicated that they currently work in elementary school settings. Table 3 displays how the respondents identified their level of school. Other level of school responses included (a) behavior units, (b) charter schools, (c) alternative schools, and (d) special education cooperatives.

Table 3

Level of School Percentages Based on 725 Responses

Level of School	Frequency	% Responses
Preschool	11	1.5
Elementary	211	29.1
Middle	93	12.8
High school	123	17.0
Other	210	29.0
<i>Missing data</i>	<i>77</i>	<i>10.6</i>

The large majority of respondents (85.1%) identified themselves as working in a public school. Table 4 displays how the respondents identified their type of school. Other setting responses included (a) behavior units, (b) ESC, (c) charter schools, (d) alternative schools, and (e) special education cooperatives.

Table 4

Type of School Results Based on 725 Responses

Type of School	Frequency	% Responses
Public school	617	85.1
Private school	3	0.4
Alternative school	13	1.8
Regional	3	0.4
Residential	1	0.1
Other	11	1.5
<i>Missing data</i>	77	10.6

While responses were elicited from all 20 ESC in Texas, the majority of responses came from ESC 11, based in Fort Worth, Texas. Additionally, a large number of responses were elicited from ESC 4, based in Houston, Texas. Figure 1 displays the location and geographic size of each ESC in Texas.

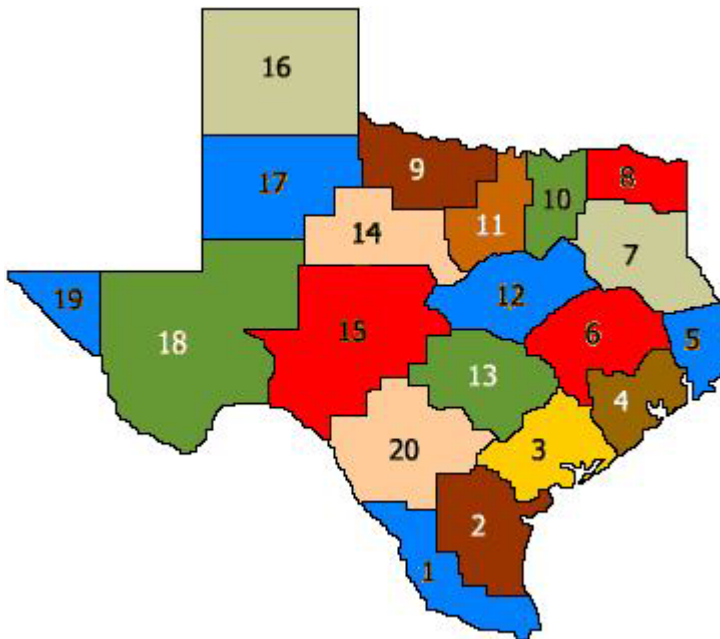


Figure 1. ESC locations in Texas.

Table 5 displays the range of responses based on Educational Service Region in the state.

Table 5

Texas Educational Service Center Results Based on 725 Responses

Educational Region	Frequency	% Responses
1	13	1.8
2	9	1.2
3	1	0.1
4	92	12.7
5	7	1.0
6	25	3.4
7	74	10.2
8	9	1.2
9	5	0.7
10	78	10.8
11	166	22.9
12	28	3.9
13	30	4.1
14	9	1.2
15	3	0.4
16	6	0.8
17	13	1.8
18	6	0.8
19	13	1.8
20	33	4.6
<i>Missing data</i>	<i>105</i>	<i>14.5</i>

The type of service delivery system ranged from a single system (e.g., full inclusion, part-time inclusion, consultation, resource room) to a combination of all service delivery systems listed: (a) full inclusion; (b) part-time inclusion; (c) self-contained; (d) consultation; (e) resource room; (f) day treatment; and (g) residential school. Other write-in responses included (a) transition units, (b) adaptive behavior units, (c) content mastery, (d) counseling, (e) 1:1 delivery systems, and (f) diagnostic work.

Respondents were asked to select the description of their position. The majority of respondents (32.4%) identified themselves as a special education teacher, and 10.6% of respondents identified themselves as special education administrator/coordinator. A smaller

percentage (4.4%) of respondents identified themselves as general education teachers, 1.9% identified themselves as school administrators (principals or assistant principals), and 1.2% identified themselves as central office staff. Respondents were also given the option of identifying themselves as “other” in which case they were asked to write in a description of their position. Those descriptions include (a) behavior interventionists/specialists, (b) diagnosticians, (c) instructional assistants/specialists, (d) counselors, (e) related service providers, (f) school psychologists, and (g) teacher aides.

Respondents reported the number of years of service in their current position. Most respondents (29.7%) have served between 1 to 5 years in their current position. Closely following this group, 21.7% of respondents served in their current position for more than 10 years, while only 15% had served 6 to 10 years and 7.4% had served less than 1 year.

Type of license (e.g., early childhood through Grade 4, Grades 4-8, 9-12, all levels) was also asked of respondents. The majority of respondents (49.8%) reported holding a license allowing them to provide services to students on all grade levels. Respondents holding licenses for either early childhood through grade four, and/or early childhood through grade 8 comprised 8% of total responses. The remaining responses were unequally dispersed among some combination of each category.

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 be one explanation for the changes in number for each research question analysis. Data presented for the first three research questions reflect the most difference in total number. Tables 6, 8, and 10 present data regarding percentages of responses incorporating all 725 respondents, regardless of missing cases. Tables 7, 9, and 11 present the statistics for the corresponding responses

reflecting the removal of missing data. Data presented for research questions 4 and 5 demonstrate the changes in number within the titles of Tables 12-21.

Research Question 1:
Which Interventions Do Practitioners Rate as Being Most Important?

Simple frequencies were calculated through PASW 17 statistical software. Table 6 displays the percentages for each Importance rating by intervention.

Table 6

Importance Ratings of Respondents by Percentage for 725 Responses

How important is/are:	Very unimportant	Unimportant	Neutral	Important	Very important
1. A climate that supports successful teaching and learning.	4.1	0.0	0.3	6.8	58.3
2. A program of peer-mediated intervention to promote positive behavior skills.	3.0	2.3	13.7	28.3	22.2
3. A conflict resolution program.	3.7	0.6	4.4	28.8	31.6
4. An anger management program.	3.4	0.7	2.1	22.9	40.4
5. Social skills instruction taught as part of regular class instruction.	3.6	0.8	3.0	21.2	40.8
6. Mental health services as appropriate.	3.3	0.7	4.1	29.0	32.4
7. A behavior support/management plan as appropriate.	3.3	0.7	1.2	17.2	47.0
8. A system of positive behavior support.	3.4	0.4	0.8	13.5	51.3
9. Academic supports and curricular/ instructional modifications.	3.3	0.6	1.8	24.1	39.7
10. Specialized instruction to promote learning and study skills.	3.6	0.6	3.6	26.2	35.6
11. A crisis intervention plan for emergency situations.	3.9	0.3	1.0	13.8	50.6
12. Procedures for the use of physical restraint.	3.7	0.3	3.9	18.5	43.2
13. Procedures for the use of seclusion.	4.6	1.9	11.0	23.9	28.1

(table continues)

Table 6 (continued).

How important is/are:	Very unimportant	Unimportant	Neutral	Important	Very important
14. Materials that reflect gender, cultural, and linguistic differences among students.	3.3	2.5	17.4	29.9	16.4
15. The use of peer-reinforcement to promote appropriate student behavior.	2.9	2.9	9.9	36.4	17.4
16. Instruction in self-monitoring of student academic performance.	2.8	1.7	6.2	37.9	21.0
17. Instruction in self-monitoring of non-academic behavior.	2.9	1.2	3.4	33.1	28.8
18. A systematic approach to cooperative learning.	2.8	1.7	11.9	35.4	17.8
19. Choice making opportunities for students.	2.9	1.0	4.0	28.0	33.7
20. A formal procedure to develop function-based interventions.	2.8	1.7	9.2	31.0	24.8
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	2.8	1.5	8.6	28.7	28.0
22. Behavior contracts.	2.6	2.8	14.8	31.7	17.7
23. Group-oriented contingency management.	2.6	1.9	20.7	31.6	12.7
24. Peer-assisted learning.	2.9	2.3	18.3	34.1	11.9
25. Clear rules/expectations.	3.4	0.6	0.6	7.0	57.9
26. Precorrection instructional strategies.	2.9	1.0	8.7	28.1	28.8
27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.	3.9	0.7	4.3	21.4	39.3

Modes, means, standard deviations, and statistics of skewness and kurtosis are displayed in Table 7. While some of the data tended to be leptokurtic, measures of skewness remained fairly stable, therefore, data transformation measures were not considered necessary.

Table 7

Modes, Means, Standard Deviations and Measures of Skewness and Kurtosis for 504 Importance Ratings

Question	Mode	Mean	Standard Deviation	Skewness	Kurtosis
1	5	4.66	0.974	-3.18	9.02
2	4	3.92	1.02	-1.03	0.95
3	5	4.22	0.997	-1.81	3.42
4	5	4.38	0.976	-2.181	4.825
5	5	4.37	1.006	-2.075	4.156
6	5	4.24	0.968	-1.840	3.715
7	5	4.50	0.958	-2.506	6.173
8	5	4.57	0.950	-2.781	7.435
9	5	4.39	0.954	-2.221	5.202
10	5	4.29	0.989	-1.944	3.917
11	5	4.54	0.984	-2.680	6.725
12	5	4.40	1.010	-2.137	4.366
13	5	3.99	1.125	-1.215	0.947
14	4	3.77	1.004	-0.881	0.768
15	4	3.90	0.962	-1.207	1.646
16	4	4.05	0.918	-1.514	2.960
17	4	4.20	0.933	-1.788	3.785
18	4	3.92	0.935	-1.186	1.858
19	5	4.27	0.948	-1.849	3.814
20	4	4.06	0.970	-1.322	1.955
21	4	4.12	0.979	-1.398	2.083
22	4	3.85	0.971	-0.949	0.975
23	4	3.72	0.923	-0.779	0.994
24	4	3.71	0.930	-0.908	1.176
25	5	4.66	0.941	-3.163	9.157
26	5	4.14	0.976	-1.448	2.296
27	5	4.32	1.033	-1.935	3.495

Respondents highly rated “a climate that supports successful teaching and learning” (Intervention 1, 58.3%, mean = 4.66), “a system of positive behavior support” (Intervention 8, 51.3%, mean = 4.57), “a crisis intervention plan for emergency situations” (Intervention 11, 50.6%, mean = 4.54), and “clear rules/expectations” (Intervention 25, 57.9%, mean = 4.66) as *very important*.

Research Question 2:
Which Interventions do Practitioners Report using Most Frequently?

Like the results for the first research question, simple frequencies were tallied for the results of Research Question 2 (See Table 8).

Table 8

Frequency of Implementation Report of Respondents by Percentage for 725 Responses

In my program we use/have:	Never	Seldom	S-times	Usually	Always
1. A climate that supports successful teaching and learning.	0.4	0.6	7.9	27.0	27.9
2. A program of peer-mediated intervention to promote positive behavior skills.	4.6	13.2	20.1	15.6	10.1
3. A conflict resolution program.	4.4	6.6	19.7	17.1	16.0
4. An anger management program.	4.3	9.7	15.3	18.3	16.4
5. Social skills instruction taught as part of regular class instruction.	3.0	8.1	17.0	14.1	21.8
6. Mental health services as appropriate.	2.3	10.1	15.3	18.1	18.2
7. A behavior support/management plan as appropriate.	0.6	2.1	8.1	20.8	32.4
8. A system of positive behavior support.	1.0	2.1	9.1	21.7	30.2
9. Academic supports and curricular/instructional modifications.	0.4	1.2	7.0	24.7	30.6
10. Specialized instruction to promote learning and study skills.	1.5	2.6	13.0	24.6	22.3
11. A crisis intervention plan for emergency situations.	1.2	2.1	9.1	16.7	34.9
12. Procedures for the use of physical restraint.	1.2	2.8	5.4	13.0	41.7
13. Procedures for the use of seclusion.	6.2	7.9	9.9	13.5	26.5
14. Materials that reflect gender, cultural, and linguistic differences among students.	3.4	8.4	20.1	19.4	12.6
15. The use of peer-reinforcement to promote appropriate student behavior.	3.0	8.8	22.8	18.9	10.5
16. Instruction in self-monitoring of student academic performance.	2.5	10.9	17.9	20.1	12.6
17. Instruction in self-monitoring of non-academic behavior.	2.8	8.3	16.7	21.2	15.0
18. A systematic approach to cooperative learning.	2.1	10.5	19.9	19.7	11.9
19. Choice making opportunities for students.	0.6	3.2	16.7	21.9	21.7
20. A formal procedure to develop function-based interventions.	2.5	6.6	15.9	20.1	18.9

(table continues)

Table 8 (continued).

In my program we use/have:	Never	Seldom	S-times	Usually	Always
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	2.6	8.1	13.8	18.8	20.7
22. Behavior contracts.	1.9	4.8	19.9	21.2	16.1
23. Group-oriented contingency management.	4.3	11.9	22.8	14.8	10.3
24. Peer-assisted learning.	2.2	9.4	27.9	16.1	8.4
25. Clear rules/expectations.	0.4	1.4	6.8	20.0	35.4
26. Precorrection instructional strategies.	1.7	6.1	18.6	21.5	16.1
27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.	4.3	10.8	14.6	17.1	17.2

Modes, means, standard deviations, and statistics of skewness and kurtosis are displayed in Table 9. Measures of skewness and kurtosis for this set of data remained within normal levels negating the need for data transformation.

Table 9

Modes, Means, Standard Deviations and Measures of Skewness and Kurtosis for 464 Frequency of Use Ratings

Question	Mode	Mean	Standard Deviation	Skewness	Kurtosis
1	5	4.28	0.760	-0.988	1.329
2	3	3.21	1.154	-0.077	-0.801
3	3	3.53	1.173	-0.437	-0.551
4	4	3.52	1.212	-0.423	-0.784
5	5	3.68	1.200	-0.468	-0.796
6	5	3.62	1.158	-0.404	-0.829
7	5	4.29	0.871	-1.206	1.175
8	5	4.22	0.913	-1.185	1.221
9	5	4.31	0.793	-1.161	1.507
10	4	3.99	0.965	-0.900	0.620
11	5	4.28	0.956	-1.344	1.407
12	5	4.42	0.952	-1.778	2.638
13	5	3.72	1.364	-0.704	-0.803
14	3	3.46	1.109	-0.344	-0.528

(table continues)

Table 9 (continued).

Question	Mode	Mean	Standard Deviation	Skewness	Kurtosis
15	3	3.39	1.062	-0.242	-0.458
16	4	3.46	1.103	-0.274	-0.731
17	4	3.59	1.110	-0.461	-0.529
18	3	3.45	1.069	-0.217	-0.685
19	4	3.95	0.935	-0.526	-0.368
20	4	3.72	1.110	-0.580	-0.412
21	5	3.73	1.160	-0.586	-0.600
22	4	3.70	1.024	-0.478	-0.219
23	3	3.23	1.130	-0.075	-0.688
24	3	3.30	0.987	-0.021	-0.300
25	5	4.39	0.810	-1.352	1.746
26	4	3.69	1.031	-0.452	-0.376
27	5	3.50	1.237	-0.382	-0.906

Respondents highly rated “a crisis intervention plan for emergency situations” (Intervention 11, 34.9%, mean = 4.28), “procedures for the use of physical restraint” (Intervention 12, 41.7%, mean = 4.42), and “clear rules/expectations” (Intervention 25, 35.4%, mean = 4.39) as Always being used.

Research Question 3:

Which Interventions do Practitioners Perceive Themselves Most Well-Prepared to Implement?

Like the results for the first and second research questions, simple frequencies were tallied for the results of Research Question 3. Table 10 displays the Preparedness frequency distribution by intervention number.

Table 10

Perception of Respondents' Preparedness by Percentage for 725 Responses

How well-prepared are you to implement:	Not at all	Not well	Adequately	Well	Very Well
1. A climate that supports successful teaching and learning.	0.1	1.9	11.9	23.0	22.9
2. A program of peer-mediated intervention to promote positive behavior skills.	2.3	9.9	17.5	18.3	11.9
3. A conflict resolution program.	1.8	8.8	16.1	18.6	14.5
4. An anger management program.	1.9	9.0	15.2	17.8	16.1
5. Social skills instruction taught as part of regular class instruction.	1.1	5.2	14.5	17.9	21.2
6. Mental health services as appropriate.	5.0	12.0	15.6	13.9	13.5
7. A behavior support/management plan as appropriate.	0.3	2.9	12.1	19.7	25.0
8. A system of positive behavior support.	0.6	3.0	11.0	18.2	27.2
9. Academic supports and curricular/ instructional modifications.	0.4	3.9	13.9	20.6	21.2
10. Specialized instruction to promote learning and study skills.	0.6	5.2	14.1	22.8	17.4
11. A crisis intervention plan for emergency situations.	1.1	3.3	13.2	16.8	25.5
12. Procedures for the use of physical restraint.	1.8	2.9	10.5	15.7	29.1
13. Procedures for the use of seclusion.	5.1	6.1	15.2	15.6	18.1
14. Materials that reflect gender, cultural, and linguistic differences among students.	1.8	9.8	21.0	16.6	10.9
15. The use of peer-reinforcement to promote appropriate student behavior.	1.4	7.9	21.5	18.8	10.5
16. Instruction in self-monitoring of student academic performance.	1.2	7.0	19.0	19.3	13.4
17. Instruction in self-monitoring of non-academic behavior.	1.0	6.9	16.7	19.7	15.7
18. A systematic approach to cooperative learning.	1.4	8.1	21.7	17.4	11.4
19. Choice making opportunities for students.	0.3	2.6	12.8	21.4	22.9
20. A formal procedure to develop function-based interventions.	1.4	6.9	15.6	18.8	17.4
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	1.4	6.6	16.1	16.7	19.2
22. Behavior contracts.	0.6	3.4	15.0	19.6	21.4
23. Group-oriented contingency management.	2.1	9.9	21.0	17.1	9.9
24. Peer-assisted learning.	2.1	8.4	21.1	17.4	11.0
25. Clear rules/expectations.	0.6	1.1	6.2	16.8	35.3
26. Precorrection instructional strategies.	1.4	7.3	15.0	19.7	16.6
27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.	2.3	9.5	18.5	15.4	14.2

Modes, means, standard deviations, and statistics of skewness and kurtosis are displayed in Table 11. Measures of skewness and kurtosis for this set of data remained within normal levels negating the need for data transformation.

Table 11

Modes, Means, Standard Deviations and Measures of Skewness and Kurtosis for 435 Preparedness to Implement Interventions Ratings

Question	Mode	Mean	Standard Deviation	Skewness	Kurtosis
1	4	4.11	0.848	-0.628	-0.271
2	4	3.46	1.101	-0.261	-0.716
3	4	3.59	1.097	-0.351	-0.717
4	4	3.62	1.126	-0.390	-0.768
5	5	3.88	1.048	-0.608	-0.442
6	3	3.32	1.252	-0.178	-1.015
7	5	4.10	0.919	-0.726	-0.253
8	5	4.14	0.951	-0.897	0.103
9	5	3.97	0.952	-0.588	-0.409
10	4	3.85	0.968	-0.529	-0.399
11	5	4.04	1.016	-0.819	-0.028
12	5	4.12	1.053	-1.118	0.610
13	5	3.59	1.249	-0.557	-0.639
14	3	3.42	1.056	-0.114	-0.681
15	3	3.49	1.001	-0.174	-0.512
16	4	3.61	1.022	-0.291	-0.573
17	4	3.71	1.030	-0.378	-0.634
18	3	3.49	1.021	-0.141	-0.607
19	5	4.07	0.899	-0.647	-0.272
20	4	3.73	1.071	-0.466	-0.594
21	5	3.76	1.087	-0.465	-0.665
22	5	3.96	0.959	-0.571	-0.393
23	3	3.38	1.052	-0.132	-0.620
24	3	3.45	1.051	-0.198	-0.555
25	5	4.42	0.820	-1.518	2.337
26	4	3.71	1.068	-0.467	-0.586
27	3	3.49	1.131	-0.231	-0.809

Respondents highly rated themselves as “Very Well Prepared” to implement “a system of positive behavior support” (Intervention 8, 27.2%, mean = 4.14), “procedures for the use of

physical restraint” (Intervention 12, 29.1%, mean = 4.12), and “clear rules/expectations” (Intervention 25, 35.3%, mean = 4.42).

Research Question 4:

To What Degree Does the Importance Rating of an Intervention Category (i.e., Primary, Secondary, and Tertiary) Relate to the Program Usage of the Same Intervention Category?

To calculate responses for Research Questions 4 and 5, a CCA was conducted via PASW 17. Because analysis of data to answer Research Questions 4 and 5 requires the simultaneous analysis of two variable sets (e.g., primary, secondary, tertiary importance ratings with primary, secondary, tertiary frequency ratings), a CCA was determined to be the most appropriate analysis technique (Sherry & Henson, 2005). Synthetic predictor and criterion variables were created for each latent construct being analyzed. These synthetic variables are then compared through statistical analysis to determine the canonical correlation.

Research Question 4 asks to what degree does the importance rating of an intervention category (i.e., primary, secondary, and tertiary) relate to the program usage of the same intervention category. A CCA was conducted using the three levels (e.g., primary, secondary, tertiary) of Importance (Part II) ratings as predictors of the three levels (e.g., primary, secondary, tertiary) of Frequency (Part III) ratings to evaluate the multivariate shared relationship between the two variable sets (i.e., Importance ratings of intervention categories and Frequency of use of the same intervention categories). The analysis yielded three functions with squared canonical correlations of .155, .063, and .029 respectively (See Table 12).

Table 12

Eigenvalues and Canonical Correlations for 465 Responses

Root No.	Eigenvalue	%	Cumulative %	Canonical Correlation	Squared Correlation
1	.184	65.450	65.450	.394	.155
2	.067	23.811	89.261	.250	.063
3	.030	10.739	100.000	.171	.029

Collectively, the full model across all functions was statistically significant using the Wilks' $\lambda = .768$ criterion, $F(9, 1117.24) = 14.185, p < .001$ (See Table 13). Because Wilks' λ represents the variance unexplained by the model, $1 - \lambda$ yields the full model effect size in an r^2 metric. Thus, for the set of three canonical functions, the r^2 type effect size was .232, which indicates that the full model explained some portion, about 23%, of the variance shared between the variable sets.

Table 13

Statistical Significance Tests for the Full CCA Model Effect for 465 Responses

Test Name	Value	Approximate F	Hypothesis DF	Error DF	Significance of F
Pillais'	.247	13.809	9.00	1383.00	$p < .001$
Hotelling's	.281	14.290	9.00	1373.00	$p < .001$
Wilks'	.768	14.185	9.00	1117.24	$p < .001$
Roy's	.155				

Note. DF=degrees of freedom.

The dimension reduction analysis allows the researcher to test the hierarchal arrangement of functions for statistical significance. As noted, the full model (Functions 1 to 3) was statistically significant (See Table 14), $F(9, 1117.24) = 14.185, p < .001$. Functions 2 to 3 and 3 to 3 were also statistically significant, $F(4, 920) = 11.128, p < .001$, and $F(1, 461) = 13.913, p < .001$, respectively.

Table 14

Dimension Reduction Analysis for 465 Responses

Roots	Wilks λ	F	Hypothesis DF	Error DF	Significance of F
1 to 3	.768	14.185	9.00	1117.24	$p < .001$
2 to 3	.910	11.128	4.00	920.00	$p < .001$
3 to 3	.971	13.913	1.00	461.00	$p < .001$

Note. DF=degrees of freedom.

Given the R_c^2 effects for each function, only the first function was considered noteworthy in the context of this study (15.5%; see Table 12, Squared Correlation). The last two functions only explained 6.3% and 2.9%, respectively, of the remaining variance in the variable sets after the extraction of the prior functions.

Table 15 presents the standardized canonical function coefficients and structure coefficients for the dependent variables of Functions 1, 2, and 3. As described previously, Function 1 is the noteworthy correlation to be interpreted. Looking at the Function 1 coefficients, one sees that the relevant criterion variable was the Primary2 group with the largest coefficient of -2.078 supported by evidence from the squared structure coefficient (12.8%). The Primary2 group includes the primary interventions based on Frequency ratings. The second largest coefficient (1.384) was for the Tertiary2 group with a squared structure coefficient of 4.8%. The Tertiary2 group includes the tertiary interventions based on Frequency ratings. The smallest group was the Secondary2 group with a coefficient of .745 and a squared structure coefficient of .4%. The Secondary2 group includes secondary interventions based on Frequency ratings. It was not unexpected that the Secondary2 group would be smallest due to the limited number of secondary interventions included in the actual instrument.

Table 15

Standardized Canonical Coefficients for Dependent Variables for 465 Responses

Variable	Function 1			Function 2			Function 3		
	Coef	r_s	r_s^2	Coef	r_s	r_s^2	Coef	r_s	r_s^2
Primary2	-2.078	-.357	.128	.584	.828	.686	-.524	.432	.187
Secondary2	.745	-.063	.004	-.486	.533	.284	1.547	.844	.712
Tertiary2	1.384	.220	.048	.811	.956	.914	-.408	.194	.038

Note. Coef=standardized canonical function coefficient. r_s =structure coefficient. r_s^2 =squared structure coefficient.

Standardized canonical function coefficients and structure coefficients for the covariates (independent variables) of Functions 1, 2, and 3 are presented in Table 16. Looking at the Function 1 coefficients, the relevant criterion variable was the Primary1 group with the largest coefficient of -2.793. The Primary1 group includes the primary interventions based on Importance ratings. However, the squared structure coefficient for the Primary1 group was the lowest in Function 1 at only .7%. The second largest coefficient (2.413) was for the Tertiary1 group which also had the largest squared structure coefficient of 8.4%. The Tertiary1 group includes the tertiary interventions based on Importance ratings. Not unexpectedly, the smallest group was the Secondary1 group with a coefficient of .529, but the Secondary1 group had a larger squared structure coefficient (1.5%) than the Primary1 group. The Secondary1 group includes secondary interventions based on Importance ratings.

Table 16

Standardized Canonical Coefficients for Covariates (Independent Variables) for 465 Responses

Variable	Function 1			Function 2			Function 3		
	Coef	r_s	r_s^2	Coef	r_s	r_s^2	Coef	r_s	r_s^2
Primary1	-2.793	-.084	.007	1.147	.832	.692	-.347	.548	.301
Secondary1	.529	.122	.015	-1.227	.548	.301	1.944	.827	.684
Tertiary1	2.413	.290	.084	.852	.843	.711	-.922	.453	.205

Note. Coef=standardized canonical function coefficient. r_s =structure coefficient. r_s^2 =squared structure coefficient.

A direct relationship can be detected between Primary2 variables and Primary1 variables. This supports the theory that respondents who rated primary level interventions as important were more likely to report using primary interventions more frequently. The same theory holds true for secondary and tertiary variables. However, despite the direct relationship among each of the variables, squared structure coefficients indicate that while primary interventions are reported as used most frequently, the importance rating of tertiary level interventions are also accounting for a large portion of the variance explained in the model. There is an inverse relationship between the importance ratings of tertiary level interventions and the frequency of use of primary interventions. This inverse relationship indicates that as respondents rate tertiary level interventions as most important, they have a higher likelihood of increased frequency of using primary level interventions.

Research Question 5:

To What Degree Does the Importance Rating of an Intervention Category (i.e., Primary, Secondary, and Tertiary) Relate to the Perceived Preparedness to Implement Interventions of the Same Category?

As with Research Question 4, a CCA was conducted using the three levels (e.g., primary, secondary, tertiary) of Importance (Part II) ratings as predictors of the three levels (e.g., primary, secondary, tertiary) of Preparedness (Part IV) ratings to evaluate the multivariate shared relationship between the two variable sets (i.e., Importance ratings of intervention categories and Preparedness to implement the same intervention categories). The analysis yielded three functions with squared canonical correlations of .184, .056, and .036 respectively (See Table 17).

Table 17

Eigenvalues and Canonical Correlations for 443 Responses

Root No.	Eigenvalue	%	Cumulative %	Canonical Correlation	Squared Correlation
1	.226	69.943	69.943	.429	.184
2	.060	18.479	88.422	.237	.056
3	.037	11.578	100.000	.1898	.036

Collectively, the full model across all functions was statistically significant using the Wilks' $\lambda = .742$ criterion, $F(9, 1063.69) = 15.396, p < .001$ (See Table 18). Because Wilks' λ represents the variance unexplained by the model, $1 - \lambda$ yields the full model effect size in an r^2 metric. Thus, for the set of three canonical functions, the r^2 type effect size was .258, which indicates that the full model explained some portion, about 26%, of the variance shared between the variable sets.

Table 18

Statistical Significance Tests for the Full CCA Model Effect for 443 Responses

Test Name	Value	Approximate F	Hypothesis DF	Error DF	Significance of F
Pillais'	.276	14.847	9.00	1317.00	$p < .001$
Hotelling's	.323	15.615	9.00	1307.00	$p < .001$
Wilks'	.742	15.396	9.00	1063.69	$p < .001$
Roy's	.184				

Note. DF=degrees of freedom.

The dimension reduction analysis allows the researcher to test the hierarchical arrangement of functions for statistical significance. As noted, the full model (Functions 1 to 3) was statistically significant (See Table 19), $F(9, 1063.69) = 15.396, p < .001$. Functions 2 to 3 and 3 to 3 were also statistically significant, $F(4, 876) = 10.604, p < .001$, and $F(1, 439) = 16.397, p < .001$, respectively.

Table 19

Dimension Reduction Analysis for 443 Responses

Roots	Wilks λ	F	Hypothesis DF	Error DF	Significance of F
1 to 3	.742	15.396	9.00	1063.69	$p < .001$
2 to 3	.910	10.604	4.00	876.00	$p < .001$
3 to 3	.964	16.397	1.00	439.00	$p < .001$

Note. DF=degrees of freedom.

Given the R_c^2 effects for each function, only the first function was considered noteworthy in the context of this study (18.4%; see Table 17, Squared Correlation). The last two functions only explained 5.6% and 3.6%, respectively, of the remaining variance in the variable sets after the extraction of the prior functions.

Table 20 presents the standardized canonical function coefficients and structure coefficients for the dependent variables of Functions 1, 2, and 3. As described previously, Function 1 is the noteworthy correlation to be interpreted. Looking at the Function 1 coefficients, one sees that the relevant criterion variable was the Primary3 group with the largest coefficient of -2.412 supported by evidence from the squared structure coefficient (6.7%). The Primary3 group includes the primary interventions based on Preparedness ratings. The second largest coefficient (1.899) was for the Tertiary3 group with a squared structure coefficient of 5.0%. The Tertiary3 group includes the tertiary interventions based on Preparedness ratings. Predictably, the smallest group was the Secondary3 group with a coefficient of .542 and a squared structure coefficient of .8%. The Secondary3 group includes secondary interventions based on Preparedness ratings.

Table 20

Standardized Canonical Coefficients for Dependent Variables for 443 Responses

Variable	Function 1			Function 2			Function 3		
	Coef	r_s	r_s^2	Coef	r_s	r_s^2	Coef	r_s	r_s^2
Primary3	-2.412	-.259	.067	.540	.960	.921	-1.329	.108	.012
Secondary3	.542	-.087	.008	-.106	.857	.733	2.237	.509	.259
Tertiary3	1.899	.223	.050	.587	.975	.950	-.656	-.008	.001

Note. Coef=standardized canonical function coefficient. r_s =structure coefficient. r_s^2 =squared structure coefficient.

Standardized canonical function coefficients and structure coefficients for the covariates (independent variables) of Functions 1, 2, and 3 are presented in Table 21. Looking at the Function 1 coefficients, the relevant criterion variable was the Primary1 group with the largest coefficient of -2.550. The Primary1 group includes the primary interventions based on Importance ratings. However, the squared structure coefficient for the Primary1 group was the second largest in Function 1 at 3.3%. The second largest coefficient (2.485) was for the Tertiary1 group which also had the largest squared structure coefficient of 4.8%. The Tertiary1 group includes the tertiary interventions based on Importance ratings. Not unexpectedly, the smallest group was the Secondary1 group with a coefficient of .092 and the smallest squared structure coefficient of .2%. The Secondary1 group includes secondary interventions based on Importance ratings.

Table 21

Standardized Canonical Coefficients for Covariates (Independent Variables) for 443 Responses

Variable	Function 1			Function 2			Function 3		
	Coef	r_s	r_s^2	Coef	r_s	r_s^2	Coef	r_s	r_s^2
Primary1	-2.550	-.181	.033	.768	.970	.940	-1.257	.164	.027
Secondary1	.092	-.039	.002	-.364	.815	.665	2.251	.577	.333
Tertiary1	2.485	.218	.048	.572	.965	.931	-.639	.147	.022

Note. Coef=standardized canonical function coefficient. r_s =structure coefficient. r_s^2 =squared structure coefficient.

A direct relationship can be detected between Primary3 variables and Primary1 variables. This relationship supports the rationale that respondents who rated primary level interventions as important were more likely to report being most well-prepared to implement primary interventions. The same rationale holds true for secondary and tertiary variables. However, despite the direct relationship among each of the variables, squared structure coefficients indicate that while respondents report being most well-prepared to implement primary interventions, the importance rating of tertiary level interventions are also accounting for a large portion of the variance explained in the model. There is an inverse relationship between the importance ratings of tertiary level interventions and the preparedness to implement primary interventions. This inverse relationship indicates that as respondents rate tertiary level interventions are most important, they have a higher likelihood of reporting high levels of preparedness to implement primary level interventions.

CHAPTER 5

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

An anonymous online survey was used to examine the implementation of evidence-based practices (EBP) for students with emotional/behavioral disorders (EBD) in Texas. Data from the online survey were coded and analyzed using statistical software to determine importance, frequency of use, and preparedness to implement twenty-seven identified EBP for students with EBD. Additionally, data were examined to determine the relationship, if any, between importance ratings of interventions and frequency of use and preparedness to implement EBP.

Summary

Dissemination of the survey yielded an approximate response rate of 32%. The largest percentage of respondents identified themselves as special educators currently providing direct or indirect services to students with EBD in suburban public schools. Most respondents have served in their current position between 1 and 5 years, although a close second group have served in their current position for 10 or more years. Most respondents indicated that they work in elementary or other school settings. Other school settings included (a) behavior units, (b) charter schools, (c) alternative schools, and (d) special education cooperatives. All 20 ESC regions were represented in the database. The majority of responses were received from ESC 11, based in Fort Worth, Texas. Additionally, a lesser significant group of responses were elicited from ESC 4, based in Houston, Texas.

Participants were asked to rate the importance of 27 interventions for students with EBD. Participants' perceptions of importance listed a climate that supports successful teaching and learning (Intervention 1) and clear rules/expectations (Intervention 25) as *very important*. Also

listed as *very important* with high percentages and means were a system of positive behavior support (Intervention 8) and a crisis intervention plan for emergency situations (Intervention 11).

The next part of the survey asked participants to rate which interventions they use most frequently. The intervention with the largest percentage and mean was procedures for the use of physical restraint (Intervention 12). Other interventions rated as being used *always* included clear rules/expectations (Intervention 25), and a crisis intervention plan for emergency situations (Intervention 11).

Participants were then asked to rate how well-prepared they felt to implement the same 27 interventions. Respondents indicated that they were *very well prepared* to implement clear rules/expectations (Intervention 25). To a slightly lesser extent, respondents identified that they were also *very well prepared* to implement a system of positive behavior support (Intervention 8) and procedures for the use of physical restraint (Intervention 12).

Data were assimilated through a CCA to determine the degree the Importance rating of an intervention category (i.e., primary, secondary, and tertiary) relates to the program usage of the same intervention category. Results indicate that a statistically significant relationship exists between Importance ratings and Frequency of Use ratings. The two variable sets explain 23% of the variance in the full model, again emphasizing a statistically significant relationship. Analysis indicates that Frequency of Use ratings for primary interventions and Importance of tertiary interventions were explaining most of the variance within the model, although the two groups were inversely related.

A similar analysis was conducted to determine the degree to which the Importance rating of an intervention category relates to how well-prepared respondents perceived themselves to implement an intervention category. Again, a statistically significant relationship exists between

Importance ratings and Preparedness ratings to a greater extent than the relationship between Importance ratings and Frequency of Use ratings. Importance ratings and Preparedness ratings explained 26% of the shared variance in the model, indicating a slightly stronger relationship than Importance ratings and Frequency of Use ratings. A similar relationship was found during analysis of Importance ratings and Preparedness ratings. Ratings on Preparedness to implement primary interventions and ratings on Importance of tertiary interventions accounted for most of the variance within the model, but again, an inverse relationship exists between the two categories.

Implications

While all survey participants provided direct or indirect services to students with EBD, the data accrued were based on participants' perceptions. Additionally, most of the participants were special educators, those who have the most direct contact with students with disabilities and who should have extensive educational experiences upon which to base their perceptions. Intervention 25, clear rules/expectations, was included in the top rating across Importance, Frequency of Use, and Preparedness categories. Intervention 25 was the only intervention to be highly rated in all three categories indicating that clear rules/expectations is a very important and frequently used intervention for students with EBD in Texas. Also of note, Intervention 11, a crisis plan for emergency situations, was considered important and frequently used in Texas for students with EBD. Perhaps most interestingly, Intervention 12, procedures for the use of physical restraint, was rated as being used Always for students with EBD in Texas, and respondents indicated that they were Very Well Prepared to implement physical restraint.

The inverse relationship between Frequency of Use ratings for primary interventions and Importance ratings of tertiary interventions yields implications as well. Participants who rated tertiary level interventions as Very Important were more likely to then report using primary interventions Always. Similarly, participants who rated tertiary level interventions as Very Important were more likely to also rate themselves as Very Well Prepared to implement primary level interventions. Two theories could support these inverse relationships. First, practitioners who serve students with EBD may understand the importance of individualized, tertiary level interventions and as a result, implement primary level interventions as a preventative measure. Second, practitioners may perceive tertiary level interventions as most important, but are following school mandates or theoretical models (e.g., PBIS) to implement primary level interventions more frequently.

Recommendations

Replication of the current study should be considered by future researchers. Additionally, future studies should focus on improving data collection procedures. Specific groups of practitioners (e.g., special educators, general educators) may need to be targeted individually. Survey dissemination may need to be done in stages within specific educational service centers to ensure that a pre-determined rate of return is achieved. It will also be important for future data collection to ensure the cooperation and participation of large school districts like Austin Independent School District and Houston Independent School District that have in-house research departments requiring special forms and approval to conduct research prior to dissemination of the survey.

Moreover, future studies may wish to examine each PBIS tier of interventions individually rather than as a cohesive unit. More information could be gathered by delving deeper into the reasons why primary and tertiary interventions were reported as having such a profound effect on implementation of EBP in Texas classrooms. Additionally, an increased number of secondary interventions should be included in the survey instrument in order to determine if secondary interventions were underrepresented in the current version of the survey or if they do not impact EBP for students with EBD in Texas.

Finally, future studies may benefit from gathering deeper qualitative data from teachers to determine why interventions were rated as Very Important versus those that were rated lower. Qualitative information might also reveal patterns within districts that could be compared to similar districts examining how leadership in special education effects implementation of EBP in the classroom. Additionally, qualitative information could help clarify the inverse relationships existing among primary interventions and tertiary interventions. Because the implementation of EBP is still a national mandate (e.g., inclusion in legislation like No Child Left Behind, IDEIA), it is imperative that schools have clear pictures of how interventions are being implemented in Texas classrooms.

APPENDIX A
COMMUNICATIONS WITH SPECIAL EDUCATION DIRECTORS

Letter mailed to directors

5 March 2010

Dear Director of Special Education:

My name is Lyndal M. Bullock, professor in special education at the University of North Texas, Denton, where I coordinate the personnel preparation program in emotional/behavioral disorders (E/BD). A doctoral student, Andrea Hathcote, and I are engaging in a state-wide survey of services for students with E/BD in the state of Texas. We will be looking, specifically, at how school professionals rate the importance, usage, and preparedness to implement evidence-based interventions for students with E/BD.

We will be seeking participants to respond to a survey which will be available online. Participants should currently provide some type(s) of services to students with E/BD or have done so in the recent past. The survey will take no longer than 10-15 minutes for each voluntary participant to complete. However, to access participants, we will need your assistance.

Here's how you can assist us. We will send you an electronic copy of the survey information not later than March 31, 2010. When you receive the electronic copy, we ask that you forward the survey link via email to special education personnel (e.g., teachers, supervisors, administrators) in your school district.

Your school personnel's participation in this survey may help school professionals, staff developers, and researches identify the most frequently used interventions for students with E/BD in Texas, and assist in the guidance of future development of service provisions to students with E/BD in our state. If you participate, we will send you an abstract summary of the survey findings when data are analyzed.

The survey is confidential and in no way will responses be linked to an individual or a

particular school district. Participation is voluntary, and participants may stop the survey at any time without penalty.

If you have questions regarding this survey, please contact andrea.hathcote@unt.edu (940-565-2169) or lyndal.bullock@unt.edu (940-565-3583).

Thank you in advance for your assistance. Please look for an electronic copy of the survey from my e-mail address in your inbox by March 31, 2010.

Cordially,

Lyndal M. Bullock
Regents Professor, Special Education
University of North Texas, Denton

First Email Communication

Several days ago you received a letter from me requesting your assistance in a state-wide survey of services for students with E/BD in the state of Texas. In that letter, we stated that an electronic copy of the survey information would be sent to you. Below is the link to the survey. Please forward this link to all personnel (e.g., teachers, supervisors, administrators) in your district who provide direct or indirect services to students with E/BD. You also may complete the survey as your opinion is valuable to us as well.

<http://web3.unt.edu/bullock/PS/>

You may recall that the survey is confidential and in no way will responses be linked to an individual or a particular school district. Participation is voluntary, and participants may stop the survey at any time without penalty. Participants who complete the survey may enter an email address for a chance to win a \$50 Amazon.com gift card.

If you have questions regarding this survey, please contact andrea.hathcote@unt.edu (940-565-2169) or Lyndal.bullock@unt.edu (940-565-3583).

Thank you for your participation and assistance.

Cordially,

Lyndal M. Bullock

Regents Professor, Special Education

University of North Texas, Denton

Second Email Communication

You recently received an email from me requesting your assistance in a state-wide survey of services for students with emotional/behavioral disorders (E/BD). If you have already completed the survey, thank you! If not, your opinion is important to us. Please forward this link to all personnel (e.g., teachers, supervisors, administrators) in your district who provide direct or indirect services to students with E/BD.

<http://web3.unt.edu/bullock/PS/>

You may recall that the survey is confidential and in no way will responses be linked to an individual or a particular school district. Participation is voluntary, and participants may stop the survey at any time without penalty. Participants who complete the survey may enter an email address for a chance to win a \$50 Amazon.com gift card.

If you have questions regarding this survey, please contact andrea.hathcote@unt.edu (940-565-2169) or Lyndal.bullock@unt.edu (940-565-3583).

Thank you for your participation and assistance.

Cordially,

Lyndal M. Bullock

Regents Professor, Special Education

University of North Texas, Denton

APPENDIX B
SURVEY OF PROGRAMS FOR STUDENTS WITH EMOTIONAL DISABILITIES
IN TEXAS

Survey of Programs for Students with Emotional Disabilities in Texas

Informed Consent Notice

- The purpose of this survey is to accrue information regarding the perceived importance, usage and preparedness to implement evidence-based interventions for students with emotional/behavioral disorders.
- Participation in this survey is voluntary. You have the right to withdrawal at any time with no penalty or loss of rights or benefits.
- The survey will take approximately 10-15 minutes.
- All data obtained will remain confidential. Data collected from the survey will be secured in a separate location from the volunteer forms and drawing entry form. 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 the focus group include: (a) identifying the most frequently used interventions for students with emotional/behavioral disorders in Texas; and (b) assisting in the guidance of the future development of service provision to students with emotional/behavioral disorders in Texas.
- This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB may be contacted at 940-565-3940 with questions regarding the rights of research subjects.
- For those *who complete the SURVEY*, there is an opportunity to include your personal information to be included in a drawing for a \$50 gift certificate to Amazon.com. 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 *Continue* you agree that you have read and understand the informed consent and are ready to proceed with the survey. If at any time you would like to withdraw from the research study please close your browser.

Continue

If you have questions or concerns about the survey please contact:

Doctoral Candidate:

Principal Investigator:

Andrea Hathcote
Doctoral Candidate
University of North Texas
Denton, TX
940-565-2169
Andrea.Hathcote@unt.edu

Dr. Lyndal M. Bullock
Regents Professor
University of North Texas
Denton, TX
940-565-3583
Lyndal.Bullock@unt.edu

Survey of Programs for Students with Emotional Disabilities in Texas

Introduction. The following survey is designed to provide a better understanding of programs for students with emotional/behavioral disabilities. The survey should take approximately 10-15 minutes to complete and will provide valuable information for policymaking and for teacher preparation.

Part I: Demographic Information

1. Name of school district (optional):

2. Level of school:

Preschool

Elementary

Middle

High school

Other:

3. Type of school:

Public school

Private school

Alternative school

Regional

Residential

Other (please specify):

Continue

Demographic Information (cont):

4a. School Setting:

- Urban
- Suburban
- Rural

4b. I currently work in this Texas Educational Service Center:

5. I am working with students with ED:

- Yes
- No

6. I am not working with students with ED, but have done so in the last three years:

- Yes
- No

Continue

Demographic Information (cont):

7. Type of service delivery system (check all that apply):

- | | | |
|---|--|---|
| <input type="checkbox"/> Full Inclusion | <input type="checkbox"/> Part-time Inclusion | <input type="checkbox"/> Self-contained |
| <input type="checkbox"/> Consultation | <input type="checkbox"/> Resource Room | <input type="checkbox"/> Day Treatment |
| <input type="checkbox"/> Residential School | <input type="checkbox"/> Other: | <input type="text"/> |

8. Position of person completing this survey:

- Special education administrator/ coordinator
- Special education teacher
- Central office staff
- School administrator (Principal/ Assistant Principal)
- General education teacher
- Other:

9. Number of years in this position:

- less than 1 year
- 1 to 5 years
- 6 to 10 years
- more than 10 years

10. Type of license (check all that apply):

- EC - 4
- 4 - 8
- 9 - 12
- All-levels

Continue

Survey of Programs for Students with Emotional Disabilities in Texas

Instructions: The purpose of this survey is to learn more about programs for students with emotional/behavioral disabilities in Texas. Please read carefully each of the 27 items and check the column that best describes your perception of the importance of each item.

Part II: Importance of Programming

	Very Unimportant	Unimportant	Neutral	Important	Very Important
How important is/are:	1	2	3	4	5
1. A climate that supports successful teaching and learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A program of peer-mediated intervention to promote positive behavior skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A conflict resolution program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. An anger management program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Social skills instruction taught as part of regular class instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Mental health services as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A behavior support/management plan as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. A system of positive behavior support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Academic supports and curricular/ instructional modifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Specialized instruction to promote learning and study skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. A crisis intervention plan for emergency situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Procedures for the use of physical restraint.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Procedures for the use of seclusion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Materials that reflect gender, cultural, and linguistic differences among students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. The use of peer-reinforcement to promote appropriate student behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Instruction in self-monitoring of student academic performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Instruction in self-monitoring of non-academic behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. A systematic approach to cooperative learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Choice making opportunities for students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A formal procedure to develop function-based interventions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Behavior contracts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Group-oriented contingency management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Peer-assisted learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Clear rules/expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Precorrection instructional strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Continue

Survey of Programs for Students with Emotional Disabilities in Texas

Instructions: The purpose of this survey is to learn more about programs for students with emotional/behavioral disabilities in Texas. Please read carefully each of the 27 items and check the column that best describes your perception of the frequency of use for each item.

Part III: Frequency of Implementation

	Never	Seldom	Sometimes	Usually	Always
In my program we use/have:	1	2	3	4	5
1. A climate that supports successful teaching and learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A program of peer-mediated intervention to promote positive behavior skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A conflict resolution program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. An anger management program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Social skills instruction taught as part of regular class instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Mental health services as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A behavior support/management plan as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. A system of positive behavior support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Academic supports and curricular/ instructional modifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Specialized instruction to promote learning and study skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. A crisis intervention plan for emergency situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Procedures for the use of physical restraint.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Procedures for the use of seclusion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Materials that reflect gender, cultural, and linguistic differences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

among students.

15. The use of peer-reinforcement to promote appropriate student behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Instruction in self-monitoring of student academic performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Instruction in self-monitoring of non-academic behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. A systematic approach to cooperative learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Choice making opportunities for students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A formal procedure to develop function-based interventions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Behavior contracts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Group-oriented contingency management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Peer-assisted learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Clear rules/expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Precorrection instructional strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Continue

Survey of Programs for Students with Emotional Disabilities in Texas

Instructions: The purpose of this survey is to learn more about programs for students with emotional/behavioral disabilities in Texas. Please read carefully each of the 27 items and check the column that best describes your perception of the individual preparedness to implement the interventions.

Part IV: Perception of Individual Preparedness

	Not at all prepared	Not well prepared	Adequately prepared	Well prepared	Very well prepared
How well-prepared are you to implement:	1	2	3	4	5
1. A climate that supports successful teaching and learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A program of peer-mediated intervention to promote positive behavior skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A conflict resolution program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. An anger management program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Social skills instruction taught as part of regular class instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Mental health services as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A behavior support/management plan as appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. A system of positive behavior support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Academic supports and curricular/ instructional modifications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Specialized instruction to promote learning and study skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. A crisis intervention plan for emergency situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Procedures for the use of physical restraint.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Procedures for the use of seclusion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Materials that reflect gender, cultural, and linguistic differences among students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. The use of peer-reinforcement to promote appropriate student behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Instruction in self-monitoring of student academic performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Instruction in self-monitoring of non-academic behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. A systematic approach to cooperative learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Choice making opportunities for students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A formal procedure to develop function-based interventions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. A systematic approach to data collection, graphing, and analysis for intervention plans.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Behavior contracts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Group-oriented contingency management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Peer-assisted learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Clear rules/expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. Precorrection instructional strategies.



27. A program to transition students from preschool to elementary school, from elementary school to middle school, from middle school to high school, or from high school to post secondary education and/or employment.



Continue

Survey of Programs for Students with Emotional Disabilities in Texas

Instructions: This concludes the survey. If you would like to participate in the optional Amazon.com drawing or volunteer for the online focus group, please provide your information below and click continue. If not, your participation is greatly appreciated.

Part V: Optional Registration

Thank you for participating in this research survey. As a thank you, I would like to enter your name in a drawing for a \$50 gift certificate to Amazon.com. If you would like your name entered please fill out the following information. This information will in no way be connected to your survey responses. Thank you again.

Name:

Email Address:

Phone Number:

Continue

Thank you for your participation!

APPENDIX C

INSTITUTIONAL REVIEW BOARD APPROVAL NOTICE



Discover the power of ideas.

OFFICE OF THE VICE PRESIDENT FOR RESEARCH AND ECONOMIC DEVELOPMENT
Research Services

March 3, 2010

Dr. Lyndal Bullock
Department of Educational Psychology/Special Education
University of North Texas

RE: Human Subjects Application No. 10-094

Dear Dr. Bullock:

In accordance with 45 CFR Part 46 Section 46.101, your study titled "Program Design for Students with Emotional/Behavioral Disorders: The Importance, Usage, and Preparedness for Implementation of Evidence-Based Interventions" has been determined to qualify for an exemption from further review by the UNT Institutional Review Board (IRB).

No changes may be made to your study's procedures or forms without prior written approval from the UNT IRB. Please contact Jordan Smith, Research Compliance Analyst, ext. 3940, if you wish to make any such changes. Any changes to your procedures or forms after 3 years will require completion of a new IRB application.

We wish you success with your study.

Sincerely,

Patricia L. Kaminski, Ph.D.
Associate Professor
Chair, Institutional Review Board

PK:js

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