TEACHERS OF STUDENTS WITH EMOTIONAL AND BEHAVIORAL DISORDERS' PERCEPTIONS OF PROFESSIONAL STANDARDS OF PRACTICE

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2012

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Lusk, Mandy E. <u>Teachers of Students with Emotional and Behavioral Disorders'</u>

<u>Perceptions of Professional Standards of Practice.</u> Doctor of Philosophy (Special Education),

August 2012, 118 pp., 22 tables, 1 figure, references.

In recent decades, there has been renewed interest in examining the effectiveness of teacher preparation programs. Unfortunately, researchers have found that there is limited empirical research on the effectiveness of quality special education teacher preparation programs, specifically those programs specializing in the education of students with emotional and behavioral disorders (EBD). The Council for Exceptional Children (CEC), the largest special education organization, conducts research on the standards needed by teachers who serve children and youth with exceptionalities. These CEC standards are recommended to serve as a guide for teacher preparation programs in special education.

Utilizing the CEC standards delineated for preparation programs in EBD, the present study sought to determine how graduates of one program perceived the importance of the standards and their perceived proficiency in using the standards in their work with students with EBD. Results indicated that graduates viewed the standards as Important to their work with students with EBD. Further, they viewed their proficiency in using the standards to be above average.

In addition, the present study examined the relationship between graduates perceived importance and perceived proficiency in using the CEC standards. Results indicated that graduates who had higher score ratings on their perceived importance of the standards tended to have higher ratings on their perceived proficiency scores.

Further, a multiple regression model examined specific demographic variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) as predictors for graduates' perceptions of importance in using the CEC standards. Unfortunately, the regression model did not predict the graduates' perceived importance in using the CEC standards; however, graduates' years of teaching experience with students with EBD was a significant predictor for two of the standards.

Finally, a multiple regression model examined specific demographic variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) as predictors for graduates' perceptions of proficiency in using the CEC standards. Unfortunately, the overall regression model did not predict the graduates' perceived proficiency in using the CEC standards; however, a deeper examination showed that total years of graduates' teaching experience, graduates' feelings about working with students with EBD, graduates' years of teaching experience with students with EBD, and graduates' feelings about causal factors of students with EBD were significant predictors.

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ACKNOWLEDGEMENTS

This dissertation and my work in educating students with exceptionalities would not be possible without the help of several remarkable individuals in my life. I often state that I am the most loved person in the world. Simply stated, "it takes a village" to get me through graduate school and these persons were a colossal support. Dr. Bullock, you have single handedly made my dreams come true. Your dedication and leadership encourages me as an educator. Mrs. B, thank you for ongoing support. I cannot give enough thanks to my peers and everlasting friends from UNT. Jeanie, Andrea, Kathy, Kelly Carrero, Calli, Staci, Brenda, and Fred, you are the friends that are always willing to help and provide encouragement. My family and friends are the persons that gave me the strength to fulfill my dream. Kelli, you are my sister and best friend. Thank you for always believing in me. Aunt Ann, you are the most kindhearted woman. God knew that having you in my life would make me want to be a better person. Thank you both for your ongoing encouragement and unconditional love. Melissa, You are the true definition of a best friend. Meghan, I cannot imagine my life without you. Miranda, thank you for loving me, unconditionally. Lizzie, you are a once in a lifetime friend. To my Dana, thank you for all you do for our students. Keith, you continuously surprise me as the greatest man I have ever met. I cannot wait to walk through life with you beside me. To the little hearts that beat in my life, Austin, 'lil Austin, Dani, Seth, Kelsey, Mikey, and Rosalie, you make life worth living. To my dearest friends that have walked through this journey of life with me, Crystal, Angie, Allison, Ashley, Betsy, Alicia, Cherie, Raven, James, and Jason, thank you for your endless love and encouragement. I will never forget your support through making my dreams come true. Last, by definitely not least, Angel and Rita/Rico, you make me smile everyday.

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CHAPTER 1

INTRODUCTION

In 1983, the publication of *A Nation at Risk: The Imperative for Educational Reform*(National Commission on Excellence and Education, 1983) began a national frenzy. The report broadcasted the notion that American schools were not appropriately educating children and youth. Over the years, national reports and legislative actions have called for improvements in teacher preparation (e.g., Higher Education Opportunity Act of 2008; No Child Left Behind [NCLB], 2001; *Reauthorization of Elementary and Secondary Education Act*; [USDE], 2010). These landmark actions have placed pressure on institutions of higher education (IHEs) and their teacher preparation programs to enhance the quality of teacher preparation.

Teacher preparation programs in the United States have been criticized for (a) centering too much on pedagogy and not enough on teacher competencies or standards, (b) being detached from the realities of education settings, and (c) providing minimal field experience for preservice teachers (Prater & Sileo, 2004). According to the United States Secretary of Education's annual report on teacher quality (USDE, 2002), IHEs are to blame for the unqualified teachers in the country. The teacher quality report holds IHEs and their colleges of education responsible for producing teachers that are not prepared for the reality of the classroom.

Conversely, IHEs may not entirely be to blame for the downfall of teacher preparation programs. Alternative certification options were introduced to the field of education as an approach to ease teacher shortages and to correct the downfalls of teacher preparation programs (Payne, 2005; Rosenberg, Sindelar, & Hardman, 2004; Simmons, 2005). Although alternative certification programs permit individuals to participate in a shortened route to enter the teaching profession (Zumwalt, 1996), they are not without criticism. Among the criticisms, Humphrey,

Wechsler, and Hough (2008) indicate that alternative certification programs also place unqualified, ill prepared individuals into the teaching profession. In addition, alternative certification heightens the issues of attrition and retention in special education classrooms (Rosenberg et al., 2004), and places individuals in classrooms who are unprepared to meet the multitude of needs presented by students with emotional and behavioral disorders (EBD; Katsiyannis, Zhang, & Conroy, 2003).

Organizations in special education that accredit and approve teacher preparation programs recognize the importance of specific standards and corresponding knowledge and skills for teacher candidates of children and youth with exceptionalities (Bullock, Dykes, & Kelly, 1973; Carlson, 1996; Prater & Sileo, 2004). For several years, the Council for Exceptional Children (CEC), the largest special education organization, has researched the standards needed by teachers who serve children and youth with exceptionalities. Outcomes of its works are reported in *What Every Special Educator Must Know* (1995, 1996, 1998, 2000, 2003, 2009) and serves as a guide for teacher preparation programs in special education. Typically, IHEs use the CEC standards to guide the development of their curricula and as a measure whereby to assess the graduates' competence (CEC, 2009; Crutchfield, 2003). More specifically, teacher educators may utilize these CEC standards as a means to evaluate teachers' competence in teaching students with EBD (Crutchfield, 2003).

Statement of the Problem

The issue of limited empirical research on the effectiveness of quality teacher preparation programs in special education is a current dilemma in education (Sindelar, Brownell, & Billingsley, 2010). Specifically in the preparation of teachers of students with EBD, data are

limited for teacher preparation programs that conduct ongoing, comprehensive evaluation of the preparation provided (Brownell, Ross, Colon, & McCallum, 2005; Carlson, 1996). To adequately prepare teachers of children and youth with EBD, it may be helpful for IHEs to examine graduates' perceptions of the importance of the CEC standards and ascertain how proficient they view themselves in the use of these standards. Data accrued from this study may assist special education in the development of quality teacher preparation models for teachers of students with EBD.

Purpose of the Study

Preparation programs for teachers of students with EBD should aspire to adequately prepare qualified teachers in the field of special education (Crutchfield, 2003). The purpose of this study is twofold: (a) to determine how graduates, who completed a National Council Accreditation of Teacher Education (NCATE) and CEC approved master's program specializing in EBD from one university, perceive the importance of CEC standards in working with students with EBD, and (b) to examine how program graduates perceive their proficiency in using CEC standards when working with students with EBD.

Significance of the Study

There is considerable literature that addresses the need for qualified teachers of students with EBD (e.g., Albrecht, Johns, Mountsteven, & Olorunda, 2009; Carlson, 1996; Harkey, 2008; Kagler, 2011; Martin, 2010; Rothwell-Carson, 2009; Stempien & Loeb, 2002; USDE, 2008; United States Department of Health and Human Services, 2002); however, there is limited information regarding the quality of teacher preparation programs of students with EBD

(Sindelar et al., 2010).

The present study analyzes (a) graduates' perceptions of the importance of standards delineated by CEC (2009) in the field of EBD and (b) graduates' perceptions of their proficiency in using the standards delineated by CEC (2009) in the field of EBD. I collected demographic data on the participants to examine if there are any potential differences. Data accrued may be helpful to guide the future development or improvements of teacher preparation programs with specialization in EBD.

Limitations

Due to the sample of participants coming from one master's degree program in EBD, the findings may be limited in scope and generalizability. However, the convenience sample is a CEC accredited program, and other CEC accredited IHEs use these CEC standards for their teacher preparation programs.

Definition of the Terms

Terminology may be applied to different meanings in various disciplines. For the purposes of this study, the following terms and definitions are used:

- Attrition: Attrition refers to leaving the field or transferring to another teaching or educational position outside of and with no influence in special education (Adera & Bullock, 2010).
- Emotional and 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)).

- Knowledge and skills: Considered a sub-category of standards, which represents the skill base that professionals should possess to teach children and youth with exceptionalities (CEC, 2009).
- Standards: An ability or skill that special educators should attain in their teacher preparation program in order to effectively increase achievement of students with exceptionalities (CEC, 2009).
- Teacher candidate: An individual who has declared an education major but has not yet completed training to become a teacher in a given field (Cook & Boe, 2007).
- Retention: The act of staying in the same or similar special education assignment as the
 previous year. Those professionals who remain in direct contact with students with
 exceptionalities (Billingsley, 2004).

Research Questions

Five research questions guided this study.

- 1. How do graduates perceive the importance of CEC standards in their work with students with EBD?
- 2. How do graduates perceive their level of proficiency of using CEC standards in their work with students with EBD?

- 3. What is the relationship, if any, between graduates' level of proficiency and the perceived importance of CEC standards?
- 4. To what extent do specific variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) predict graduates' perceptions of the importance of the CEC standards?
- 5. To what extent do specific variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) predict graduates' perceptions of their proficiency using CEC standards?

CHAPTER 2

REVIEW OF LITERATURE

It is a common belief that the preparation of teacher candidates is the primary factor to their future successes or failure in the field of special education (Carlson, 1996). Quality teacher preparation programs are designed to increase teachers' knowledge and skill set and commitment levels (Rosenberg, Sindelar, & Hardman, 2004) and influence their decision to enter and remain in the field. With growing concern regarding attrition and retention of special education teachers, specifically teachers of children and youth with emotional and behavioral disorders (EBD), the contribution of quality teacher preparation programs is a timely topic (Adera & Bullock, 2010; Higher Education Opportunity Act, 2008; Katsiyannis, Zhang, & Conroy, 2003; Rosenberg et al., 2004).

There is overwhelming research evidence that there are acute teacher shortages in the field of special education (e.g., Center on Personnel Studies in Special Education, 2004; McLeskey, Tyler, & Flippin, 2004; Payne, 2005; Sindelar, Brownell, & Billingsley, 2010; U.S. Department of Education, 2008). More specifically, the shortages of qualified teachers of children and youth EBD continue to be grave concern (Adera & Bullock, 2010; Albrecht, Johns, Mountsteven, & Olorunda 2009; Cancio & Conderman, 2008; Stempien & Loeb, 2002; Sutherland, Denny, & Gunter, 2005). In fact, the largest national shortage of special education teachers is in the field of EBD (Albrecht et al., 2009).

Literature, dating back as early as the 1950s and as recent as 2011, was examined in order to provide extensive coverage of issues related to teacher preparation programs as well as the Council for Exceptional Children's (CEC) standards in the field of special education. The literature databases used were ERIC via EBSCOHost and the Professional Development

Collection with search criterion including (a) teacher preparation programs, (b) retention and attrition in special education, (c) teacher shortages, and (d) teacher standards. The purpose of this review of literature is to provide information regarding teacher preparation programs in special education, specifically teachers of students with EBD. The review examines (a) teacher shortages in special education, (b) children and youth with EBD, (c) improvements in teacher quality, (d) teacher quality measurements, (e) CEC standards for teachers of students with EBD, and (f) evaluation of teacher preparation programs.

Teacher Shortages in Special Education

At a time when accountability and teacher quality are essential, shortages of special education teachers plague the United States' schools (Albrecht et al., 2009; Harkey, 2008; Kagler, 2011; Martin, 2010; Rothwell-Carson, 2009; Stempien & Loeb, 2002; United States Department of Education, 2008; United States Department of Health and Human Services, 2002). As an example, McKeskey et al. (2004) reported that nearly 98 % of the nation's school districts had special education teacher shortages and similar shortages continue (Albrecht et al., 2009). The need for special education teachers is anticipated to increase to nearly 20 % until 2018, which is a rate that is higher than any other occupation in the United States (Bureau of Labor Statistics, U.S. Department of Labor, 2009).

According to Albrecht et al. (2009), nearly one third of all new special education teachers leave the profession within the three years. Special education teachers leave the profession for a variety of reasons, which may include (a) work-related stress, (b) lack of administrative support, (c) teaching students with challenging behavioral issues (Brownell, Smith, McNellis, & Miller, 1997), (d) increased student enrollment, (e) large teacher caseloads (McLeskey et al., 2004), and

(f) inconsistencies in school expectations (Adera & Bullock, 2010).

There is an alarming discrepancy in the annual production of teacher candidates graduating from teacher preparation programs in the United States as compared to the special education teachers needed to meet the supply and demand. Cook and Boe (2007) indicate that approximately 75 % of master's students who graduate are already employed upon graduation, leaving only 25 % of master's graduates to fill special education teaching positions.

Numerous researchers identify issues concerning teacher supply and demand in the field of special education. These issues include (a) shortage of special education teachers is chronic and long-term and will get increasingly worse (Boe, 2006; Brownell, 2005); (b) severe shortages of culturally and linguistically diverse teachers which will get increasingly worse (Obiakor, 2004); (c) teacher shortages are pervasive across all regions of the United States (McLeskey et al., 2004); (d) teacher shortages in special education are greater than any other teacher shortages, including math and science teachers (Boe, 2006; Boe, Bobbitt, & Cook, 1997); (e) insufficient number of new teachers are being prepared to meet the ongoing demand (Brownell, Hirsch, Seo, 2004; McLeskey et al., 2004); (f) teacher attrition reduction is necessary in order to address teacher shortages (Boe, 2006); and finally, (g) teaching conditions are a major contributing factor to teacher shortages (Boe, 2006; McLeskey et al., 2004).

Children and Youth with Emotional and Behavioral Disorders (EBD)

Students with challenging behaviors are becoming a major problem in schools throughout the United States (Albrecht et al., 2009; Bradshaw, 1997). Children and youth with EBD are considered one of the most challenging groups of students to teach (Bradshaw, 1997; Knopf, Park, & Mulye, 2008). Children and youth with EBD populate over 10 % of students from ages

6 through 21 in the United States (Albrecht et al., 2009; Code of Federal Regulations, Title 34, Section 300.8(c)(4); Billingsley, Fall, & Williams, 2006). In order to improve the performance and achievement of children and youth with EBD, competent and qualified teachers are crucial (Wang, 2005). We recognize, however, that the field of special education is relatively young and as a result, research examining teacher preparation programs is sparse and slow to develop (Sindelar et al., 2010).

Teacher Preparation Programs

The ultimate goal of teacher preparation programs in EBD is to increase the number of well-prepared competent teachers (Bullock, Dykes, & Kelly, 1973; Bullock & Gable, 2004; Sutherland et al., 2005; U.S. Department of Health and Human Services, 2002). In quality teacher preparation programs, it is expected that the curricula are guided by the CEC Standards for Effective Practice (CEC, 2009) which include (a) general knowledge and skills, (b) foundation information, (c) theoretical knowledge, (d) screening and assessment, (e) behavior management, (f) educational and behavioral programming, (g) field experience, (h) research, (i) consultation and collaboration, and (j) resources (Bullock, Ellis, & Wilson, 1998; Regan, 2009). There is limited data that identify the number of teacher preparation programs for preparing personnel to teach students with EBD who conduct ongoing, comprehensive evaluation of the preparation provided (Brownell et al., 2005; Carlson, 1996). Even though Bullock and Gable (2004) state that teachers of students with EBD who complete the National Council on the Accreditation of Teacher Education (NCATE) and CEC teacher preparation programs are typically adequately prepared to meet the demands of teaching, teacher preparation programs

must have a planned strategy for evaluating their programs to ensure relevance and quality of the overall course offerings.

Improvement of Teacher Quality

As legislation addresses the need for accountability in American schools, the ideas about improving teacher quality runs rampant. There is more pressure than ever for teacher preparation programs to produce well-prepared teachers (Connelly & Rosenberg, 2009). Under Part D of the Individuals with Disabilities Education Improvement Act (IDEIA; 2004), national program activities and federal funding for research and innovation, personnel preparation, technical assistance and dissemination, parent training and information, technology, media services, and evaluation are authorized. The purpose of this subpart is to assist state educational agencies, and their partners in reforming and improving their systems for providing educational, early intervention, and transitional services, including their systems for professional development, technical assistance, and dissemination of knowledge about best practices to improve results for children with disabilities (Part D of IDEIA; 2004).

For over 30 years, the Office of Special Education Programs (OSEP) has awarded IHEs personnel preparation grants (Sindelar, Brownell, & Billingsley, 2010). Annually, nearly \$90 million of federal funding supports teacher preparation programs (Kleinhammer-Tramill, Tramill, & Westbrook, 2009).

Measuring Teacher Quality

In recent decades, there has been renewed interest in examining the effectiveness of teacher preparation programs, based on national reports, publications, and legislation (e.g.,

Higher Education Opportunity Act, 2008; *Nation at Risk*, 1983; No Child Left Behind, 2001). NCATE (2001) stated that "attention to teacher quality is critical" (p. 1). According to the professional standards of NCATE (2008), teacher preparation programs must ensure that teacher educators will "produce competent, caring, and qualified teachers and other professional school personnel who can help all students learn" (p. 1). Unfortunately as much as it is needed, Sindelar et al. (2010) found that there is limited empirical research on the effectiveness of quality special education teacher preparation programs. In fact, researchers state that federal policies, not empiricism, typically are the driving forces behind educational decisions in the United States (Gable, 1991; Odom et al., 2005; Rosenberg et al., 2004). Often, teacher educators and administrators advocate for change in teacher preparation programs before accruing sufficient data to know how these changes may affect special educators later in their careers (Carlson, 1996).

Measuring teacher quality is no small task (Brownell et al., 2005). Institutions of higher education (IHEs), in general, understand that evaluating and assessing teacher quality is a fundamental step toward understanding the knowledge base in teacher education (Sindelar et al., 2010). In special education teacher preparation programs, IHEs measure teacher quality in a variety of ways. Teacher candidates must be accountable in their knowledge in (a) teaching students with different needs, (b) providing instruction in assorted subject areas, and (c) engaging in various roles to collaborate with students, parents, and administrators (Brownell et al., 2005). To-date, CEC delineates standards which guide decision-making about the content taught and how teacher quality its examined in teacher preparation programs (CEC, 2009; Sindelar et al., 2010).

Council for Exceptional Children (CEC) Standards Translate into Practice
Historically, empirically validated competencies, or standards, have guided the
instruction of teacher preparation programs in special education (e.g., Brownell et al., 2005;
Shores, Cegleka, & Nelson, 1973). Specifically related to students with EBD, researchers
Mackie, Kvaraceus, and Williams (1957) suggested that standards should encompass (a) an
understanding of child development, (b) an awareness of social and cultural factors, (c)
knowledge and skills of agencies and legal framework, (d) ability to work with other disciplines,
and (e) self-understanding and other personal qualities (Bullock & Whelan, 1971). In addition,
Whelan and Haring (1966) stated that teachers of students with EBD must have a thorough
knowledge and understanding of behavioral management skills for their students.

In an examination of the standards needed for teacher preparation programs for students with EBD, Bullock and colleagues (1973) found that the majority of teacher candidates acquired these standards in their course work and field experiences. It has been recommended that teacher preparation programs design their curriculum around the standards that have been identified as essential for teachers (Brownell et al., 2005; Dingle, Falvey, Givner, & Haager, 2004; Nelson & Moyer, 1977).

The movement of behaviorism began the concept of competency-based teacher education (Carlson, 1996). In the 1950s, Mackie et al. (1957) attempted to identify specific competencies needed by teachers of students with challenging behaviors. In the 1960s, Hewett (1966) identified several hierarchical competencies for teachers of students with EBD, which included (a) objectivity, (b) flexibility, (c) structure, (d) resourcefulness, (e) social reinforcement, (f) curriculum expertise, and (g) intellectual modeling. As competency-based teacher education gained acceptance in the 1970s, Shores et al. (1973) helped shift research from teacher

competency to student performance. As Shores and Nelson stated in an interview (Gable, 1991), "Competency-based teacher education still is primarily a matter of generating sets of competencies in terms that are more or less performance-based" (p. 177).

For teachers of students with EBD, such competencies meant teaching social skills (Quinn, Kavale, Mathur, Rutherford, & Forness, 1999), implementing functional behavior analyses and behavior intervention plans (Fox & Gable, 2004), assisting with emotional difficulties (Albrecht et al. 2009), and creating programs for students to self-monitor their behaviors (Martin et al., 2011). Competency-based teacher education appears to remain a process of generating sets of competencies at two basic levels, which include knowledge-based and performance-based (Carlson, 1996; Gable, 1991). Although a great deal of research has been conducted on competency-based teacher education (Bullock & Whelan, 1971; Hewett, 1966; Mackie et al., 1957; Shores et al., 1973; Whelan and Haring, 1966), there is limited empirical evidence that supports the belief that teacher candidates who mastered competencies are more effective than those who did not (Mitchell et al., 2001).

CEC Standards in Teacher Preparation Programs

With the movement toward accountability and the costs of higher education, teacher preparation programs are pressured to ensure that they meet special education standards and their programs reflect current developments in the field (Conderman, Katsiyannis, & Franks, 2001). CEC, the largest professional organization in special education, and a compilation of peer-reviewer experts in special education organized *What Every Special Educator Must Know* (CEC, 1995; 1996; 1998; 2000; 2003; 2009). This collaborative product identifies standards vital to being an effective special educator. The standards recognized in *What Every Special Educator*

Must Know: Ethics, Standards, and Guidelines (2009) are current, best practices that are designed to provide information to teacher candidates, practicing professionals, state officials, faculty in IHEs, families, and other community stakeholders.

CEC divided the standards into two tiers, which include (a) the content standards, which are based on the knowledge and skill standards and (b) the foundational standards, including knowledge and skill sets. CEC developed these knowledge and skill standards using the Interstate New Teacher Assessment and Support Consortium (INTASC) principles (Rosenberg, et al., 2004) and NCATE guidelines (Conderman et al., 2001). What Every Special Educator Must Know: Ethics, Standards, and Guidelines (2009) is formatted into standards and knowledge and skills [competencies] expectations for learners of various disability categories in special education.

What Every Special Educator Must Know: Ethics, Standards, and Guidelines (2009) provides specific standards for teacher candidates and beginning teachers that includes (a) foundations, (b) development and characteristics of learners, (c) individual learning differences, (d) instructional strategies, (e) learning environments and social interactions, (f) language, (g) instructional planning, (h) assessment, (i) professional and ethical practice, and (j) collaboration (CEC, 2009).

CEC and key researchers have continuously updated these standards to better prepare and sustain professionals in the field of special education (CEC, 2009). Practicing teachers in special education may use these CEC standards to help them maintain the knowledge and skills necessary for effectively meeting the needs of students with exceptionalities (Crutchfield, 2003). Further, in evaluating teacher preparation programs, the CEC standards are used to examine the effectiveness of teacher preparation programs.

Theoretical Orientation

Research and theory related to teacher preparation programs did not emerge until the nineteenth century (Rosenberg et al., 2004) with the creation of normal schools. The normal schools created a brief course of study for teacher educators. Numerous theorists believe that individuals can become experts with appropriate training (Alexander, Buehl, Sperl, & Fives, 2004; Ericsson & Charness, 1994; Ericsson & Williams, 2007; Sternberg & Horvath, 1995). According to Ericsson and Williams (2007), teacher education is one of a select few professions that are evaluated for the high levels of achievement across a broad range of domains of expertise. According to theorists and researchers, Sternberg and Horvath (1995), the schools in the United States put pressure on our society to effectively develop an expert teacher in public schools. If we are to develop a model of teaching expertise, the model should address performance standards, which may help identify highly qualified teachers. Ericsson and Charness (1994) state that researchers should focus on creating "reproducible, empirical phenomena of superior performance (p. 726)." The CEC standards and knowledge and skills have been developed to help guide teacher preparation entities in the development, evaluation, and sustainability of exemplary personnel training programs.

Conclusion

Sustaining, maintaining and retaining teachers of students with exceptionalities, specifically teachers of students with EBD, are serious challenges (Stempien & Loeb, 2002). Teacher preparation programs in IHEs will continue to be a focal point for improving teacher quality in years to come (U.S. Department of Education, 2008). Teacher preparation programs in educating students with EBD should aspire to adequately prepare qualified teachers in the field

of special education. In efforts to achieve this goal, evaluation of teacher preparation programs for students with EBD serves as a vehicle for improved teacher quality. The CEC standards can be used as a roadmap to help practicing special education professionals evaluate their competence and ensure their level of expertise (Crutchfield, 2003).

CHAPTER 3

METHODOLOGY

Chapter three discusses the methodology and presentation of data including the (a) purpose of the study, (b) research questions, (c) selection of participants, (d) data collection procedures, (e) instrumentation used, and (f) data analysis procedures.

Purpose of the Study

Preparation programs for teachers of students with emotional and behavioral disorders (EBD) should aspire to adequately prepare qualified teachers in the field of special education (Crutchfield, 2003). The purpose of this study is twofold: (a) to determine how graduates, who completed a National Council Accreditation of Teacher Education (NCATE) and Council for Exceptional Children (CEC) approved master's program specializing in EBD from one university, perceive the importance of CEC standards in working with students with EBD, and (b) to examine how program graduates perceive their proficiency in using CEC standards when working with students with EBD.

Research Questions

Five research questions guide this study.

- 1. How do graduates perceive the importance of CEC standards in their work with students with EBD?
- 2. How do graduates perceive their level of proficiency of using CEC standards in their work with students with EBD?
- 3. What is the relationship, if any, between graduates' level of proficiency and the perceived

- importance of CEC standards?
- 4. To what extent do specific variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) predict graduates' perceptions of the importance of the CEC standards?
- 5. To what extent do specific variables (i.e., total years of teaching experience, positions graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) predict graduates' perceptions of their proficiency using CEC standards?

Selection of Participants

The participants in this study are graduates from a selected master's degree program in special education with a focus on teaching students with EBD. The program has been a NCATE and CEC approved program since its early inception in the 1980s. The names and addresses for 230 graduates of the master's degree program from 1990 to 2011 were accessed through university databases. A letter from the coordinator of the EBD program was sent to all 230 program graduates introducing the study and soliciting their online contact information (see Appendix A). One hundred seventy-one graduates provided online contact information.

E-mails were sent to each program graduate who provided online contact information. In the e-mail, further information was provided about the online survey along with an invitation to complete the survey (see Appendix B). In all cases, the use of a coding system ensured anonymity. No names or other identifying information were used in data analysis and presentation.

Instrumentation and Data Collection Procedures

The survey instrument was developed utilizing the CEC standards and knowledge and skills statements for the preparation of teachers of students with EBD as delineated by the CEC (2009). When individuals accessed the survey, the first page was an informed consent form (see Appendix C) and only after its completion was the survey accessible. The survey instrument was constructed in two parts.

Part I asked for demographic data, which was comprised of 13 items (i.e., year completed master's program, undergraduate major, highest degree attained, total years teaching experience, years teaching students with EBD, geographic setting of position, position currently held, other positions held, population of students worked with, age group of students with whom they currently work, problems faced in their current setting, number of the students on their caseload, graduates' feelings about working with students with EBD, and graduates' feelings about causal factors of students with EBD).

In Part II of the survey, statements representative of the standards for professional practice (see Appendix D) were presented. Nine CEC standards for professional practice (i.e., foundations, development and characteristics of learners, individual learning differences, instructional strategies, learning environments/social interactions, instruction planning, assessment, professional and ethical practice, and collaboration) were delineated each followed by four knowledge and skills statements representative of the specific standard. Participants were instructed to read each of the standards and accompanying knowledge and skills statements. In the left column, after each knowledge and skill statement, participants rated, using a four-point scale, their perceived importance of each standard in relation to his or her work with students

with EBD. In the right column, participants rated, using a four-point scale, their perceived proficiency in using each standard.

At the end of the second and fourth week of data collection, a reminder was sent to encourage program graduates to complete the survey if they had not already done so. Data were entered electronically and saved into a database for analysis. At the conclusion of the survey, participants provided their e-mail addresses if they desired to be entered into an incentive, random drawing for a \$50 gift certificate to Amazon.com. The survey was piloted with five professionals in the field to ensure the clarity of the instrument and specific items. Based on feedback from the pilot, minor adjustments were made in some items for further clarity. It was also determined that completion of the survey should take no longer than 20 minutes.

Data Analysis

To begin, quantitative research is the "systematic collection of data that results in the quantification of characteristics of participants in the study" (Mertens & McLaughlin, 2004, p. 52). Selected demographic data collected from the survey were quantified (e.g., geographic setting: rural = 1, suburban = 2, urban = 3), and these quantified responses were coded to the appropriate question number. Responses to the survey questions were quantified based on the four-point Likert scale (e.g., *very important* = 4, *important* = 3 ... and *very well prepared* = 4, *adequately prepared* = 3...) and each response was coded to the corresponding CEC standard (1 through 9). This procedure applies to both parts of the survey. Data were analyzed using Predictive Analytics Software (PASW) Statistics 20 software and Microsoft EXCEL software. Data mining procedures were initially utilized. Any missing data was analyzed to determine if a mean, median, or mode could be substituted or if the entire case should be list-wise deleted.

Demographic information was analyzed using descriptive statistics, such as means and standard deviations for continuous variables and frequencies and percentages for categorical variables. Because the researcher created the scale in which participants rated both the importance of the CEC standards and their proficiency of using CEC standards, a reliability analysis using Cronbach's alpha was conducted (Cronbach, 1953). To determine the effect size for analyses based on the multiple linear regressions with four predictors, a sensitivity power analysis was conducted using G*Power 3.1.2 (Faul, Erdfelder, Buchner, & Lang, 2007; Faul, Erdfelder, Lang, & Buchner, 2009). Figure 1 reports the findings from the power analysis.

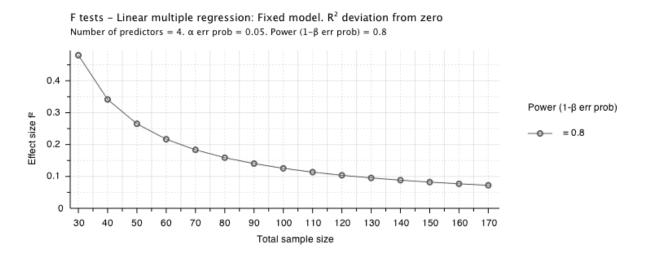


Figure 1. Power analyses for teachers' perceptions of CEC standards research study.

Additionally, preliminary analyses were conducted to examine the potential relationships between the variables. Cross tabulations with Pearson chi square analyses were conducted to examine the relationships between the categorical demographic variables to determine the presence of any potential covariates. Pearson product moment correlations (Cohen, Cohen, West, & Aiken, 2003) were conducted to examine any potentially significant relationships between continuous variables (e.g., participants' perceptions of proficiency and importance ratings represented by the 9 CEC standards). Separate Pearson product moment correlations (Cohen et

al., 2003) were conducted to examine the relationship between participants' total proficiency scores using CEC standards and their importance ratings of those standards. Additional analyses (e.g., cross tabulations, Pearson product moment correlations) examined the relationships between the four predictors of proficiency and importance ratings.

Finally, primary analyses were conducted to specifically address the research questions. Specifically, Research Questions 1 and 2 were analyzed using descriptive statistics (i.e., means and standard deviations) and the results were reported in tables. For Research Question 3, which asks if there is a relationship between graduates' perceptions of importance and proficiency, scale scores were calculated for graduates' perceptions of importance and proficiency. The relationship between graduates' perceptions of importance and proficiency was analyzed using a Pearson product moment correlation (Cohen et al., 2003) for each of the 9 CEC standards.

Research Question 4 was analyzed using multiple linear regressions (Cohen et al., 2003; Howell, 2007) with perceptions of importance of the CEC standards as the outcome variable and specific variables (i.e., total years of teaching experience, position graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) as the predictors.

The regression formula is

$$\hat{y} = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + constant$$

where:

y = graduates' perceptions of importance of CEC standards

 x_1 = total years of teaching experience

 x_2 = position graduates currently held

 x_3 = graduates' feelings about working with students with EBD

 x_4 = graduates' feelings of causal factors for students with EBD

Research Question 5 was analyzed using a multiple linear regression (Cohen et al., 2003; Howell, 2007) in which participants' level of proficiency of the CEC standards was the outcome variable and specific variables (i.e., total years of teaching experience, position graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) as the predictors.

The regression formula is

$$\hat{y} = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + constant$$

where:

y = graduates' perceptions of their proficiency of CEC standards

 x_1 = total years of teaching experience

 x_2 = position graduates currently held

 x_3 = graduates' feelings about working with students with EBD

 x_4 = graduates' feelings of causal factors for students with EBD

CHAPTER 4

ANALYSES OF DATA AND DISCUSSION

Chapter 4 presents the analysis of data obtained, the procedures employed, and the results of the study. The purpose of the present study was twofold: (a) to determine how graduates, who completed a National Council Accreditation of Teacher Education (NCATE) and Council for Exceptional Children (CEC) approved master's program specializing in teaching students with emotional and behavioral disorders (EBD) from one university, perceived the importance of CEC standards in working with students with EBD, and (b) to examine how program graduates perceive their proficiency in using CEC standards when working with students with EBD. The study examined the graduates' ratings of their perceived importance and perceived proficiency of the CEC standards. Finally, demographic variables were tested to determine if they significantly related to graduates' perceptions of the importance of the CEC standards in working with students with EBD, and graduates' perceptions of their proficiency in using the CEC standards in working with students with EBD. Data were analyzed using Statistical Package for the Social Sciences 20.0 software and Microsoft EXCEL software. These analyses included descriptive statistics, cross tabulations with Pearson chi square analyses, Pearson product moment correlations, multivariate analysis of variance (MANOVA), and multiple linear regressions.

Demographic Data

One hundred twenty-seven (n = 127) respondents attempted the survey; however, 21 surveys were not included in the data analyses due to excessive missing data ($\geq 15\%$). In addition, one participant was deemed an outlier and omitted from the data analysis. Several demographic data (i.e., year completed master's program, undergraduate degree, highest degree

attained, total years teaching experience, years teaching students with EBD, geographic setting of graduates' job position, total position currently held, other positions held, categories of disabilities and ages of students with whom they currently work, problems faced in their current setting, number of the students on their caseload, graduates' feelings about working with students with EBD, and graduates' feelings about causal factors for students with EBD) were examined.

As shown in Table 1, a majority of participants' highest degree earned was a master's degree in education (M.Ed.). The results also demonstrated the majority of respondents obtained an undergraduate degree from a college of education versus other recorded colleges. As to geographical settings, most participants worked in suburban areas. Furthermore, a majority of graduates were currently employed as some type of classroom teacher; however, other graduates currently held positions as educational support personnel, higher education faculty, and administrators. Finally, a majority of the graduates previously held positions as classroom teachers, educational support personnel, administrators, and higher education faculty.

Also shown in Table 1, two main predictors of graduates' perceived importance and perceived proficiency in using the CEC standards were (a) graduates' feelings about working with students with EBD and (b) graduates' feelings about causal factors for students with EBD. A majority of the respondents felt great satisfaction in working with students with EBD. Others felt working with students with EBD was too difficult or other factors deterred them for working with these students. Finally, some graduates felt they were temperamentally adapted to work with students with EBD.

As previously mentioned, graduates rated their feelings on causal factors for students with EBD. A majority of the graduates felt that the students' home environment was the cause

of their exceptionality. Others felt that mental health issues were a causal factor for students with EBD. Graduates also rated school environments and personal choice as causal factors for students with EBD. Due to a small sample size for the school environments and personal choice, a new variable for perceptions of causal factors was created with two levels: (a) mental health issues and (b) home environments, school environments, and personal choice factors for analyses purposes.

Table 1
Frequencies and Percentages of Categorical Demographic Variables

Variables	n	%	
Timeframe of Graduation			
1990-2000	75	71.4	
2001-2012	30	28.6	
Highest Degree Attained			
M.Ed.	80	76.2	
M.A./M.S.	6	5.7	
Ed.D.	2	1.9	
Ed.S.	1	1.0	
Ph.D.	16	15.2	
Undergraduate Degree			
Colleges of Arts and Sciences	27	26.5	
Colleges of Education	60	58.8	
Colleges of Business Public Affairs and Community	15	14.7	
Geographical Setting			
Suburban	54	51.4	
Urban	40	38.1	
Rural	11	10.5	

(table continues)

Table 1 (continued).

Variables	n	%
Position Currently Held		
Classroom Teacher	65	61.9
Educational Support Personnel	21	20.0
Higher Education	10	9.5
Administrator	9	8.6
Position Previously Held		
Classroom Teacher	57	54.3
Educational Support Personnel	26	24.8
Administrator	12	11.4
Higher Education	10	9.5
Feelings About Students with EBD		
Great Satisfaction	54	54.5
Other Factors	27	27.3
Temperamentally Adapted	18	18.2
Feelings About Causal Factors		
Home Environments	51	48.6
Mental Health Issues	46	43.8
School Environments	5	4.8
Personal Choice	3	2.9

Graduates also rated other demographic variables. Most graduates previously worked with students with cognitive impairments. In addition, most graduates primarily work with three age groups, which included elementary, middle school, and secondary-aged students. Other age groups included preschool and higher education.

A majority of graduates felt an unreasonable amount of paperwork is a prevalent problem when working in the educational setting. Other notable prevalent problems consisted of the lack of parent/guardian support, too much emphasis on accountability, too many students on a caseload, lack of support from other educational personnel, and lack of administrative support.

Some graduates also reported lack of educational resources, lack of funding, and lack of time as other prevalent problems when working in an educational setting.

The continuous demographic variables (i.e., time since completion of the degree, years taught students with EBD, and total years of teaching experience) were analyzed with means and standard deviations. As shown in Table 2, the years since degree completion ranged from 1 year to 21 years, with an average time of 9.37 years. The graduates' years taught or are teaching students with EBD ranged from 1 to 50, with an average time of 8.44 years. The total years of teaching experience by graduates ranged from 1 to 31, with an average of 11.14.

Variables were recoded to provide more specific information to the readers. Timeframe since graduates completed their degree was recoded into two categories (1990 to 2000 versus 2001 and later). Graduates' experience teaching students with EBD was recoded into three categories (5 years or less, 6 to 9 years, and 10 or more years). Graduates' total years of teaching experience was recoded into two categories (10 years or less and 11 years or more).

Table 2

Means and Standard Deviations of Continuous Demographic Variables

Variables	n	Mean	SD	Min	Max
Time Since Completion of Degree	105	9.37	5.21	1	21
Years Taught with Students with EBD	105	8.44	6.99	1	50
Total Years Teaching Experience	105	11.14	6.20	1	31

Preliminary Analyses

Preliminary analyses were conducted to determine if any significant relationships were present among variables. Cross tabulations with Pearson chi square analyses were conducted to test the relationships between the categorical variables. The effect size was analyzed using Spearman rho correlation. Strong relationships between categorical variables have values close to 1.00. The reliability of the graduates' perceived importance and proficiency responses was tested. Cronbach's alpha for the 9 CEC standards on graduates' perceived importance and graduates' perceived proficiency were .87 and .92, respectively.

Graduates' Feelings about Causal Factors for Students with EBD

A cross tabulation with Pearson chi square was conducted to examine the relationships of graduates' feelings about causal factors for students with EBD with other demographic factors. As shown in Table 3, graduates' feelings about causal factors were significantly and positively associated with geographical setting, $X^2(2) = 9.29$, p = .010, Cramer's V = .297. A greater number of participants who noted that the causal factor for EBD is a mental health issue lived in the suburbs (65.2%), compared to those who indicated that it was due to issues related to home, school, or personal choice factors (40.7%). A greater number of participants who concluded that the causal factors for EBD related to home, school, or personal choice factors lived in an urban area (50.8%), compared to those who believed causal factors for students with EBD were mental health issues (21.7%).

Table 3

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained,
Undergraduate Degree, Geographic Setting, Position Currently Held, Position Previously Held,
Feelings about Working with Students with EBD, Total Years of Teaching Experience and Years
Teaching Students with EBD by Feelings about Causal Factors for Students with EBD

		Feeling	s About Caus	sal Factors		
		l Health sues	Home, Sc Personal Ch	2		
Variables	n	%	n	%	χ^2	p
Timeframe of Graduation					.25	.619
1990-2000	12	26.1	18	30.5		
2001-2012	34	73.9	41	69.5		
Undergraduate Degree					2.53	.283
Colleges of Arts and Sciences	15	34.1	12	20.7		
Colleges of Education Colleges of Business Public	24	54.5	36	62.1		
Affairs and Community	5	11.4	10	17.2		
Highest Degree Earned					.21	.644
M.Ed., M.A./M.S., Ed.S.	39	84.8	48	81.4		
Ph.D., Ed.D.	7	15.2	11	18.6		
Geographical Setting					9.29	.010*
Rural	6	13.0	5	8.5		
Suburban	30	65.2	24	40.7		
Urban	10	21.7	30	50.8		
Position Currently Held					.60	.896
Administrator	3	6.5	6	10.2		
Classroom Teacher	29	63.0	36	61.0		
Educational Support Personnel	10	21.7	11	18.6		
Higher Education	4	8.7	6	10.2		
p = < .05					(table	continue

Table 3 (continued).

-	Fee	elings Ab	out Causal F	actors	_	
1	Mental Hea	alth	Home, S Personal C	2		
Variables	n	%	n	%	χ^2	p
Position Previously Held					3.03	.386
Administrator	5	10.9	7	11.9		
Classroom Teacher	29	63.0	28	47.5		
Educational Support Personne	el 8	17.4	18	30.5		
Higher Education	4	8.7	6	10.2		
Years Teaching Students with EBD					.25	.884
5 Years or Less	16	34.8	23	39.0		
6 to 9 Years	15	32.6	19	32.2		
10 or More Years	15	32.6	17	28.8		
Total Years of Teaching Experience					.73	.394
10 Years or Less	28	60.9	31	52.5		
11 Years or More	18	39.1	28	47.5		
Feelings About Working Students with EBD	5				10.13	.006*
Temperamentally Adapted	14	31.8	4	7.3		
Great Satisfaction	21	47.7	33	60.0		
Other Factors	9	20.5	18	32.7		

 $rac{p}{ = < .05}$

As also shown in Table 3, graduates' feelings regarding causal factors for EBD was significantly associated with feelings about working with students with EBD, $X^2(2) = 10.13$, p = .006, Cramer's V = .320. A greater number of graduates who noted that the causal factor for EBD was related to mental health issues also indicated that they were temperamentally adapted

to work with students with EBD (31.8%), compared to participants who felt that EBD was related to home, school, or personal choice factors (7.3%). Graduates' feelings about causal factors for students with EBD was not significantly associated with graduates' timeframe of graduation, undergraduate degree, highest degree earned, position currently held, position previously held, years teaching students with EBD, and total years of teaching experience, all *ps* not-significant.

Graduates' Feelings about Working with Students with EBD

A separate cross tabulation with Pearson chi square analyses graduates' feelings about working with students with EBD and other demographic factors. As shown in Table 4, graduates' feelings about students with EBD were significantly associated with graduates' feelings about causal factors, $X^2(2) = 10.13$, p = .006, Cramer's V = .320. A greater number of those who indicated that they were temperamentally adapted to work with students with EBD also felt that causal factors for students with EBD was due to mental health issues (77.8%), compared to those who had great satisfaction working with students with EBD (38.9%) and other factors prevented them from working with these students (33.3%). Graduates' feelings about working with students with EBD were not significantly associated with timeframe of graduation, undergraduate degree, highest degree earned, geographic setting, position currently held, position previously held, total years of teaching experience, and years teaching students with EBD, all ps not-significant.

Table 4

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained,
Undergraduate Degree, Geographic Setting, Position Currently Held, Position Previously Held,
Feelings about Casual Factors for Students with EBD, Total Years of Teaching Experience, and
Years Teaching Students with EBD by Feelings about Working with Students with EBD

				ıt Workin with EBD		h		
	Temper	ramentally		oreat		Other	_	
	-	lapted		sfaction	Fa	actors		
Variables	n	%	n	%	n	%	χ^2	p
Timeframe of Graduation							2.44	.295
1990-2000	8	44.4	14	25.9	7	25.9		
2001-2012	10	55.6	40	74.1	20	74.1		
Causal Factors							10.13	.006*
Mental Health Issues Home, School, and	14	77.8	21	38.9	9	33.3		
Personal Factors	4	22.2	33	61.1	18	66.7		
Undergraduate Degree Colleges of Arts and							7.89	.096
Sciences	1	5.9	20	37.7	6	22.2		
Colleges of Education Colleges of Business Public Affairs and	13	76.5	25	47.2	18	66.7		
Community	3	17.6	8	15.1	3	11.1		
Highest Degree Earned							4.02	.134
M.Ed., M.A./M.S., Ed.S	13	72.2	48	88.9	20	74.1		
Ph.D., Ed.D.	5	27.8	6	11.1	7	25.9		
Position Currently Held							4.89	.557
Administrator	3	16.7	5	9.3	1	3.7		
Classroom Teacher Educational Support	12	66.7	31	57.4	18	66.7		
Personnel	2	11.1	13	24.1	4	14.8		
Higher Education	1	5.6	5	9.3	4	14.8		
* p = < .05							(table c	ontinues)

Table 4 (continued).

				t Workin with EBD		1		
	1	amentally		reat		Other	_	
	A	dapt	Satis	sfaction	Fa	actors	2	
Variables	n	%	n	%	n	%	χ^2	p
Position Previously Held							9.87	.130
Administrator	4	22.2	6	11.1	1	3.7		
Classroom Teacher	12	66.7	25	46.3	16	59.3		
Educational Support								
Personnel	1	5.6	18	33.3	6	22.2		
Higher Education	1	5.6	5	9.3	4	14.8		
Geographical Setting							7.04	.134
Rural	1	5.6	7	13.0	2	7.4		
Suburban	14	77.8	23	42.6	15	55.6		
Urban	3	16.7	24	44.4	10	37.0		
Years Teaching Students								
with EBD							3.37	.499
5 Years or Less	4	22.2	19	35.2	13	48.1		
6 to 9 Years	7	38.9	19	35.2	8	29.6		
10 or More Years	7	38.9	16	29.6	6	22.2		
Total Years of Teaching								
Experience							.67	.716
10 Years or Less	10	55.6	33	61.1	14	51.9		
11 Years or More	8	44.4	21	38.9	13	48.1		

p = < .05

Position Currently Held

A separate cross tabulation with Pearson chi square was conducted to examine the relationships of graduates' position currently held with other demographic factors. As expected, position currently held was significantly associated with position previously held, $X^2(9) = 210.15$, p < .001, Cramer's V = .817 (see Table 5). A greater number of current classroom teachers (81.5%) also previously held the positions as classroom teachers.

Additionally, position currently held was significantly associated with highest degree, X^2 (3) = 49.89, p < .001, Cramer's V = .689. A greater number of graduates' position currently held in higher education also earned a Ph.D. and/or Ed.D. (90.0%) compared to administrators (44.4%), classroom teachers (6.2%), and educational support personnel (4.8%). Finally, position currently held was not significantly associated with years teaching students with EBD, total years of teaching experience, graduates' feelings about students with EBD, timeframe for graduation, graduates' feelings about causal factors for students with EBD, undergraduate degree, and geographic setting, all ps not-significant.

Geographical setting. A separate cross tabulation examined the relationships of graduates' work geographical setting with other demographic factors. As shown in Table 6, geographical setting was significantly associated with years of teaching experience of students with EBD, $X^2(4) = 10.54$, p = .032, Cramer's V = .224. A greater number of participants who worked in an urban setting also have 5 years or less teaching experience of students with EBD (52.5%), compared to those who worked in a rural geographic setting (45.5%) or in a suburban setting (24.1%).

As also shown in Table 6, a greater number of those who worked in a suburban setting had 6 to 9 years of teaching experience (44.4%), compared to those who worked in a rural setting (27.3%) and those who worked in an urban setting (17.5%). Geographic setting was also significantly associated with graduates' feelings of causal factors for students with EBD, $X^2(2) = 9.29$, p = .010, Cramer's V = .297. A greater number of participants who worked in an urban setting noted that the causal factors for students with EBD was related to home, school or personal choice factors work in an urban area (75.0%), compared to those who worked in a suburban setting (44.4%).

Table 5

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained, Undergraduate Degree, Geographic Setting, Feelings about Causal Factors for Students with EBD, Years Teaching Students with EBD, Total Years of Teaching Experience, Position Previously Held, and Feelings about Working with Students with EBD by Position Currently Held

			Position Castroom		ducational	Н	igher	_	
Admi	inistrator	Te	eacher	Suppo	ort Personnel	Edi	ucation		
n	%	n	%	n	%	n	%	χ^2	p
								210.15	.001*
9	100.0	0	0.0	3	14.3	0	0.0		
0	0.0	53	81.5	4	19.0	0	0.0		
0	0.0	12	18.5	14	66.7	0	0.0		
							100.		
0	0.0	0	0.0	0	0.0	10	0		
								8.10	.23
4	44.4	22	33.8	10	47.6	3	30.0		
4	44.4	20	30.8	4	19.0	6	60.0		
1	11.1	23	35.4	7	33.3	1	10.0		
								1.32	.72
6	66.7	38	58.5	10	47.6	5	50.0		
3	33.3	27	41.5	11	52.4	5	50.0		
	9 0 0 4 4 1	9 100.0 0 0.0 0 0.0 0 0.0 4 44.4 4 44.4 1 11.1	Administrator n N N N N N N N N N N N N N N N N N N	Administrator Teacher n % 9 100.0 0 0.0 0 0.0 53 81.5 0 0.0 12 18.5 0 0.0 0 0.0 4 44.4 22 33.8 4 44.4 20 30.8 1 11.1 23 35.4 6 66.7 38 58.5	Administrator Teacher Suppose 9 100.0 0 0.0 3 0 0.0 53 81.5 4 0 0.0 12 18.5 14 0 0.0 0 0.0 0 4 44.4 22 33.8 10 4 44.4 20 30.8 4 1 11.1 23 35.4 7 6 66.7 38 58.5 10	Administrator Teacher Support Personnel 9 100.0 0 0.0 3 14.3 0 0.0 53 81.5 4 19.0 0 0.0 12 18.5 14 66.7 0 0.0 0 0.0 0 0.0 4 44.4 22 33.8 10 47.6 4 44.4 20 30.8 4 19.0 1 11.1 23 35.4 7 33.3 6 66.7 38 58.5 10 47.6	Administrator Teacher Support Personnel Edit 9 100.0 0 0.0 3 14.3 0 0 0.0 53 81.5 4 19.0 0 0 0.0 12 18.5 14 66.7 0 0 0.0 0 0.0 0 0.0 10 4 44.4 22 33.8 10 47.6 3 4 44.4 20 30.8 4 19.0 6 1 11.1 23 35.4 7 33.3 1 6 66.7 38 58.5 10 47.6 5	Administrator Teacher Support Personnel Education 9 100.0 0 0.0 3 14.3 0 0.0 0 0.0 53 81.5 4 19.0 0 0.0 0 0.0 12 18.5 14 66.7 0 0.0 0 0.0 0 0.0 0 0.0 10 0 4 44.4 22 33.8 10 47.6 3 30.0 4 44.4 20 30.8 4 19.0 6 60.0 1 11.1 23 35.4 7 33.3 1 10.0 6 66.7 38 58.5 10 47.6 5 50.0	Administrator n Teacher n Support Personnel n Education n 229 100.0 00.03 14.3 00.000.053 81.5 4 19.0 00.000.0 12 18.5 14 66.7 00.000.000.000.0 $100.$ 00.000.000.0 $100.$ 4 44.4 22 33.8 10 47.6 3 30.0 4 44.4 20 30.8 4 19.0 6 60.0 1 11.1 23 35.4 7 33.3 1 10.0 6 66.7 38 58.5 10 47.6 5 50.0

Table 5 (continued).

			F	osition	Currently 1	Held				
			Classr	oom	Education	al Support		Higher		
	Admi	nistrator	Teacl		Perso	onnel	\mathbf{E}	ducation		
Variables	n	%	n	%	n	%	n	%	χ^2	p
Feelings About Students with EBD									4.89	.557
Temperamentally Adapted	3	33.3	12	19.7	2	10.5	1	10.0		
Great Satisfaction	5	55.6	31	50.8	13	68.4	5	50.0		
Other Factors	1	11.1	18	29.5	4	21.1	4	40.0		
Timeframe of Graduation									4.81	.186
1990-2000	5	55.6	15	23.1	6	28.6	4	40.0		
2001-2012	4	44.4	50	76.9	15	71.4	6	60.0		
Causal Factors									.60	.896
Mental Health Issues	3	33.3	29	44.6	10	47.6	4	40.0		
Home, School, and Personal Choice Factors	6	66.7	36	55.4	11	52.4	6	60.0		
Undergraduate Degree									.86	.990
Colleges of Arts and Sciences	3	33.3	15	24.2	6	28.6	3	30.0		
Colleges of Education Colleges of Business Public Affairs	5	55.6	38	61.3	12	57.1	5	50.0		
and Community	1	11.1	9	14.5	3	14.3	2	20.0		
* <i>p</i> = < .05									(table	continues)

Table 5 (continued).

	A 1 ·	• , ,		ssroom	St	cational apport		ligher	-	
	Admii	nistrator	16	eacher	Personnel		Ea	ucation	2	
Variables	n	%	n	%	n	%	n	%	χ²	p
Highest Degree Earned									49.89	.001*
M.Ed., M.A./M.S., Ed.S.	5	55.6	61	93.8	20	95.2	1	10.0		
Ph.D., Ed.D.	4	44.4	4	6.2	1	4.8	9	90.0		
Geographical Setting									6.52	.367
Rural	0	0.0	7	10.8	3	14.3	1	10.0		
Suburban	3	33.3	38	58.5	8	38.1	5	50.0		
Urban	6	66.7	20	30.8	10	47.6	4	40.0		

^{*} *p* = < .05

Graduates' geographical setting at work was not significantly associated with the timeframe for graduation, undergraduate degree, highest degree earned, position currently held, position previously held, graduates' feelings of working with students with EBD, and total years of teaching experience, all *ps* not-significant.

Table 6

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained,
Undergraduate Degree, Position Currently Held, Position Previously Held, Feelings about
Causal Factors, Years Teaching Students with EBD, Total Years of Teaching Experience, and
Feelings about Working with Students with EBD by Geographic Setting

		G	_					
_	Rur	al	Subu	ırban	U	Irban	_	
Variables	n	%	n	%	n	%	χ^2	p
Position Currently Held							6.52	.367
Administrator	0	0.0	3	5.6	6	15.0		
Classroom Teacher Educational Support	7	63.6	38	70.4	20	50.0		
Personnel	3	27.3	8	14.8	10	25.0		
Higher Education	1	9.1	5	9.3	4	10.0		
Position Previously Held							6.26	.395
Administrator	1	9.1	3	5.6	8	20.0		
Classroom Teacher Educational Support	7	63.6	33	61.1	17	42.5		
Personnel	2	18.2	13	24.1	11	27.5		
Higher Education	1	9.1	5	9.3	4	10.0		
Years Teaching Students with EBD							10.54	.032*
5 Years or Less	5	45.5	13	24.1	21	52.5		
6 to 9 Years	3	27.3	24	44.4	7	17.5		
10 or More Years	3	27.3	17	31.5	12	30.0		
* <i>p</i> = < .05							(table d	continu

Table 6 (continued).

		G	eograph	ic Setting	3			
	Rur	al	Subu	ırban	U	rban		
Variables	n	%	n	%	n	%	χ^2	p
Total Years of Teaching								
Experience							1.27	.531
10 Years or Less	5	45.5	33	61.1	21	52.5		
11 Years or More	6	54.5	21	38.9	19	47.5		
Feelings About Students with EBD								
Temperamentally								
Adapted	1	10.0	14	26.9	3	8.1		
Great Satisfaction	7	70.0	23	44.2	24	64.9		
Other Factors	2	20.0	15	28.8	10	27.0		
Γime Frame of Graduation							.83	.661
1990-2000	2	18.2	17	31.5	11	27.5		
2001-2012	9	81.8	37	68.5	29	72.5		
Undergraduate Degree							3.55	.471
Colleges of Arts and								
Sciences	3	27.3	13	25.0	11	28.2		
Colleges of Education Colleges of Business Public Affairs and	7	63.6	28	53.8	25	64.1		
Community	1	9.1	11	21.2	3	7.7		
Highest Degree Earned M.Ed., M.A./M.S.,							.74	.691
Ed.S.	10	90.9	45	83.3	32	80.0		
Ph.D., Ed.D.	1	9.1	9	16.7	8	20.0		
Causal Factors							9.29	.010*
Mental Health Issues Home, School, and Personal Choice	6	54.5	30	55.6	10	25.0		
Factors	5	45.5	24	44.4	30	75.0		
$\frac{100000}{5}$								

^{*} p = < .05

Undergraduate Degree Earned

A separate cross tabulation with Pearson chi square analyses graduates' undergraduate degree earned with the other demographic factors. As shown in Table 7, undergraduate degree earned was significantly associated with total years of teaching experience, $X^2(2) = 12.80$, p = .002, Cramer's V = .354.

Table 7

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained,
Geographic Setting, Position Currently Held, Position Previously Held, Feelings about Causal
Factors for Students with EBD, Years Teaching Students with EBD, Total of Years Teaching
Experience, and Feelings about Working with Students with EBD by Undergraduate Degree

	Colleg Arts Scien	ges of and	Colles Educ	_	Coll Busine Affa	eges of ess Public irs and munity	c	
Variables	n	%	n	%	n	%	χ^2	p
Highest Degree Earned M.Ed., M.A./M.S., Ed.S. Ph.D., Ed.D.	23 4	85.2 14.8	49 11	81.7 18.3	12	80.0 20.0	.23	.893
Geographical Setting Rural Suburban Urban	3 13 11	11.1 48.1 40.7	7 28 25	11.7 46.7 41.7	1 11 3	6.7 73.3 20.0	3.55	.471
Position Currently Held Administrator Classroom Teacher Educational Support Personnel Higher Education	3 15 6 3	11.1 55.6 22.2 11.1	5 38 12 5	8.3 63.3 20.0 8.3	1 9 3 2	6.7 60.0 20.0 13.3	.86	.990
Position Previously Held Administrator Classroom Teacher Educational Support Personnel	4 15 5	14.8 55.6 18.5	7 33 15	11.7 55.0 25.0	1 7 5	6.7 46.7 33.3	1.97	.923
* $p = < .05$	3	10.5	13	23.0	J	33.3	(table co	ontinue

Table 7 (continued).

-		J	Jndergra	duate De				
	Colleg Arts Scien	ges of and	Colleg Educ	ges of	Coll Busine Affa	eges of ss Publi irs and munity	c	
Variables	n	%	n	%	n	%	χ^2	p
Higher Education	3	11.1	5	8.3	2	13.3		•
Years Teaching Students with EBD							8.83	.065
5 Years or Less	14	51.9	19	31.7	5	33.3		
6 to 9 Years	10	37.0	16	26.7	6	40.0		
10 or More Years	3	11.1	25	41.7	4	26.7		
Total Years of Teaching Experience 10 Years or Less	22	81.5	25	41.7	10	66.7	12.80	.002*
11 Years or More	5	18.5	35	58.3	5	33.3		
Feelings About Working with Students with EBD Temperamentally							7.89	.096
Adapted	1	3.7	13	23.2	3	21.4		
Great Satisfaction	20	74.1	25	44.6	8	57.1		
Other Factors	6	22.2	18	32.1	3	21.4		
Timeframe of Graduation							3.70	.157
1990-2000	5	18.5	22	36.7	3	20.0		
2001-2012	22	81.5	38	63.3	12	80.0		
Causal Factors Mental Health Issues Home, School, and	15	55.6	24	40.0	5	33.3	2.53	.283
Personal Choice Factors	12	44.4	36	60.0	10	66.7		

^{*} *p* = < .05

In addition, a greater number of graduates obtained an undergraduate degree in a College of Arts and Sciences have been teaching for 10 years or less (81.5%) compared to graduates that earned their undergraduate degree in a College of Education (41.7%). Undergraduate degree earned was

not significantly associated with causal factors, timeframe of graduation, highest degree earned, geographic setting, position currently held, position previously held, years teaching students with EBD, and graduates' feelings about working with students with EBD, all *p*s not-significant.

Highest Degree Attained

A separate cross tabulation with Pearson chi square analyses graduates' highest degree attained with the other demographic factors. As shown in Table 8, highest degree obtained was significantly associated with position currently held $X^2(3) = 49.89$, p < .001, Cramer's V = .689. These results should be viewed with caution due to low sample size per cell. Additionally, highest degree attained had a significant association with position previously held $X^2(3) = 46.88$, p < .001, Cramer's V = .668. For graduates, their highest degree obtained was not significantly associated with any factors (all ps not significant).

Table 8

Frequencies and Percentages of Timeframe of Graduation, Undergraduate Degree, Geographic Setting, Position Currently Held, Position Previously Held, Feelings about Causal Factors for Students with EBD, Years Teaching Students with EBD, Total Years Teaching Experience, and Feelings about Working with Students with EBD by Highest Degree Attained

		Highest Degree Attained M.Ed., M.A./M.S.,						
		d.S.	Ph.I	D., Ed.D.				
Variables	n	%	n	%	χ^2	p		
Geographical Setting					.74	.691		
Rural	10	11.5	1	5.6				
Suburban	45	51.7	9	50.0				
Urban	32	36.8	8	44.4				
p = < .05					(tahle d	continue		

Table 8 (continued).

	Hi	ighest Degi	ree Attair	ned		
		M.A./M.S.,			•	
	E	d.S.	Ph.I	D., Ed.D.		
Variables	n	%	n	%	χ^2	p
Position Currently Held					49.89	<.001*
Administrator	5	5.7	4	22.2		
Classroom Teacher	61	70.1	4	22.2		
Educational Support						
Personnel	20	23.0	1	5.6		
Higher Education	1	1.1	9	50.0		
Position Previously Held					46.88	<.001*
Administrator	8	9.2	4	22.2		
Classroom Teacher	54	62.1	3	16.7		
Educational Support						
Personnel	24	27.6	2	11.1		
Higher Education	1	1.1	9	50.0		
Years Teaching Students with EBD					3.44	.179
5 Years or Less	35	40.2	4	22.2		
6 to 9 Years	25	28.7	9	50.0		
10 or More Years	27	31.0	5	27.8		
Total Years of Teaching Experience					.00	.952
10 Years or Less	49	56.3	10	55.6		
11 Years or More	38	43.7	8	44.4		
Feelings About Working with Students with EBD					4.02	.134
Temperamentally Adapted	13	16.0	5	27.8		
Great Satisfaction	48	59.3	6	33.3		
Other Factors	20	24.7	7	38.9		
Timeframe of Graduation					2.68	.101
1990-2000	22	25.3	8	44.4		
2001-2012	65	74.7	10	55.6		
* <i>p</i> = < .05					(table	continues)

Table 8 (continued).

		ghest Degi M.A./M.S.,				
		d.S.		D., Ed.D.		
Variables	n	%	n	%	χ^2	p
Causal Factors					.21	.644
Mental Health Issues	39	44.8	7	38.9		
Home, School, and Personal						
Choice Factors	48	55.2	11	61.1		
Undergraduate Degree					.23	.893
Colleges of Arts						
and Sciences	23	27.4	4	22.2		
Colleges of Education	49	58.3	11	61.1		
Colleges of Business Public						
Affairs and Community	12	14.3	3	16.7		

^{*} p = < .05

Timeframe of Graduation

A cross tabulation with Pearson chi square analyses timeframe of graduation with the other demographic factors. As shown in Table 9, timeframe of graduation was significantly associated with graduates' total years of teaching experience $X^2(1) = 14.87$, p < .001, Cramer's V = .376. A greater number of graduates that completed the teacher preparation program of students with EBD between the years of 1990 to 2000 (73.3%) have been teaching for 11 or more years compared to those who graduated between 2001 to 2012 (32.0%). Timeframe of graduation was not significantly associated with causal factors, undergraduate degree, highest degree earned, geographic setting, position currently held, position previously held, years teaching students with EBD, and graduates' feelings about students with EBD, all ps not-significant.

Table 9

Frequencies and Percentages of Highest Degree Attained, Undergraduate Degree, Position Currently Held, Position Previously Held, Geographic Setting, Feelings about Causal Factors for Students with EBD, Years Teaching Students with EBD, Total Years of Teaching Experience, and Feelings about Working with Students with EBD by Timeframe of Graduation

_	Ti	imeframe c	of Gradua	tion	<u> </u>	
	199	90-2000	200	1-2012		
Variables	n	%	n	%	χ^2	p
Position Previously Held					2.13	.545
Administrator	5	16.7	7	9.3		
Classroom Teacher	14	46.7	43	57.3		
Educational Support Personnel	7	23.3	19	25.3		
Higher Education	4	13.3	6	8.0		
Years Teaching Students with EBD					3.50	.173
5 Years or Less	10	33.3	29	38.7		
6 to 9 Years	7	23.3	27	36.0		
10 or More Years	13	43.3	19	25.3		
Total Years of Teaching Experience					14.87	.001*
10 Years or Less	8	26.7	51	68.0		
11 Years or More	22	73.3	24	32.0		
Feelings About Students with EBD					2.44	.295
Temperamentally Adapted	8	27.6	10	14.3		
Great Satisfaction	14	48.3	40	57.1		
Other Factors	7	24.1	20	28.6		
Causal Factors					.25	.619
Mental Health Issues	12	40.0	34	45.3		
Home, School, and Personal Choice Factors	18	60.0	41	54.7		

^{*} p = < .05 (table continues)

Table 9 (continued).

	T	imeframe o	-			
	19	90-2000	200	01-2012		
Variables	n	%	n	%	χ^2	p
Undergraduate Degree					3.70	.157
Colleges of Arts and Sciences	5	16.7	22	30.6		
Colleges of Education Colleges of Business Public	22	73.3	38	52.8		
Affairs and Community	3	10.0	12	16.7		
Highest Degree Earned					2.68	.101
M.Ed., M.A./M.S., Ed.S.	22	73.3	65	86.7		
Ph.D., Ed.D.	8	26.7	10	13.3		
Geographical Setting					.83	.661
Rural	2	6.7	9	12.0		
Suburban	17	56.7	37	49.3		
Urban	11	36.7	29	38.7		
Position Currently Held					4.81	.186
Administrator	5	16.7	4	5.3		
Classroom Teacher	15	50.0	50	66.7		
Educational Support Personnel	6	20.0	15	20.0		
Higher Education	4	13.3	6	8.0		

p = < .05

Years Teaching Experience with Students with EBD

A separate cross tabulation examined the relationships of graduates' years teaching experience with students with EBD and other demographic factors. As shown in Table 10, graduates' years of teaching experience with students with EBD was expected to be significantly associated with total years teaching experience, $X^2(2) = 18.20$, p < .001, Cramer's V = .416. Not surprisingly, a greater number of graduates who had been teaching students with EBD for 10

years or more also had 11 years or more *total* teaching experience (75.0%), compared to those who had 5 years or less (30.8%) or graduates who had 6 to 9 years teaching experience with students with EBD (29.4%).

Graduates' years teaching students with EBD was also significantly associated with geographical work-setting, $X^2(4) = 10.54$, p = .032, Cramer's V = .224. More graduates, those with 6 to 9 years of teaching experience with students with EBD also taught in a suburban region (70.6%) compared to those who had 5 years of experience or less (33.3%). Graduates' years of teaching experience of students with EBD was not significantly associated with timeframe of graduation, undergraduate degree, highest degree earned, position currently held, position previously held, graduates' feelings about causal factors, and graduates' feelings about working with students with EBD, all ps not-significant.

Table 10

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained,
Undergraduate Degree, Position Currently Held, Position Previously Held, Geographic Setting,
Feelings about Causal Factors for Students with EBD, Feelings about Working with Students
with EBD, Total Years of Teaching Experience by Years Teaching Students with EBD

		Years Te	eaching S	Students	with EF	BD		
	5 Y	ears or	6	to 9	10 o	r More	_	
	I	ess	Y	ears	Y	ears		
Variables	n	%	n	%	n	%	χ^2	p
Undergraduate Degree							8.83	.065
Colleges of Arts and								
Sciences	14	36.8	10	31.3	3	9.4		
Colleges of Education	19	50.0	16	50.0	25	78.1		
Colleges of Business								
Public Affairs and								
Community	5	13.2	6	18.8	4	12.5		
Highest Degree Earned							3.44	.179
M.Ed., M.A./M.S., Ed.S.	35	89.7	25	73.5	27	84.4		
Ph.D., Ed.D.	4	10.3	9	26.5	5	15.6		
* p = < .05							(table co	ntinues)

Table 10 (continued).

_		Years Te	eaching	Students	with EI	BD		
	5 Y	ears or		to 9		r More	_	
]	Less	Y	ears	Y	ears		
Variables	n	%	n	%	n	%	χ^2	p
Geographical Setting							10.54	.032
Rural	5	12.8	3	8.8	3	9.4		
Suburban	13	33.3	24	70.6	17	53.1		
Urban	21	53.8	7	20.6	12	37.5		
Position Currently Held							8.10	.231
Administrator	4	10.3	4	11.8	1	3.1		
Classroom Teacher	22	56.4	20	58.8	23	71.9		
Educational Support								
Personnel	10	25.6	4	11.8	7	21.9		
Higher Education	3	7.7	6	17.6	1	3.1		
Position Previously Held							8.83	.183
Administrator	5	12.8	5	14.7	2	6.3		
Classroom Teacher	19	48.7	19	55.9	19	59.4		
Educational Support								
Personnel	12	30.8	4	11.8	10	31.3		
Higher Education	3	7.7	6	17.6	1	3.1		
Total Years of Teaching								
Experience							18.20	<.001*
10 Years or Less	27	69.2	24	70.6	8	25.0		
11 Years or More	12	30.8	10	29.4	24	75.0		
Feelings About Students								
with EBD							3.37	.499
Temperamentally								
Adapted	4	11.1	7	20.6	7	24.1		
Great Satisfaction	19	52.8	19	55.9	16	55.2		
Other Factors	13	36.1	8	23.5	6	20.7		
Timeframe of Graduation							3.50	.173
1990-2000	10	25.6	7	20.6	13	40.6		
2001-2012	29	74.4	27	79.4	19	59.4		
Causal Factors							.25	.884
Mental Health Issues	16	41.0	15	44.1	15	46.9		
Home, School, and	_							
Personal Choice Factors	23	59.0	19	55.9	17	53.1		
* <i>p</i> = < .05							(table co	ontinues

Table 10 (continued).

		Years To	eaching	Students	with E	BD		
	5 Y	ears or	6	to 9	10 c	or More	•	
		Less	Y	ears	Y	<i>Years</i>		
Variables	n	%	n	%	n	%	χ^2	p
Total Years of Teaching								
Experience							18.20	<.001*
10 Years or Less	27	69.2	24	70.6	8	25.0		
11 Years or More	12	30.8	10	29.4	24	75.0		
Feelings About Students							2.27	400
with EBD							3.37	.499
Temperamentally	4	11 1	7	20.6	7	24.1		
Adapted	4	11.1	7	20.6	7	24.1		
Great Satisfaction	19	52.8	19	55.9	16	55.2		
Other Factors	13	36.1	8	23.5	6	20.7		
Timeframe of Graduation							3.50	.173
1990-2000	10	25.6	7	20.6	13	40.6		
2001-2012	29	74.4	27	79.4	19	59.4		
Causal Factors							.25	.884
Mental Health Issues	16	41.0	15	44.1	15	46.9		
Home, School, and								
Personal Choice								
Factors	23	59.0	19	55.9	17	53.1		

p = < .05

Position Previously Held

A separate cross tabulation with Pearson chi square was conducted to examine the relationships of position graduates previously held with other demographic factors--timeframe of graduation, highest degree attained, undergraduate degree, position currently held, geographic setting, feelings about causal factors for students with EBD, feelings about working with students with EBD, total years of teaching experience, and years teaching students with EBD. As shown in Table 11, position graduates previously held was significantly associated with

highest degree earned, $X^2(3) = 46.88$, p < .001, Cramer's V = .668. A greater number of those who worked as a classroom teacher had a M.Ed., M.A., M.S., or Ed.S. (94.7%) compared to those who worked as an administrator (66.7%) or in higher education (10.0%). Not surprisingly, position previously held was significantly associated with position currently held $X^2(9) = 210.15$, p < .001, Cramer's V = .817. A greater number of participants who worked previously as a classroom teacher continued to work as a classroom teacher (93.0%) compared to working as educational support personnel (46.2%). However, these results should be viewed with caution due to small sample sizes. Graduates' positions previously held was not significantly associated with timeframe of graduation, undergraduate degree, graduates' feelings about working with students with EBD, graduates' feelings about causal factors for students with EBD, geographical setting, years teaching students with EBD, and total years of teaching experience

Total Years of Teaching Experience

A separate cross tabulation with Pearson chi square was conducted to examine the relationships of graduates' total years of teaching experience with other demographic factors. As shown in Table 12, graduates' total years of teaching experience was significantly associated with timeframe of graduation, $X^2(1) = 14.87$, p < .001, Cramer's V = .397. A greater number of participants with 10 years or less total teaching experience graduated between 2001 and 2012 (86.4%), compared to those who had 11 or more years of teaching experience (52.2%).

Furthermore, graduates' total years of teaching experience was also significantly associated with graduates' undergraduate degree attained, $X^2(2) = 12.80$, p = .002, Cramer's V = .354. A greater number of respondents who had 10 years or less teaching experience graduated from a college of arts and sciences (38.6%).

Table 11

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained, Undergraduate Degree, Position Currently Held, Geographic Setting, Feelings about Causal Factors for Students with EBD, Feelings about Working with Students with EBD, Total Years of Teaching Experience, and Years Teaching Students with EBD by Position Previously Held

				Position	n Previously H	Held				
		nistrato r	Class	sroom .cher	Educational Person	Support		gher cation		
Variables	n	%	n	%	n	%	n	%	χ^2	p
Years Teaching Students with EBD									8.83	.183
5 Years or Less	5	41.7	19	33.3	12	46.2	3	30.0		
6 to 9 Years	5	41.7	19	33.3	4	15.4	6	60.0		
10 or More Years	2	16.7	19	33.3	10	38.5	1	10.0		
Years of Teaching Experience									3.36	.340
10 Years or Less	8	66.7	35	61.4	11	42.3	5	50.0		
11 Years or More	4	33.3	22	38.6	15	57.7	5	50.0		
Feelings About Students with									0.07	120
EBD	4	26.4	10	22.6	1	4.0	1	10.0	9.87	.130
Temperamentally Adapted	4	36.4	12	22.6	1 10	4.0	l E	10.0		
Great Satisfaction	6	54.5	25	47.2	18	72.0	5	50.0		
Other Factors	1	9.1	16	30.2	6	24.0	4	40.0		
Timeframe of Graduation									2.13	.545
1990-2000	5	41.7	14	24.6	7	26.9	4	40.0		
2001-2012	7	58.3	43	75.4	19	73.1	6	60.0		
* <i>p</i> = < .05									(tab	le continues)

Table 11 (continued).

			Po	osition P	reviously Held					
	Admini	strator		sroom Educational Sur acher Personnel						
Variables	n	%	n	%	n	%	n	%	χ^2	p
Causal Factors									3.03	.386
Mental Health Issues Home, School, and Personal	5	41.7	29	50.9	8	30.8	4	40.0		
Choice Factors	7	58.3	28	49.1	18	69.2	6	60.0		
Undergraduate Degree									1.97	.923
Colleges of Arts and Sciences	4	33.3	15	27.3	5	20.0	3	30.0		
Colleges of Education Colleges of Business Public	7	58.3	33	60.0	15	60.0	5	50.0		
Affairs and Community	1	8.3	7	12.7	5	20.0	2	20.0		
Highest Degree Earned									46.88	<.001*
M.Ed., M.A./M.S., Ed.S.	8	66.7	54	94.7	24	92.3	1	10.0		
Ph.D., Ed.D.	4	33.3	3	5.3	2	7.7	9	90.0		
p = < .05									(table	continues

Table 11 (continued).

Variables	Position Previously Held								_	
	Classro Administrator Teacher		oom	om Educational			Higher			
			Teacher		Support Personnel		Education			
	n	%	n	%	n	%	n	%	χ^2	p
Geographical Setting									6.26	.395
Rural	1	8.3	7	12.3	2	7.7	1	10.0		
Suburban	3	25.0	33	57.9	13	50.0	5	50.0		
Urban	8	66.7	17	29.8	11	42.3	4	40.0		
Position Currently Held									210.15	<.001*
Administrator	9	75.0	0	0.0	0	0.0	0	0.0		
Classroom Teacher	0	0.0	53	93.0	12	46.2	0	0.0		
Educational Support Personnel	3	25.0	4	7.0	14	53.8	0	0.0		
Higher Education	0	0.0	0	0.0	0	0.0	10	100.0		

^{*}p = < .05

Additionally, total years teaching experience was significantly associated with graduates' years teaching students with EBD, $X^2(2) = 18.20$, p < .001, Cramer's V = .416. A greater number of participants with 11 or more years teaching experiences had been working with students with EBD for 10 or more years (52.2%) as compared to those who have 10 years or less teaching experience (13.6%).

Finally, a greater number of those with 11 or more years of total teaching experience graduated from a College of Education (77.8%) compared to those with 10 years or less teaching experience (43.9%). Graduates' total years of teaching experience was not significantly associated with highest degree earned, position currently held, position previously held, years teaching students with EBD, graduates' feelings about causal factors for students with EBD, graduates' feelings about working with students with EBD, and geographical setting, all *ps* not-significant.

In addition to the cross tabulations with Pearson chi square analyses, Pearson product moment correlations were conducted to test the relationships among years since graduates completed their master's degree, total years of graduates' teaching experience, and years graduates have taught students with EBD. A Pearson product moment correlation shows significant relationships between continuous variables. The correlation coefficients can range from -1.00 to +1.00 where 0 indicates a random relationship or no relationship and +1.00 indicates a perfect positive relationship. Negative relationships occur when increases in one variable are associated with decrease in another variable. Positive relationships occur when increases in one variable are associated with increase in another variable. Time since completion of master's degree program was significantly positively related to graduates' years taught students with EBD and graduates' total years of teaching experience.

Frequencies and Percentages of Timeframe of Graduation, Highest Degree Attained, Undergraduate Degree, Position Currently Held, Position Previously Held, Geographic Setting, Feelings about Causal Factors for Students with EBD, Feelings about Working with Students with EBD, and Years Teaching Students with EBD by Total Years of Teaching Experience

Table 12

	Total '	Years of Te	_			
	10 Years or Less		11 Years or More		-	
Variables	n	%	n	%	χ^2	p
Feelings About Students with EBD					.67	.716
Temperamentally Adapted	10	17.5	8	19.0		
Great Satisfaction	33	57.9	21	50.0		
Other Factors	14	24.6	13	31.0		
Timeframe of Graduation					14.87	<.001*
1990-2000	8	13.6	22	47.8		
2001-2012	51	86.4	24	52.2		
Causal Factors					.73	.394
Mental Health Issues	28	47.5	18	39.1		
Home, School, and Personal Choice Factors	31	52.5	28	60.9		
Undergraduate Degree					12.80	.002*
Colleges of Arts and Sciences	22	38.6	5	11.1		
Colleges of Education	25	43.9	35	77.8		
Colleges of Business Public						
Affairs and Community	10	17.5	5	11.1		
Highest Degree Earned					.00	.952
M.Ed., M.A./M.S., Ed.S.	49	83.1	38	82.6		
Ph.D., Ed.D.	10	16.9	8	17.4		
Geographical Setting					1.27	.531
Rural	5	8.5	6	13.0		
Suburban	33	55.9	21	45.7		
Urban	21	35.6	19	41.3		
p = < .05					(tabi	le continu

Table 12 (continued).

	Total \	Years of Te				
	10	Years or	11 Years or			
	Less		More		-	
Variables	n	%	n	%	χ^2	p
Position Currently Held					1.32	.724
Administrator	6	10.2	3	6.5		
Classroom Teacher	38	64.4	27	58.7		
Educational Support Personnel	10	16.9	11	23.9		
Higher Education	5	8.5	5	10.9		
Position Previously Held					3.36	.340
Administrator	8	13.6	4	8.7		
Classroom Teacher	35	59.3	22	47.8		
Educational Support Personnel	11	18.6	15	32.6		
Higher Education	5	8.5	5	10.9		
Years Teaching Students with						
EBD					18.20	<.001*
5 Years or Less	27	45.8	12	26.1		
6 to 9 Years	24	40.7	10	21.7		
10 or More Years	8	13.6	24	52.2		

p = < .05

In addition to the correlations and cross tabulations, a series of multivariate analyses of variance (MANOVAs) were conducted to examine the effect of the demographic variables on the participants' perceived ratings of importance and proficiency in using CEC standards. As with the correlations and cross tabulations, these analyses were performed to identify any potential covariates within the demographic variables.

Perceived Ratings of Importance in using CEC Standards

A MANOVA was conducted to examine the effect of timeframe of graduation on graduates' perceptions of the importance of CEC standards. The results indicated no effect of

timeframe of graduation on the overall importance scores, F(9, 95) = .79, p = .628, $\eta^2 = .069$. Further examination of the results found that there was no effect of timeframe on graduation on the individual importance scores, all ps not-significant.

A separate MANOVA was conducted to examine the effect of the highest degree attained on graduates' ratings of perceived importance for the CEC standards. The results indicated no effect of highest degree attained on the overall importance scores, F(9, 95) = .69, p = .713, $\eta^2 = .062$. A deeper examination of the results found no effect of highest degree attained on the individual importance scores, all ps not-significant.

A MANOVA was conducted to examine the effect of the undergraduate degree attained on graduates' perceptions of importance for the CEC standards. The results indicated no effect of undergraduate major degree attained on the overall of importance scores for the CEC standards, $F(18, 182) = .87, p = .621, \eta^2 = .079$. Furthermore, a deeper examination of the results found that there was no effect of undergraduate degree attained on the individual importance scores, all ps not-significant.

A MANOVA was also conducted to examine the effect of graduates' geographical worksetting on graduates' perceptions of importance. The results indicated that there was no effect of geographical setting on the overall importance scores, F(18, 188) = 1.59, p = .065, $\eta^2 = .132$. Further analysis found no effect of geographical setting on the individual Importance, all ps not-significant.

A separate MANOVA was conducted to examine the effect of positions previously held on graduates' perceptions of importance. The results indicated no effect of positions previously held on the overall importance scores, F(27, 272) = 1.04, p = .416, $\eta^2 = .091$. Further examination of the results found no effect of positions previously held on the individual scores of

Importance, all ps not-significant.

Additionally, a MANOVA was conducted to examine the effect of graduates' years working experience with students with EBD on graduates' perceptions of Importance. As shown in Table 13, the results indicated that there was a significant effect on importance scores, F (18, 188) = 1.79, p = .013, $\eta^2 = .159$. A deeper examination of the results found that graduates' years teaching students with EBD had a significant effect on Standard 1: Foundations, F(2, 102) =4.12, p = .019, $\eta^2 = .075$. A Tukey's post hoc analysis revealed that respondents with 10 years or more of teaching experience with working with students with EBD rated the importance of Standard 1: Foundations significantly higher (M=3.71, SD=.31) than those who worked with these students 5 years or less (M=3.49, SD=.34). Further examination of the results found that years teaching students with EBD had a significant effect on Standard 4: Instructional Strategies, $F(2, 102) = 3.89, p = .023, \eta^2 = .071$. A Dunnett's T3 post hoc analysis revealed that respondents with 10 years or more of teaching experience working with students with EBD rated the importance of Standard 4: Instructional Strategies significantly higher (M=3.91, SD=.20) than those who worked with these students 5 years or less (M=3.69, SD=.40). Further analysis found that years teaching students with EBD had a marginally significant effect on Standard 6: Instructional Planning, F(2, 102) = 2.69, p = .074, $\eta^2 = .050$. A Dunnett's T3 post hoc analysis revealed that respondents with 10 years or more of teaching experience with working with students with EBD rated the importance of Standard 6: Instructional Planning marginally higher (M=3.88, SD=.22) than those who worked with these students 5 years or less (M=3.71, SD=.38)and those who worked with these students 6 to 9 years (M=3.72, SD=.36). A deeper examination of the results found that years teaching students with EBD had a marginally significant effect on Standard 8: Professional and Ethical Practice, F(2, 102) = 2.83, p = .063, $\eta^2 = .053$. A Dunnett's

T3 post hoc analysis revealed that respondents with 10 years or more experience teaching with students with EBD rated the importance of Standard 6: Instructional Planning marginally higher (M=3.83, SD=.29) than those who worked with these students for 6 to 9 years (M=3.63, SD=.43). Table 13

Means and Standard Deviations on the Perceived Importance of CEC by Years Teaching Students with EBD

Standards of Importance	n	Mean	SD	F	p
Standard 1 Importance: Foundations				4.12	.019*
5 Years or Less	39	3.49^{a}	.34		
6 to 9 Years	34	3.57^{ab}	.32		
10 or More Years	32	3.71 ^b	.31		
Standard 2 Importance: Development					
and Characteristics of Learners				1.79	.171
5 Years or Less	39	3.62	.39		
6 to 9 Years	34	3.64	.38		
10 or More Years	32	3.77	.33		
Standard 3 Importance: Individual					
Learning Differences				.91	.406
5 Years or Less	39	3.77	.31		
6 to 9 Years	34	3.77	.29		
10 or More Years	32	3.85	.24		
Standard 4 Importance: Instructional					
Strategies				3.89	.023*
5 Years or Less	39	3.69^{a}	.40		
6 to 9 Years	34	3.76^{ab}	.33		
10 or More Years	32	3.91 ^b	.20		
Standard 5 Importance: Learning					
Environments/Social Interactions				1.06	.351
5 Years or Less	39	3.85	.28		
6 to 9 Years	34	3.92	.12		
10 or More Years	32	3.89	.21		
				(tab	le continues

Table 13 (continued).

Standards of Importance	n	Mean	SD	F	p
Standard 6 Importance: Instructional					
Planning				2.67	.074
5 Years or Less	39	3.71	.38		
6 to 9 Years	34	3.72	.36		
10 or More Years	32	3.88	.22		
Standard 7 Importance: Assessment				.50	.609
5 Years or Less	39	3.63	.37		
6 to 9 Years	34	3.70	.37		
10 or More Years	32	3.70	.34		
Standard 8 Importance: Professional and	[
Ethical Practice				2.83	.063
5 Years or Less	39	3.79	.34		
6 to 9 Years	34	3.63	.43		
10 or More Years	32	3.83	.29		
Standard 9 Importance: Collaboration				.55	.580
5 Years or Less	39	3.83	.28		
6 to 9 Years	34	3.79	.30		
10 or More Years	32	3.87	.27		

Note. Multivariate effect: F(18, 188) = 1.97, p = .013, $\eta^2 = .159$. Means with different superscripts designate significant mean difference, *p = < .05.

Perceived Ratings of Proficiency in Using CEC Standards

A MANOVA was conducted to examine the effect of timeframe of graduation on participants' perceptions of proficiency for the CEC standards. The results indicated no effect of timeframe of graduation on the overall of scores of proficiency, F(9, 95) = .61, p = .787, $\eta^2 = .055$. A deeper examination of the results found no effect of timeframe of graduation for scores of proficiency, all ps not-significant.

A MANOVA was conducted to examine the effect of highest degree attained on

graduates' perceptions of proficiency in using CEC standards. The results indicated no effect of highest degree attained on the overall scores of proficiency, F(9, 95) = 1.40, p = .198, $\eta^2 = .117$. Further examination found no effect of highest degree attained on the individual scores of proficiency, all ps not-significant.

A MANOVA was conducted to examine the effect of undergraduate degrees on graduates' perceptions of proficiency for the CEC standards. The results indicated that there was no effect of undergraduate degree attained on the overall scores of proficiency, F (18, 182) = .68, p = .832, $\eta^2 = .063$. A deeper examination of the results found no effect of undergraduate degree attained on the individual scores of proficiency, all ps not-significant.

A separate MANOVA was conducted to examine the effect of geographical work-setting on graduates' perceptions of proficiency in using the CEC standards. The results indicated no effect of geographical setting on the overall scores of proficiency, F(18, 188) = .851, p = .639, $\eta^2 = .075$. A deeper examination of the results found no effect of geographical setting on the individual scores of proficiency, all ps not-significant.

A separate MANOVA was conducted to examine the effect of position previously held on graduates' perceptions of proficiency in using CEC standards. The results indicated no effect of position previously held on the overall scores of proficiency, F(27, 272) = 1.16, p = .275, $\eta^2 = .100$. Furthermore, a deeper examination of the results found no effect of position previously held on the individual scores of proficiency, all ps not-significant.

A MANOVA was conducted to examine the effect of graduates' years teaching students with EBD on graduates' perceptions of proficiency in using the CEC standards. The results indicated no effect of years teaching students with EBD on the overall scores of proficiency, F (18, 188) = .782, p = .719, η^2 = .070. A deeper examination of the results found that there was no

effect of years teaching students with EBD on the individual scores of proficiency, all *p*s not-significant.

To examine the relationship between the individual standards of importance scores with the others, a Pearson product moment correlation was conducted. Table 14 shows each standard importance ratings (standards 1 through 9) were significantly and positively related to the other standard importance ratings (rs ranging from .244 to .678, ps <.05). As shown in Table 15, each standard proficiency ratings (standards 1 through 9) were significantly and positively related to the other standards of proficiency ratings (rs ranging from .418 to .688, ps <.05).

Primary Analysis

Research Question 1. How Do Graduates Perceive the Importance of CEC Standards in Their Work with Students with EBD?

The researcher examined the graduates' perceptions of the importance of the CEC standards to help understand their viewpoints of professional standards and how this transcends into the field. I utilized 9 CEC standards designed to guide the field of special education teacher preparation. Each standard was represented by four knowledge and skills statements.

Respondents were asked to rate each of the standards on their perceived Importance. Response options ranged from 1 (*very unimportant*) to 4 (*very important*). Each of the four items within a single standard was averaged to create a single standard score. Table 16 shows the means and standard deviations of perceived importance of CEC Standards 1 through 9.

In summary, graduates from this teacher preparation program rated their overall perceived importance in using the CEC standards as important to very important, which explains that respondents felt that the CEC standards were important in teaching students with exceptionalities, specifically students with EBD.

Table 14

Relationships between Ratings on Standards of Perceived Importance

	Standard 1 ^a	Standard 2 ^b	Standard 3 ^c	Standard 4 ^d	Standard 5 ^e	Standard 6 ^f	Standard 7 ^g	Standard 8 ^h
Standard 2 ^b	.345**							
Standard 3 ^c	.268**	.541**						
Standard 4 ^d	.349**	.487**	.398**					
Standard 5 ^e	.291**	.369**	.478**	.494**				
Standard 6 ^f	.401**	.407**	.372**	.546**	.472**			
Standard 7 ^g	.485**	.297**	.460**	.415**	.472**	.486**		
Standard 8 ^h	.250*	.413**	.583**	.545**	.595**	.458**	.470**	
Standard 9 ⁱ	.244*	.392**	.554**	.487**	.509**	.429**	.381**	.678**

Note. * p < .05, ** p < .01; *a=:Foundations; *b=:Development and Characteristics of Learners; *c=:Individual Learning Differences; *d=:Instructional Strategies; *e=:Learning Environments/Social Interactions; *f=:Instructional Planning; *g=:Assessment; *h=:Professional and Ethical Practice; *i=:Collaboration.

Table 15

Relationships between Ratings on Standards of Perceived Proficiency

	Standard 1 ^a	Standard 2 ^b	Standard 3 ^c	Standard 4 ^d	Standard 5 ^e	Standard 6 ^f	Standard 7 ^g	Standard 8 ^h
Standard 2 ^b	.647**							
Standard 3 ^c	.619**	.737**						
Standard 4 ^d	.566**	.665**	.679**					
Standard 5 ^e	.506**	.526**	.589**	.664**				
Standard 6 ^f	.493**	.593**	.589**	.688**	.576**			
Standard 7 ^g	.573**	.492**	.527**	.539**	.595**	.681**		
Standard 8 ^h	.427**	.465**	.527**	.559**	.550**	.505**	.438**	
Standard 9 ⁱ	.373**	.517**	.425**	.558**	.554**	.538**	.418**	.618**

Note. * p < .05, ** p < .01; *a=:Foundations; *b=:Development and Characteristics of Learners; *c=:Individual Learning Differences; *d=:Instructional Strategies; *e=:Learning Environments/Social Interactions; *f=:Instructional Planning; *g=:Assessment; *h=:Professional and Ethical Practice; *i=:Collaboration.

Table 16

Means and Standard Deviations for Perceived Importance in using CEC Standards 1 through 9

CEC Standards of Importance	n	Mean	SD	Min	Max
Standard 1 Importance: Foundations	105	3.58	.34	2.75	4.00
Standard 2 Importance: Development and Characteristics of Learners	105	3.67	.37	2.75	4.00
Standard 3 Importance: Individual Learning Differences	105	3.80	.28	3.00	4.00
Standard 4 Importance: Instructional Strategies	105	3.79	.34	2.50	4.00
Standard 5 Importance: Learning Environments/Social Interactions	105	3.88	.22	3.00	4.00
Standard 6 Importance: Instructional Planning	105	3.77	.34	2.75	4.00
Standard 7 Importance: Assessment	105	3.67	.36	2.75	4.00
Standard 8 Importance: Professional and Ethical Practice	105	3.75	.36	2.75	4.00
Standard 9 Importance: Collaboration	105	3.83	.28	3.00	4.00

In fact, graduates rated Standard 1 Importance: Foundations as the lowest; however, the mean (3.58) was rated well above an average score for four-point Likert scale.

Research Question 2. How Do Graduates Perceive Their Level of Proficiency of Using CEC Standards in Their Work with Students with EBD?

The researcher examined the graduates' perceptions of their proficiency in using the CEC standards to help understand their viewpoints of professional standards and how this transcends

into the field. Nine CEC standards designed to guide the field of special education teacher preparation were utilized in the study. Each standard was represented by four knowledge and skills statements. Respondents were asked to rate each of the standards on their perceived proficiency in using the standards. Response options ranged from 1(not prepared) to 4 (very well-prepared). Each of the four items within a single standard was averaged to create a single standard score. Table 17 shows the means and standard deviations of perceived proficiency in using CEC standards 1 through 9.

In summary, graduates from this teacher preparation program rated their overall perceived proficiency in using the CEC standards as important to very important, which explains that respondents felt well-prepared in using the CEC standards in teaching students with exceptionalities, specifically students with EBD. Interesting, graduates rated their perceived proficiency scores lower than their perceived importance scores; however, their perceived proficiency scores were still higher.

Research Question 3. What is the Relationship, if Any, Between Graduates' Level of Perceived Proficiency and the Perceived Importance of CEC Standards?

A Pearson moment correlation was conducted to analyze the relationship between graduates' level of perceived proficiency and perceived importance in using the CEC standards (see Table 18). Standard 1 importance: Foundations was significantly and positively correlated with the standards of proficiency for Foundations, Learning Environments and Social Interactions, Assessment, Professional and Ethical Practice, and Collaboration (rs ranged from .214 to .288, ps <.05). The Standard 1 importance: Foundations was not significantly related to the remaining standards (i.e., standards 2, 3, 4, and 6), all ps not-significant.

Table 17

Means and Standard Deviations for Perceived Proficiency in using CEC Standards 1 through 9

CEC Standards of Proficiency	n	Mean	SD	Min	Max
Standard 1 Proficiency: Foundations	105	3.53	.43	2.00	4.00
Standard 2 Proficiency: Development and Characteristics of Learners	105	3.43	.49	2.50	4.00
Standard 3 Proficiency: Individual Learning Differences	105	3.46	.49	1.75	4.00
Standard 4 Proficiency: Instructional Strategies	105	3.31	.56	1.75	4.00
Standard 5 Proficiency: Learning Environments/Social Interactions	105	3.56	.49	2.25	4.00
Standard 6 Proficiency: Instructional Planning	105	3.48	.50	2.25	4.00
Standard 7 Proficiency: Assessment	105	3.33	.55	1.75	4.00
Standard 8 Proficiency: Professional and Ethical Practice	105	3.52	.45	2.25	4.00
Standard 9 Proficiency: Collaboration	105	3.52	.49	2.50	4.00

The Standard 2 importance: Development and Characteristics of Learners was significantly and positively correlated with all standards of proficiency (*r*s ranged from .202 to .479, *p*s <.05), indicating participants who had higher scores for Standard 2 importance: Development and Characteristics of Learners tended to have higher standards of proficiency in all standards.

The Standard 3 importance: Individual Learning Differences was significantly and positively correlated with the proficiency for all standards (*r*s ranged from .193 to .399, *p*s < .05),

except for the Instructional Strategies standard of proficiency.

Standard 4 importance: Instructional Strategies was significantly positively correlated with the standards of proficiency for Foundations, Development and Characteristics of Learners, Individual Learning Differences, Instructional Strategies, Professional and Ethical Practice, and Collaboration (*r*s ranged from .200 to .293, *p*s <.05). The respondents who had higher scores for Standard 4 importance: Instructional Strategies tended to have higher ratings on proficiency for Foundations, Development and Characteristics of Learners, Individual Learning Differences, Instructional Strategies, Professional and Ethical Practice, and Collaboration. The Standard 4 importance: Instructional Strategies was not significantly related to the remaining standards (i.e., standards 5, 6, and 7), all *p*s not-significant.

Standard 5 importance: Learning Environments and Social Interactions was significantly and positively correlated with the ratings on proficiency for Foundations, Individual Learning Differences, Learning Environments and Social Interactions, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration (*rs* ranged from .210 to .314, *ps* < .05). Respondents who had higher scores for Standard 5 importance: Learning Environments and Social Interactions tended to have higher ratings on proficiency of Foundations, Individual Learning Differences, Learning Environments and Social Interactions, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration. The Standard 5 importance: Environments and Social Interactions were not significantly related to the remaining standards (i.e., standards 2 and 4), all *ps* not-significant.

The Standard 6 importance: Instructional Planning was significantly and positively correlated with the ratings on proficiency for Development and Characteristics of Learners,

Learning Environments and Social Interactions, Instructional Planning, Assessment, Professional

and Ethical Practice, and Collaboration (*r*s ranged from .201 to .354, *p*s <.05), indicating that respondents who had higher scores for Standard 6 importance: Instructional Planning tended to have higher ratings on proficiency for Development and Characteristics of Learners, Learning Environments and Social Interactions, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration. Standard 6 importance: Instructional Planning was not significantly related to the remaining standards (i.e., standards 1, 3, and 4), all *p*s not-significant.

The Standard 7 importance: Assessment was significantly and positively correlated with the ratings on proficiency for Foundations, Development and Characteristics of Learners, Individual Learning Differences, Learning Environments and Social Interactions, Assessment, and Professional and Ethical Practice (rs ranged from .206 to .403, ps <.05), indicating that respondents who had higher scores for Standard 7 importance: Assessment tended to have higher ratings on proficiency of Foundations, Development and Characteristics of Learners, Individual Learning Differences, Learning Environments and Social Interactions, Assessment, and Professional and Ethical Practice. Standard 7 importance: Assessment was not significantly related to the remaining standards of proficiency (i.e., standards 4, 6, and 9), all ps not-significant.

The Standard 8 importance: Professional and Ethical Practice was significantly positively correlated with the standards of Proficiency for Individual Learning Differences, Learning Environments and Social Interactions, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration indicating that respondents who had higher scores for Standard 8 importance: Professional and Ethical Practice tended to have higher ratings on proficiency for these factors. Standard 8 importance: Professional and Ethical Practice were not significantly related to the remaining standards (i.e., standards 1, 2, and 4), all *ps* not-significant.

Table 18

Relationships between Perceived Importance and Perceived Proficiency of CEC Standards

	1 ^a	2 ^b	3 ^c	4 ^d	Importan 5 ^e	ce 6 ^f	7 ^g	8 ^h	9 ⁱ
Standard 1 Proficiency ^a	.288**	.325**	.289**	.200*	.210*	.190	.352**	.189	.300**
Standard 2 Proficiency ^b	.172	.479**	.350**	.250*	.165	.201*	.206*	.166	.217*
Standard 3 Proficiency ^c	.144	.371**	.399**	.293**	.276**	.173	.351**	.258**	.232*
Standard 4 Proficiency ^d	.119	.266**	.180	.251**	.158	.188	.166	.172	.204*
Standard 5 Proficiency ^e	.252**	.237*	.208*	.189	.314**	.234*	.321**	.244*	.171
Standard 6 Proficiency ^f	.129	.288**	.225*	.174	.236*	.354**	.186	.243*	.246*
Standard 7 Proficiency ^g	.214*	.202*	.193*	.176	.296**	.326**	.403**	.231*	.211*
Standard 8 Proficiency ^h	.247*	.304**	.296**	.210*	.289**	.219*	.259**	.464**	.371*
Standard 9 Proficiency ⁱ	.263**	.380**	.271**	.211*	.217*	.230*	.191	.325**	.345**

Note. * p < .05, ** p < .01; ^a=:Foundations; ^b=:Development and Characteristics of Learners; ^c=:Individual Learning Differences; ^d=:Instructional Strategies; ^e=:Learning Environments/Social Interactions; ^f=:Instructional Planning; ^g=:Assessment; ^h=:Professional and Ethical Practice; ⁱ=:Collaboration.

Finally, Standard 9 importance: Collaboration was significantly and positively correlated with the ratings on proficiency for Foundation, Development and Characteristics of Learners, Individual Learning Differences, Instructional Strategies, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration (*rs* ranged from .204 to .345, *ps* < .05), indicating that respondents who had higher scores for Standard 9 importance: Collaboration tended to have higher ratings on proficiency of Foundation, Development and Characteristics of Learners, Individual Learning Differences, Instructional Strategies, Instructional Planning, Assessment, Professional and Ethical Practice, and Collaboration. Standard 9 importance: Collaboration was not significantly related to the remaining standards (i.e., standard 5) all *ps* not-significant.

In summary, results from this analysis indicated that graduates who had higher ratings on their perceived importance tended to have higher ratings on their perceived proficiency scores for the CEC standards. The results showed there were only positive relationships between the graduates' perceived importance and perceived proficiency scores in using the CEC standards.

Research question 4. To what extent do specific variables (i.e., total years of teaching experience, position graduates currently held, graduates' feelings about working with students with EBD, and graduates' feelings of causal factors for students with EBD) predict graduates' perceptions of the importance of the CEC standards?

To analyze the fourth research question, a multiple linear regression was conducted to predict the individual importance scores (standards of importance 1 through 9) from the main predictors of total years of teaching experience, position currently held, feelings about working with students with EBD, and graduates' feelings about causal factors for students with EBD. The preliminary analyses showed that total years of teaching experience with students with EBD,

highest degree held, undergraduate degree, and geographical region were covariates with the main predictor and, therefore, were included in the primary analyses (see Tables 19 and 20).

The overall regression model predicting Standard 1 of importance: Foundations was not significant, F(13, 91) = 1.05, p = .416, and explained only .6% of the variance ($R^2 = .006$). A deeper examination of the results revealed, however, that years of teaching experience with students with EBD was a significant predictor of the first standard of importance scores, (Beta = .273, p = .036). Participants who had 10 years or more teaching experience with students with EBD, compared to participants who had 5 years or less teaching experience with students with EBD, were significantly more likely to have higher Standard 1 of importance: Foundations scores. The overall regression model predicting Standard 2 of importance: Development and Characteristics of Learners was not significant, F(13, 91) = 1.09, p = .392, and explained only .9% of the variance ($R^2 = .009$) nor were there any significant predictors, all ps non-significant.

The overall regression model predicting Standard 3 of importance: Individual Learning Differences was not significant, F(13, 91) = 1.10, p = .373, and explained only 1.2% of the variance ($R^2 = .012$) nor were there any significant predictors, all ps non-significant. Furthermore, the overall model predicting Standard 4 of importance: Instructional Strategies was not significant, F(13, 91) = 1.50, p = .132, and explained only 5.9% of the variance ($R^2 = .059$) nor were there any significant predictors, all ps non-significant.

Table 20 shows the overall regression model predicting Standard 5 of importance: Learning Environments and Social Interactions was not significant, F(13, 91) = .76, p = .699, and explained only -3.1% of the variance ($R^2 = -.031$). A deeper examination of the results revealed, however, that years of teaching experience with students with EBD was a significant predictor of the Standard 5 importance scores, (Beta = .344, p = .007).

Table 19

Summary of Multiple Linear Regressions Predicting Standards of Importance 1-4 from Total Years of Teaching Experience, Positions Currently Held, Graduates' Feelings about Working with Students with EBD, and Graduates' Feelings of Causal Factors for Students with EBD

	Standard 1 Importance Beta	Standard 2 Importance Beta	Standard 3 Importance Beta	Standard 4 Importance Beta
Total Years of Teaching Experience	.026	125	046	060
Administrator Compared to Classroom Teacher	.053	.116	.123	.119
Educational Support Personnel Compared to Classroom Teacher	.133	.137	.038	.028
Higher Education Compared to Classroom Teacher	.129	.177	.130	.146
Temperamentally Adapted Compared to Personal Satisfaction	036	103	118	004
Other Factors Deterred Compared to Personal Satisfaction	071	.041	038	163
Home School Personal Choice Compared to Mental Health Issues	106	155	125	184
Teaching Students with EBD 6 to 9 Years Compared to 5 or Less	.099	.049	.035	.078
Teaching Students with EBD 10 + Years Compared to 5 or Less	.273*	.326*	.245	.344*
Highest Degree Earned	002	033	.051	061
Colleges of Arts and Sciences Compared to Colleges of Education	088	.110	.163	.076
Colleges of Business Public Affairs Compared to Colleges of Education	104	.014	.002	.049
Rural and Suburban Compared to Urban	.051	006	126	050

Participants who had 10 years or more teaching experience with students with EBD, compared to

participants who had 5 years or less teaching experience with students with EBD, were significantly more likely to have higher ratings on Standard of importance: Learning Environments and Social Interactions scores.

The overall regression model predicting Standard 6 of importance: Instructional Planning was not significant, F(13, 91) = .1.10, p = .403, and explained only .8% of the variance ($R^2 = .008$) nor were there significant predictors, all ps non-significant. The overall model predicting Standard 7 of importance: Assessment was not significant, F(13, 91) = .89 p = .569, and explained only -1.4% of the variance ($R^2 = -.014$) nor were there significant predictors, all ps Furthermore, the overall model predicting Standard 8 of importance: Professional and Ethical Practice was not significant, F(13, 91) = 1.01, p = .445, and explained only .2% of the variance ($R^2 = .002$) nor were there significant predictors, all ps non-significant. Finally, as also shown in Table 20, the overall model predicting Standard 9 of importance: Collaboration was not significant, F(13, 91) = 8.07, p = .652, and explained only -2.5% of the variance ($R^2 = -.025$).

In summary, the multiple regression model did not predict the graduates' perceived importance in using the CEC standards; however, graduates' years of teaching experience with students with EBD was a significant predictor.

Table 20
Summary of Multiple Linear Regressions Predicting Standards of Importance 5-9 from Total Years of Teaching Experience, Positions Currently Held, Graduates' Feelings about Working with Students with EBD, and Graduates' Feelings of Causal Factors for Students with EBD

	Standard 5 Importance Beta	Standard 6 Importance Beta	Standard 7 Importance Beta	Standard 8 Importance Beta	Standard 9 Importance Beta
Highest Degree Attained	006	005	.077	.163	.125
Colleges of Arts and Sciences	026	010	0.60	071	104
Compared to Colleges of Education	.036	.018	.069	.071	.104
Colleges of Business Public Affairs Compared to Colleges of Education	.029	123	023	.060	073
Rural and Suburban Compared to Urban	.049	.102	.058	077	023
Total Years of Teaching Experience	118	.003	.011	050	122
Administrator Compared to Teacher	.098	.082	.115	.097	.099
Educational Personnel Compared to Teacher	077	.114	067	.005	021
Higher Education Compared to Teacher	.078	003	.140	051	.060
Temperamentally Adapted Compared to Personal Satisfaction	004	.032	101	.041	057
Other Factors Deterred Compared to Personal Satisfaction	069	126	203	098	122
Home, School, and Personal Choice Compared to Mental Health Issues	159	101	086	065	007
Teaching Students with EBD 6 to 9 Years Compared to 5 or Less	.104	022	.018	221	094
Teaching Students with EBD 10 + Years Compared to 5 or Less	.142	.198	.096	.076	.134

Note. Summary of Overall Models: Standard Five: F(13, 91) = .76, p = .699, R2 = -.031; Standard Six: F(13, 91) = 1.06, p = .403, R2 = .008; Standard Seven: F(13, 91) = .89, p = .569, R2 = -.014; Standard Eight: F(13, 91) = 1.01, p = .445, R2 = .002; Standard Nine: F(13, 91) = 81, p = .132, R2 = -.025.

Research Question 5. To What Extent Do Specific Variables (i.e., Total Years of Teaching Experience, Position Graduates Currently Held, Graduates' Feelings about Working with Students with EBD, and Graduates' Feelings of Causal Factors for Students with EBD) Predict Graduates' Perceptions of Their Proficiency in Using CEC Standards?

A multiple linear regression was conducted to predict the individual proficiency scores (Standards of proficiency 1 through 9) from the main predictors of total years of teaching experience, position currently held, feelings about working with students with EBD, and causal feelings for students with EBD. Furthermore, the preliminary analyses showed that years of teaching experience with students with EBD, highest degree held, undergraduate degree, and geographic region were covariates with the main predictors, and included in the primary analyses (see Tables 21 and 22).

The overall regression model predicting Standard 1 of proficiency: Foundations was not significant, F(13, 91) = 1.56, p = .111. This model explained only 6.6% of the variance ($R^2 = .066$), there was no significant predictor, all ps non-significant.

The overall model predicting Standard 2 of proficiency: Development and Characteristics of Learners was significant, F(13, 91) = 2.57, p = .004, and explained 16.4% of the variance ($R^2 = .164$). Furthermore, graduates' total years of teaching experience was a significant predictor of Standard 2 of proficiency (Beta = -.239, p = .025). Graduates with 11 or more years teaching experience compared to those who had 10 years or less were significantly more likely to have lower proficiency in using Standard 2 of proficiency: Development and Characteristics of Learners scores. Feelings about working with students with EBD was also a significant predictor of Standard 2 (Beta = -.261, p = .017). Graduates who stated that they were temperamentally adapted to working with students with EBD compared to those who stated that they found great personal satisfaction working with students with EBD, were significantly more likely to have

lower ratings on proficiency in Standard 2 scores. Finally, years of teaching experience with students with EBD was a significant predictor of the Standard 2 proficiency scores (*Beta* = .380, *p* = .002). Participants who had 10 years or more teaching experience with students with EBD, compared to participants who had 5 years or less teaching experience with students with EBD, were significantly more likely to have higher Standard 2 scores.

The overall regression model predicting Standard 3 of proficiency: Individual Learning Differences was significant, F(13, 91) = 1.89, p = .042, and explained only 10.0% of the variance $(R^2 = .100)$. There were no significant individual predictors of Standard 3 of proficiency: Individual Learning Differences scores.

The overall model predicting Standard 4 of proficiency: Instructional Strategies was marginally significant, F(13, 91) = 1.65, p = .086, and explained only 7.5% of the variance ($R^2 = .075$). A deeper examination of the results showed that feelings about working with students with EBD was a significant predictor of Standard 4 proficiency scores (Beta = ..315, p = .007). Participants who stated they were temperamentally adapted to working with students with EBD compared to those who stated that they found great personal satisfaction working with students with EBD, were significantly more likely to have lower proficiency in Standard 4 proficiency scores. Additionally, causal factors for students with EBD were also a significant predictor (Beta = ..366, p = .015). Participants who feel that causal factors of students with EBD are related to home, school, or personal choice factors predicted to have significantly lower proficiency in Standard 4 proficiency: Instructional Strategies compared to those who felt that mental health is the causal factor for students with EBD.

Table 21

Summary of Multiple Linear Regressions Predicting Standards of Proficiency 1-4 from Total Years of Teaching Experience, Positions Currently Held, Graduates' Feelings about Working with Students with EBD, and Graduates' Feelings of Causal Factors for Students with EBD

	Standard 1 Proficiency Beta	Standard 2 Proficiency Beta	Standard 3 Proficiency Beta	Standard 4 Proficiency Beta
Total Years of Teaching Experience	089	239*	171	121
Administrator Compared to Classroom Teacher	.149	.147	.052	.131
Educational Support Personnel Compared to Classroom Teacher	014	030	196	144
Higher Education Compared to Classroom Teacher	.060	.070	.050	112
Temperamentally Adapted Compared to Personal Satisfaction	132	261*	201	315*
Other Factors Deterred Compared to Personal Satisfaction	032	030	193	147
Home, School, and Personal Choice Compared to Mental Health Issues	045	125	153	266*
Teaching Students with EBD 6 to 9 Years Compared to 5 or Less	.235	.123	.058	.104
Teaching Students with EBD 10 + Years Compared to 5 or Less	.201	.380*	.204	.121
Highest Degree Earned	.189	.188	.179	.211
Colleges of Arts and Sciences Compared to Colleges of Education	.087	.107	.086	089
Colleges of Business Public Affairs Compared to Colleges of Education	057	070	.012	054
Rural and Suburban Compared to Urban	114	108	083	082

Table 22

Summary of Multiple Linear Regressions Predicting Standards of Proficiency 5-9 from Total Years of Teaching Experience, Positions Currently Held, Graduates' Feelings about Working with Students with EBD, and Graduates' Feelings of Causal Factors for Students with EBD

	Standard 5		Standard 7	Standard 8	Standard 9
	-	_	_	•	Proficiency ⁱ
	Beta	Beta	Beta	Beta	Beta
Total Years of Teaching Experience	115	301*	185	105	195
Administrator Compared to Classroom Teacher	.095	.001	.214	.109	.182
Educational Support Personnel Compared to Classroom Teacher	.018	.008	.036	.015	.050
Higher Education Compared to Classroom Teacher	086	109	.037	023	.027
Temperamentally Adapted Compared to Personal Satisfaction	181	147	151	148	160
Other Factors Deterred Compared to Personal Satisfaction	171	057	089	004	.098
Home, School, and Personal Choice Compared to Mental Health Issues	173	190	232*	258*	120
Teaching Students with EBD 6 to 9 Years Compared to 5 or Less	.157	.134	.094	.035	.140
Teaching Students with EBD 10 + Years Compared to 5 or Less	.108	.141	.070	.092	.305* (table continues)

Table 22 (continued).

	Standard 5 Proficiency ^e	Standard 6 Proficiency ^f	Standard 7 Proficiency ^g	Standard 8 Proficiency ^h	Standard 9 Proficiency ⁱ
	Beta	Beta	Beta	Beta	Beta
Colleges of Arts and Sciences Compared to Colleges of Education	135	067	072	021	017
Colleges of Business Public Affairs Compared to Colleges of Education	065	.026	.007	.043	039
Rural and Suburban Compared to Urban	042	097	057	123	025

Note. Summary of Overall Models: Standard Five: $F(13, 91) = 1.05 p = .415, R^2 = .006$; Standard Six: $F(13, 91) = 1.34, p = .213, R^2 = .039$; Standard Seven: $F(13, 91) = 1.55, p = .116, R^2 = .064$; Standard Eight: $F(13, 91) = 1.03, p = .432, R^2 = .003$; Standard Nine: $F(13, 91) = .92, p = .533, R^2 = .010$.

The overall regression model predicting Standard 5 of proficiency: Learning Environments and Social Interactions was not significant, F(13, 91) = 1.05, p = .415, and explained only .6% of the variance ($R^2 = .006$). In addition, there were no significant predictors for Standard 5 of proficiency: Learning Environments and Social Interactions, all ps non-significant.

The overall regression model predicting Standard 6 of proficiency: Instructional Planning was not significant, F(13, 91) = 1.32, p = .213, and explained only 3.9% of the variance ($R^2 = .039$). Furthermore, total years of teaching experience was a significant predictor of Standard 6 of proficiency: Instructional Planning (Beta = .301, p = .009). Participants with 11 or more years teaching experience compared to those who had 10 years or less were significantly more likely to have lower proficiency in Standard 6 proficiency: Instructional Planning scores.

The overall regression model predicting Standard 7 of proficiency: Assessment was not

significant, F(13, 91) = 1.55, p = .116, and explained only 6.4% of the variance ($R^2 = .064$). Causal factors for students with EBD were also a significant predictor (Beta = -.232, p = .034). Participants who feel that causal factors for students with EBD are related to home, school, or personal choice factors predicted to have significantly lower ratings on proficiency in Standard 7 of proficiency: Assessment compared to those who felt that mental health is the causal factor for students with EBD. The overall model predicting Standard 8 of proficiency: Professional and Ethical Practice was not significant, F(13, 91) = 1.03, p = .432, and explained only 0.3% of the variance ($R^2 = .003$). Causal factors for students with EBD were also a significant predictor (Beta = -.258, p = .023). Participants who feel that causal factors for students with EBD are related to home, school, or personal choice factors predicted to have significantly lower proficiency in Standard 8 of proficiency: Professional and Ethical Practice compared to those who felt that mental health is the causal factor for students with EBD.

The overall regression model predicting Standard 9 of proficiency: Collaboration was not significant, F(13, 91) = .92, p = .533, and explained only -1.0% of the variance ($R^2 = -.010$). A deeper examination revealed that graduates' teaching experience with students with EBD was a significant predictor (Beta = .305, p = .020). Participants with 10 years or more teaching experience as compared to those with 5 years or less were significantly more likely to have higher proficiency scores for Standard 9 proficiency: Collaboration.

In summary, the overall multiple regression models, except Standard 2 proficiency:

Development and Characteristics of Learners and Standard 3 proficiency: Individual Learning

Differences, were not significant. However, deeper examination showed that significant

predictors included a negative relationship with total years of graduates' teaching experience,

graduates' feelings about working with students with EBD, and graduates' years of teaching

experience with students with EBD.

Summary

For Research Question 1, the graduates' perceptions of the importance of CEC standards for 1 through 9 ratings ranged from 3.58 to 3.88 on a four-point scale. For Research Question 2, the ratings of graduates' perceptions of their proficiency in using CEC standards 1 through 9 ranged from 3.31 to 3.56 on a four-point scale. Concerning Research Question 3, respondents' ratings on importance of CEC standards were significantly and positively correlated with one or more based on the respondents' ratings. This indicates that respondents who had higher scores for ratings on importance tended to have higher ratings on proficiency scores. For Research Question 4, the overall regression model did not predict the perceived importance for the CEC standards 1 through 9. Finally, in Research Question 5, all regression models, except Standard 2 proficiency: Development and Characteristics of Learners and Standard 3 proficiency: Individual Learning Differences, were not significant.

CHAPTER 5

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

An anonymous online survey was used to examine (a) how graduates, who completed a National Council Accreditation of Teacher Education (NCATE) and Council for Exceptional Children (CEC) approved master's program specializing in the education of children and youth with emotional and behavioral disorders (EBD) from one university, perceived the importance of CEC standards in working with students with EBD and (b) how these graduates perceived their proficiency in using CEC standards when working with students with EBD. Data from the online survey were coded and analyzed using statistical software. These analyses included descriptive statistics, cross tabulations, Pearson chi square analyses, Pearson product moment correlations, multivariate analysis of variance (MANOVA), and multiple linear regressions.

Summary

Dissemination of the survey yielded an approximate response rate of 62%. Initially, demographic information was elicited from the participants. Most respondents identified themselves as employed as some type of classroom teacher and their highest degree earned was a master's degree in education from a College of Education. Furthermore, a majority of respondents worked in a suburban geographic setting. For the most part, the respondents felt great satisfaction in working with students with EBD. However, the participants were divided in their feelings about causal factors for students with EBD. Approximately half of the respondents felt that the students' home environment was the cause of their exceptionality and slightly less than half of the participants felt that mental health issues were the cause of the students' exceptionality.

In addition, majority of graduates had previously worked with students with cognitive impairments. In regard to age groups with whom respondents worked, there was approximately equal distribution among elementary, middle school, and secondary-aged students. In general, graduates felt that the most prevalent problems working in an educational setting included an unreasonable amount of paperwork and lack of parental and/or guardian support. Interestingly, several participants identified *other* prevalent problems (e.g., lack of educational resources, lack of funding, lack of time) in working in an educational setting.

According to the analyses, the average time that participants graduated from the program was approximately 9 years. Additionally, the average years' graduates have taught or are teaching students with EBD was about eight and one-half years. Finally, the graduates' total years of teaching experience averaged a little over eleven years.

Part II of the survey asked participants to rate how important they perceived the CEC standards to be and how proficient they considered themselves to be in using the standards. Based on a four point scale, respondents' ratings of importance of the CEC standards ranged from 3.58 to 3.88. Based on a four point scale, ratings on their proficiency in using the CEC standards ranged from 3.31 to 3.56.

The researcher also analyzed the relationship between the graduates' perceived level of proficiency and the perceived importance of CEC standards 1 through 9:

- Standard 1: Foundations
- Standard 2: Development and Characteristics of Learners
- Standard 3: Individual Learning Differences
- Standard 4: Instructional Strategies
- Standard 5: Learning Environments/Social Interactions

- Standard 6: Instructional Planning
- Standard 7: Assessment
- Standard 8: Professional and Ethical Practice
- Standard 9: Collaboration

Standard 1 importance was positively and significantly correlated with Standards 5, 7, 8, and 9 of proficiency.

Standard 2 importance and Standard 3 importance was positively and significantly correlated with all standards of proficiency.

Standard 4 importance was positively and significantly correlated with Standards 1, 2, 3, 4, 8, and 9 of proficiency.

Standard 5 importance was positively and significantly correlated with Standards 1, 3, 5, 7, 8, and 9 of Proficiency.

Standard 6 importance was significantly and positively correlated with Standards 2, 5, 6, 7, 8, and 9 of Proficiency.

Standard 7 importance was significantly and positively correlated with Standards 1, 2, 3, 5, 7, and 8 of proficiency.

Standard 8 importance was significantly and positively correlated with Standard 3, 5, 6, 7, 8, and 9 of proficiency.

Standard 9 importance was significantly and positively correlated with all standards of proficiency except Standard 5 of proficiency.

In summary, the relationships between the graduates' perceived importance and perceived proficiency showed a positive relationship. Meaning, graduates whom felt that using CEC standards were important also felt they were well-prepared in using the CEC standards in

their work with students with EBD.

The researcher also analyzed specific variables as predictors to predict graduates' perceptions of the importance of the CEC standards. Four predictors for this analysis included (a) total years of teaching experience, (b) position graduates currently held, (c) graduates' feelings about working with students with EBD, and (d) graduates' feelings for causal factors of students with EBD. Even though the overall multiple linear regression model for Standard 1 importance was not significant, a deeper examination revealed that graduates' years of teaching experience with students with EBD was a significant predictor for Standard 1 importance. The overall regression model for Standard 3, 4, and 5 importance was not significant; however, a deeper examination revealed that graduates' years of teaching experience with students with EBD was a significant predictor for Standard 5 importance. Finally, the overall regression model for Standard 6, 7, 8, and 9 of importance were not significant. The multiple regression model did not predict the graduates' perceived importance in using the CEC standards; however, graduates' years of teaching experience with students with EBD was a significant predictor for standards 1 and 5.

Finally, the researcher analyzed specific variables as predictors to calculate graduates' perceptions of their proficiency in using the CEC standards. Again, the four predictors for this analysis included (a) total years of teaching experience, (b) position graduates currently held, (c) graduates' feelings about working with students with EBD, and (d) graduates' feelings for causal factors of students with EBD. The overall multiple regression model for Standard 1 proficiency was not significant; however, the overall regression model for Standard 2 proficiency was significant. Significant predictors for Standard 2 proficiency included (a) total years teaching experience, (b) feelings about working with students with EBD, and (c) years of teaching

experience with students with EBD.

The overall regression model for Standard 3 proficiency was significant; however, there were no individual predictors of Standard 3 proficiency. There was a marginal significance for Standard 4 proficiency. A deeper examination of the results showed that feelings about working with students with EBD and causal factors for students with EBD are related to home, school, or personal choice factors are predictors. For Standard 5 proficiency, the regression model was not significant. For Standard 6 proficiency, total years of teaching experience was a significant predictor. The overall model for Standard 7 proficiency was not significant; however, the researcher found that causal factors for students with EBD was predictor. Finally, the overall model predicting Standard 9 proficiency was not significant; however, a deeper examination revealed that graduates' teaching experience with students with EBD was a predictor. The overall multiple regression model did not predict the graduates' perceived proficiency in using the CEC standards; however, a deeper examination showed that total years of graduates' teaching experience, graduates' feelings about working with students with EBD, graduates' years of teaching experience with students with EBD, and graduates' feelings about causal factors of students with EBD were significant predictors.

Implications

Although the data analyzed within this study were based on participants' perceptions, the participants provide direct or indirect services to children and youth; however, all participants received a master's degree in educating children and youth with EBD. Additionally, most of the participants were or are teachers, those who have the most direct contact with students with exceptionalities and who should have extensive educational experiences upon which to base their

perceptions. Clearly, these educational professionals would be the most viable references when obtaining informational about the CEC professional standards.

Perhaps the most interesting of the data analyses is that the graduates from the teacher preparation program, specializing in students with EBD, feel that the CEC standards are important and feel well-prepared in the CEC standards, contradicting what the literature states, i.e., there is limited data that identify the number of teacher preparation programs for preparing personnel to teach students with EBD who conduct ongoing, comprehensive evaluation of the preparation provided (Brownell et al., 2005; Carlson, 1996).

In addition, the multiple regression models discovered that graduates' years teaching children and youth with EBD should be recognized as a predictor considering it was a predictor for both models. Meaning, teacher preparations programs may need to add longer experience in the field for teacher candidates.

Recommendations

After completing the study, ceiling effects were observed in the results of participants' perception of the importance of CEC standards and the level of perceived proficiency reported by the participants. These effects could be avoided in the future by adjusting the Graduate Survey in Emotional and Behavioral Disorders instrument to create a forced-choice rating scale; thereby, requiring the participants to rank the knowledge and skills statements within each CEC standard. Replication of the current study should be considered by future researchers and educators. Future studies may focus on improving data collection procedures from gathering qualitative data from these same graduates, which may include (a) focus groups, (b) semi-structured interviews, or (c) observation field notes.

APPENDIX A INITIAL LETTER FROM COORDINATOR



COLLEGE OF EDUCATION Programs in Special Education

Dear FIRSTNAME

I trust this finds you well and happy. Things are going well at your ole Alma Mater, although in recent years there have been many changes. If you haven't visited the campus in the past few years, you should plan to come and see us and observe some of the changes. For your information, our program is now housed in Matthews Hall, Suite 119.

We are planning to do a follow-up of all our former graduates and certainly we want YOU to be included. Our initial step in the planning phase is to ensure that we have a current e-mail address, so we can communicate with you about completing a survey for us. There are three ways you may get this information to us:

- Access the following website and complete the information: http://web3.unt.edu/bullock/update
- Fill out the bottom half of this letter and return to us via US mail. Mail to Jeanie McMahan,
 Administrative Coordinator II at the address listed at the bottom of this page.
- Email Jeanie at <u>jeanie.mcmahan@unt.edu</u> with your current address and email address.

We hope to hear from you by October 31, 2011. We look forward to your participation in the follow-up survey!

Enclosed, please find a small token of our appreciation for your assistance!

Lyndal M. Bullock Regents Professor, Special Education

enclosure

lease include your current	t name along with the name you	went by while you were in	school, if different.	
Name:				
Address:			Apt:	
City:	State:	Zip Code:		
Email Address:				

1155 Union Circle #311335 | Denton, Texas 76203-5017 | TEL 940.565.3583 | FAX 940.565.4055 | TTY 940.369.8652 | www.coe.unt.edu

APPENDIX B

INVITATION LETTER TO PARTICIPANTS/PROGRAM GRADUATES

January 17, 2012

Dear UNT Graduates:

My name is Mandy E. Lusk, doctoral candidate in special education at the University of North Texas (UNT). My major professor, Dr. Lyndal M. Bullock, and I are engaging in a survey of students who graduated from the UNT master's degree program for children and youth emotional and behavior disorders (EBD). We want to know how former UNT graduates rate the importance and proficiency of standards related to their teacher preparation program for students with EBD.

We are asking former students to respond to a survey which will be available <u>online</u>. If you provide some type(s) of direct or indirect services to students with EBD or have done so in the past, we would like for you to participate in the survey provided. We anticipate the survey may take approximately 20 minutes to complete.

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

If you have questions regarding this survey, please contact mandy.lusk@unt.edu (940-565-2169) or lyndal.bullock@unt.edu (940-565-3583). Thank you in advance for your assistance. Cordially,

Mandy E. Lusk,
Doctoral Candidate
University of North Texas
Mandy.lusk@unt.edu

(940) 565-2169

APPENDIX C CONSENT FORM FOR SURVEY

Graduate Survey in Emotional and Behavioral Disorders

Informed Consent Notice

The purpose of this survey is to follow-up UNT graduates who completed the master's degree program with specialization in emotional and behavior disorders (EBD). As you know, the program in EBD adheres to the standards and knowledge and skills of professional practice delineated by the Council for Exceptional Children (CEC). In this survey, we are interested in knowing how you perceive the "importance" of selected standards and knowledge and skills as they pertain to your work with students with EBD. In addition, we are interested in knowing how "proficient" you perceive yourself to be in using the standards and knowledge and skills in your work with students with EBD.

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 20 minutes.

All data obtained for this study 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 honored in any publications or presentations using data from this study.

There are no foreseeable risks for completing this survey.

Your participation in this survey may assist in guiding future revisions in and/or developments of teacher preparation programs in the specialization area of EBD.

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.

Contact information:

Dr. Lyndal M. Bullock, Regents Professor Educational Psychology Department 1155 Union Circle #311335 Office # MH 119-I Denton, TX 76203-5017 940-565- 3583 (office) Lyndal.bullock@unt.edu Mandy E. Lusk Educational Psychology 1155 Union Circle #311335 Office # MH 119-H Denton, TX 76203-5017 940-565-2169 mandy.lusk@unt.edu

APPENDIX D

GRADUATE SURVEY FOR EMOTIONAL AND BEHAVIORAL DISORDERS

In an effort to evaluate the effectiveness of the UNT master's degree program in the education of students with emotional and behavioral disorders, we solicit your participation in this follow-up study. Your thoughtful responses to each item on the survey which follows will be of invaluable assistance to the program.

Demographic Information

In what year did you complete the master's degree program at UNT?
2. What is the highest degree you have attained?
⊚ MEd
⊚ M.A./M.S.
⊚ EdD
⊚ EdS
PhD
3. Which <u>best</u> describes your undergraduate major?
Criminal Justice
© Education
English
Music/Vocal
Psychology
Sociology
Other:

Demographic Information

4. Which <u>best</u> describes the geographic setting in which you work?
© Rural
Suburban
⊚ Urban
5. To-date, how many years have you taught students with EBD?
6. To-date, how many years teaching experience do you have?
7. Which <u>best</u> describes the position you now hold?
Administrator
 Behavioral Specialist
 Classroom Teacher (who works in a special day school solely for students with EBD)
Classroom Teacher in residential and/or psychiatric hospital setting
 Classroom Teacher (works in mostly a self-contained setting for students with EBD)
 Consulting Teacher (who works with teachers who serve students with EBD)
Co-Teacher in a general education setting
Higher Ed
Other:

Demographic Information

8. List the other types of educational positions you have held? (Check all that Apply)
None
Administrator
Counselor
General Educator - preschool or elementary
General Educator – middle
General Educator - secondary
Special Educator (i.e., behavior specialist)
Other:
9. In the past, other than students with EBD, with what other categories of students with disabilities have you worked? (Check all that Apply)
Only worked with students with EBD
Cognitively Impaired
Physically Impaired
Sensorially Impaired
Other:
10. What <u>best</u> describes the age group with which you <u>currently</u> work?(Check all that Apply)
Early childhood/preschool
■ Elementary
☐ Middle
■ Secondary
Higher Education

Demographic Information

11. Based on your work experience, what are the <u>three most</u> prevalent problems you face in your setting? (Check the three that Apply)
Lack of administrative support
Lack of support from other school personnel
Lack of parental/guardian support
Too many students on caseload
Too much emphasis on accountability
Unreasonable amount of paperwork
Other:
12. Your teacher preparation program focused primarily on working with students with EBD. Based on your experience to-date, check the <u>one</u> item below which best describes your feelings about working with students with EBD.
I am temperamentally adapted to work with students with EBD.
I find that students with EBD are too difficult to work with.
I find great personal satisfaction from working with students with EBD.
I enjoyed working with students with EBD; however, other factors deterred me from working with this population of students.
13. Based on your knowledge and experience in working with students with EBD, which <u>one</u> statement best describes your feelings about students with EBD.
I believe the students' problems are primarily related to mental health issues.
I believe the students' issues are primarily the result of their home environments.
I believe the students' issues are primarily the result of their school environments.
I believe the students' issues are primarily based on their personal choice.

In this section, you will find in the large shaded areas nine Standards representative of the knowledge and skills recommended for personnel who work with students with emotional and behavioral disorders (EBD). Following each Standard, in the center column, you will find a series of statements related to a specific Standard. In the left column, rate the importance of each statement in your work with students with EBD. In the column to the right, rate your perceived proficiency relative to each statement.

Statements Representative of Professional Standards

Standard One Foundations

Special educators have an understanding that the field is an evolving and changing discipline based on philosophies, evidence-based principles and practices, theories, state and federal laws, as well as diverse and historical points of view relative to the education and treatment of individuals with exceptionalities.

In	npoi	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on <u>Standard One</u> please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	 Knowledge of laws, policies, and ethical principles regarding behavior management planning and implementation relative to individuals with emotional and behavioral problems. 	0	0	0	0
0	0	0	0	Knowledge of issues in definition and identification of individuals with emotional and behavioral problems, including those from culturally and linguistically diverse backgrounds.	0	0	0	0
0	0	0	0	3. Knowledge of specialized terminology in the area of EBD.	0	0	0	0
0	0	0	0	4. Knowledge of models, theories, philosophies, and research methods that form the basis for special education practice.	0	0	0	0

Statements Representative of Professional Standards

Standard Two Development and Characteristics of Learners

Special educators know and demonstrate respect for their students, understand human development, and are cognizant of the characteristics of individual differences in terms of abilities and behaviors and their impact on learning and social interactions.

In	ıpoı	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on Standard Two please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	1. Knowledge of the range of <u>learning</u> similarities and differences among individuals with EBD.	0		0	0
0	0	0	0	2. Knowledge of the range of <u>behavior</u> similarities and differences among individuals with EBD.	0	0	0	0
0	0	0	0	3. Knowledge of the co-occurrence of emotional and/or behavioral problems with other exceptionalities.	0	0	0	0
0	0	0	0	Knowledge of the characteristics and effects of culture and environment on an individual's development.	0	0	0	0

Standard Three Individual Learning Differences

Special educators understand the effects that an exceptional condition may have on an individual's learning and that the beliefs, traditions, and values across and within cultures impact relationships among and between students, their families, and school.

In	npo	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on <u>Standard Three</u> please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	1. Knowledge and understanding of the impact of emotional factors on student learning.	0	0	0	0
0	0	0	0	2. Knowledge of how cultural perspectives influence relationships among families, schools, and communities as related to instruction.	0	0	0	0
0	0	0	0	3. Knowledge of the impact that learners' academic and social abilities, attitudes, interests, and values have on instructional strategies, student learning, and career development.	0	0	0	0
0	0	0	0	4. Knowledge of how to apply behavioral principles to enhance individual and group learning.	0	0	0	0

Statements Representative of Professional Standards

Standard Four Instructional Strategies

Special educators (a) retain a repertoire of evidence-based instructional strategies designed for individualized instruction, (b) possess an ability to select, adapt, and use instructional strategies to promote positive learning and modify the learning environment, and (c) teach critical thinking and problem-solving skills to enhance learning and academic performance, self-awareness, self-control, self-management, and self-reliance.

In	ıpoı	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on <u>Standard Four</u> please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	1. Ability to effectively use evidence-based practices to enhance academic and social competence in students with EBD.	0	0	0	0
0	0	0	0	2. Ability to select, adapt, and use instructional strategies and materials according to the characteristics of the individual with emotional and behavior problems.	0	0	0	0
0	0	0	0	3. Ability to teach individuals to use self-assessment, problem-solving, and other cognitive strategies to enhance the students' personal competence.	0	0	0	0
0	0	0	0	4. Ability to use strategies that promote successful transition for students with EBD.	0	0	0	0

Standard Five Learning Environments/Social Interactions

Special educators possess a repertoire of skills which enable them to (a) create positive learning environments, (b) use effective and varied behavioral and crisis management strategies, (c) teach social skills, and (d) advocate for appropriate placement for students with EBD.

In	ıpo	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on Standard Five please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	1. Ability to create a safe, equitable, positive, and supportive learning environment for students with EBD.	0	0	0	0
0	0	0	0	2. Ability to plan and implement effective classroom management strategies.	0	0	0	0
0	0	0	0	3. Ability to effectively teach social skills.	0	0	0	0
0	0	0	0	Ability to accrue student academic and behavioral data which may impact decisions regarding educational planning.	0	0	0	0

Statements Representative of Professional Standards

Standard Six Instructional Planning

Individualized decision-making and instruction is at the center of special education practice. Special educators develop instructional plans anchored in both general and special education curricula. As appropriate, these plans are adapted through collaborative efforts with individual learners, families, professional colleagues, and personnel from other agencies to meet the individual learning needs of students with EBD. Principles of transition planning are included in all decision-making.

I	mp	orta	ıce	Statements	P	rofic	cien	cy
Very I Inimportant	Unimportant	Important	Very Important	Based on <u>Standard Six</u> please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	(0	0	1. Knowledge of how to develop and implement comprehensive, longitudinal individualized educational plans in collaboration with others.	0	0	0	0
0	(0	0	2. Knowledge of how to utilize functional behavioral assessment principles in educational decision-making.	0	0	0	0
0) () (0	3. Knowledge of how to incorporate the principles of positive behavioral intervention and supports in educational decision-making.	0	0	0	0
0	0	0	0	4. Knowledge of how to plan and implement individualized reinforcement systems and environmental modifications at levels equal to the intensity of student behavior.	0	0	0	0

Standard Seven Assessment

Assessment is integral to the decision-making of special educators who use multiple types of assessment information. They understand the legal polices and ethical principles of measurement and assessment related to referral, eligibility, program planning, instruction, and placement for students with emotional and behavior problems.

In	npo	rtan	ce	Statements	P	rofi	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on <u>Standard Seven</u> please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	1. Knowledge of legal provisions and ethical principles regarding assessment of individuals with emotional and behavior problems.	0	0	0	0
0	0	0	0	2. Knowledge of how to conduct a functional behavioral assessment and prepare a report on individuals with EBD.	0	0	0	0
0	0	0	0	3. Knowledge of how to assess/evaluate social behaviors of individuals with EBD.	0	0	0	0
0	0	0	0	4. Knowledge of screening, pre-referral, referral, and classification procedures for individuals with or at-risk for emotional and behavior problems.	0	0	0	0

Statements Representative of Professional Standards

Standard Eight Professional and Ethical Practice

Special educators are guided by the profession's ethical and professional practice standards. They function in multiple roles and complex situations across a wide age and developmental range, and in diverse settings. Further, special educators must be life-long learners in order to stay abreast of their field, and must be aware how their own and others' attitudes, behaviors, and ways of communicating influence their practice.

In	npo	rtan	ce	Statements	P	rofic	cien	cy
Very Unimportant	Unimportant	Important	Very Important	Based on Standard Eight please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared
1	2	3	4		1	2	3	4
0	0	0	0	Ability to uphold high standards of competence and integrity and exercise sound judgment in the practice of the professional.	0	0	0	0
0	0	0	0	2. Ability to demonstrate sensitivity for the culture, language, religion, gender, disability, socioeconomic status, and sexual orientation of students with EBD.	0	0	0	0
0	0	0	0	3. Ability to demonstrate commitment to engage in evidence-based practices.	0	0	0	0
0	0	0	0	4. Ability to demonstrate commitment to developing life-long education strategies and quality-of-life potential of individuals with EBD.	0	0	0	0

Standard Nine Collaboration

Special educators routinely and effectively collaborate with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways, as well as, advocate for needed services such as transition. They are often viewed as specialists and serve as a resource regarding the laws and policies relevant to individuals with EBD.

Importance				Statements			Proficiency			
Very Unimportant	Unimportant	Important	Very Important	Based on Standard Nine please rate the <i>Importance</i> and <i>Proficiency</i> of the following statements:	No Preparation	Not Well Prepared	Adequately Prepared	Very Well Prepared		
1	2	3	4		1	2	3	4		
0	0	0	0	1. Ability to share effective behavior management techniques/strategies with others.	0	0	0	0		
0	0	0	0	2. Ability to foster respectful and beneficial relationships between families and professionals.	0	0	0	0		
0	0	0	0	3. Ability to model and coach others in the use of instructional methods and accommodations.	0	0	0	0		
0	0	0	0	4. Ability to communicate effectively with families of individuals with specific learning and behavioral needs from diverse backgrounds.	0	0	0	0		

Thank You for Completing the Survey

Please close your browser to exit

Amazon Gift Card Drawing

If you would like for your name to be entered into the drawing for a \$50.00 Amazon gift certificate, please provide your name and e-mail address below. This information will in no way be connected to your survey responses.

After the survey closure, one person will be selected randomly and will receive an email gift card from Amazon.

First Name:		Last Name:	
	Email:		

Enter

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