

Preparedness of Speech-Language Pathologists to Treat Students with Emotional or Behavioral Disorders

by

Sara Taylor

A thesis submitted to the faculty of Radford University  
in partial fulfillment of the requirements for the degree of  
Master of Arts in the Department of Communication Sciences and Disorders

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## Abstract

**Purpose:** The population of school-age students diagnosed with emotional or behavioral disorders has steadily increased in American public schools. This study sought to determine the preparedness of preprofessional speech-language pathology graduate students in identifying, assessing, and treating school-age students with emotional or behavioral disorders.

**Methods:** Three sources of data were used to investigate the preparedness of preprofessional speech-language pathology students: (a) syllabi from accredited graduate programs were obtained and analyzed for common themes in the instruction universities provide to preprofessional students, (b) semistructured interviews were conducted with four preprofessional speech-language pathology graduate students regarding their incidental, academic, and clinical experiences with emotional or behavioral disorders, and (c) data from a case review of a preprofessional first year speech-language pathology graduate student's experience in treating a student with a diagnosed emotional or behavioral disorder was analyzed retrospectively for themes.

**Results:** Results demonstrate a lack of documented academic instruction specific to emotional or behavioral disorders, although they may be introduced in the context of autism spectrum disorders or behavioral management. The academic instruction provided seems to be supplemented with practicum experiences that expose preprofessional students to emotional or behavioral disorders in clients with comorbid language impairments.

**Implications:** Findings suggest that it is plausible that at least some graduates of accredited speech-language pathology programs might lack sufficient preparedness to assess and treat students with a broad range of emotional or behavior disorders. Although academic instruction

may not be well documented, clinical experience may supplement instruction to provide practical experience with emotional or behavioral disorders. Accordingly, it is important that speech-language pathologists seek continuing education in this area. These results elicit a call to action to encourage universities with accredited speech-language pathology programs to address didactic academic instruction on a broad range of emotional or behavioral disorders, encourage research in this area, and promote internship experiences for its students specific to this population of students.

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# **Preparedness of Speech-Language Pathologists to Treat Clients with Emotional or Behavioral Disorders**

## **Introduction**

### **Emotional or Behavioral Disorders**

Emotional or behavioral disorders represent a constellation of behaviors that are collectively referred to by this label. Emotional or behavioral disorders may be manifested differently. As such, three broad categories have been identified to contrast the differing presentations of an emotional or behavioral disorder including externalizing behaviors, internalizing behaviors, and low incidence disorders (Smith, 2007). According to Smith (2007), the most common type of emotional or behavioral disorder includes the externalizing behaviors. These students display behaviors such as aggression, impulsivity, noncompliance, and coerciveness, which may be interpreted as “acting out” (Smith, 2007, p. 232). It is difficult to distinguish externalizing behaviors of an emotional or behavioral disorder and social maladjustment because both are characterized by acting out. A student with social maladjustment in the absence of another disorder, however, does not qualify for special education services in the public school system because it is viewed as a choice to misbehave (Smith, 2007). To contrast, externalizing behaviors are consistent with the criteria for a disability label in that the expression of the challenging behaviors is not under the control of the student (United States Department of Education, 2004). Thus, it is important that diagnostic measures are sensitive to identify the students with emotional or behavioral disorders, and specific to eliminate the students who do not have an emotional or behavioral disorder. Smith (2007) states that internalizing behaviors (e.g., being withdrawn, depressed, anxious, or lonely) are the second most common type of

emotional or behavioral disorder. Internalizing behaviors, however, are not as common as externalizing behaviors in the public school system (Smith, 2007). Internalizing behaviors can be just as potentially detrimental to a student's academic success, but are more difficult to identify, as they are "less likely than externalizing behaviors to interfere with instruction" (Smith, 2007, p. 232). Thus, it is important to acknowledge that under-identification can lead to this discrepancy, which makes externalizing behaviors appear more common. Low incidence behaviors are the least common and include diagnoses such as schizophrenia (Smith, 2007). Students with low incidence disorders often have complex Individualized Education Plans (IEPs) and require a multidisciplinary team for effective treatment. Thus, when crafting a definition for emotional or behavioral disorders, it must encompass both internalizing and externalizing behaviors, as well as account for low incidence disorders. At the same time, the definition cannot over-identify students that may exhibit characteristics reflecting an emotional or behavioral disorder (e.g., social maladjustment or conduct disorders) without a true disability being present that would warrant special education services in the public school system.

### **Definition**

In this study, the operational definition of emotional or behavioral disorders applied is that put forward by the United States Department of Education (2004). This definition describes the condition as occurring over a long period of time, during which the student exhibits one or more of the following characteristics: (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 personal or school problems” (United States Department of Education, 2004). Using this definition, as documented in the Individuals with Disabilities Education Act, the presence of an emotional or behavioral disorder must also negatively impact the student’s educational performance (United States Department of Education, 2004).

As per the Individuals with Disabilities Education Act (2004), it should be noted, however, that a diagnosis of an emotional or behavioral disorder in a school system is listed as being the primary disorder, rather than a diagnosis of an autism spectrum disorder when the two disorders are concomitant. That is, an autism label “...does not apply if a child’s educational performance is adversely affected primarily because the child” has a comorbid emotional or behavioral disorder (United States Department of Education, 2004). One study reports comorbidity of an emotional or behavioral disorder and an autism spectrum disorder occurs with a prevalence of 44.4 out of 100 in children ages 10 to 14 years (Simonoff, Pickles, Charman, Loucas, & Baird, 2008). Thus, although these two disorders often co-occur and are prioritized on a student’s Individualized Education Plan, it is important to recognize them as separate diagnoses with different diagnostic criteria.

Behavioral characteristics are not the only features associated with a school-based label of emotional or behavioral disorders. In the United States public educational milieu, students’ with certain demographic features are more prevalent or likely to receive a label of an emotional or behavioral disorder than others. Prevalence is higher in males than females, higher in school-age children ages 8 to 17 than children 4 to 7 years of age, higher in students who are non-

Hispanic black than students of Hispanic origin or non-Hispanic white, and higher in students living in poverty (Pastor, P.N., Reuben, C.A., & Duran, C.R., 2012).

### **Diagnosis**

In the United States public educational milieu, a multidisciplinary team of school professionals might choose to apply the emotional or behavioral disorders label to a student as an explanation for academic difficulties (United States Department of Education, 2004). The use of a team diagnosis in the public schools differs from that which might be provided in the private sector, where emotional or behavioral disorders might be diagnosed with an operational definition that is different than that presented by the Individuals with Disabilities Education Act (2004). The diagnosis might come from a medical doctor (Stafford, 2011), clinical psychologist (American Psychological Association, 2013), or clinical social worker (National Association of Social Workers, 2005). While the professional opinions of these professionals might be regarded with great value by school-based multidisciplinary teams, they are not required for the label of emotional or behavioral disorders to be designated as an explanation for an underperforming student's disabling condition.

### **Incidence**

The National Center of Education Statistics (2010) reports that from 1976 to 2010, the incidence of emotional or behavioral disorders among the school-age population (i.e., 3 to 21 years of age) has increased from approximately 283,000 to 420,000 students. Although these data provided by the National Center of Education Statistics (2010) demonstrate a slight decrease in incidence (i.e., incidence was recorded as 450,000 students in 2008), it still represents a significant proportion of the school-age population (Armstrong, 2011). For example, during the

2008 to 2009 academic year, emotional or behavioral disorder was the sixth most common label of the 14 disability categories identified among school-age students (US Department of Education, 2011), affecting 9% of males and 2% of females of the population receiving special education services under 18 years of age (e.g., Stafford, 2011; Turgay, 2009). Given the proportion of students in the public schools labeled as having an emotional or behavioral disorder, exploring ways to meet their complex needs has become crucial to increase their academic, social, and vocational success (e.g., Armstrong, 2011; Carter & Wehby, 2003; Chesapeake Institute, 1994).

### **Treatment**

It is not uncommon for comprehensive treatment plans for students labeled with emotional or behavioral disorders to involve pharmacology. This treatment must be provided by a medical doctor. As such, school professionals who serve students with emotional or behavioral disorders must be aware of how this label is identified, diagnosed, and treated outside the school milieu. Unfortunately, the coordination of services for students with emotional or behavioral disorders has not always been consistent (e.g., National Governor's Association, 1989).

In 1994, the Chesapeake Institute for the United States Department of Education Office of Special Education and Rehabilitative Services created an agenda to explore the treatment of students with emotional or behavioral disorders. Coordination of services has been documented as a weakness in the treatment of students with emotional or behavioral disorders, causing confusion for parents, isolation of students with emotional or behavioral disorders, and inconsistent and less rigorous treatment for these students (National Governor's Association, 1989). As a result, one of the overarching goals of the agenda was the creation of a

“comprehensive and collaborative system” established to improve outcomes for children at risk for developing or already diagnosed with an emotional or behavioral disorder (Chesapeake Institute, 1994, p. 3). As such, this goal suggests a call for increased coordination of services by school-based professionals for students with emotional or behavioral disorders.

More recently, Stafford (2011) discusses the Bright Futures initiative. This initiative calls for increased coordination between families, community resources (e.g., public schools), and medical providers (e.g., pediatric primary care) to best serve the needs of students with emotional or behavioral disorders. Given these calls for collaboration, it is pertinent that school-based professionals who commonly provide services to students with emotional or behavioral disorders understand services that might exist outside of the educational milieu. These services are often provided by medical doctors and clinical psychologists.

In response to the Chesapeake Institution’s (1994) call for research, the professions involved in the identification, assessment, and treatment of emotional or behavioral disorders are to create new assessment and treatment approaches to improve outcomes for this population. With more sensitive screening tools, valid assessments and evidence-based treatments, students with emotional or behavioral disorders will be able to receive individualized treatment to maximize their strengths and target weaknesses. Furthermore, involvement of primary care physicians, psychiatrists or psychologists, special education teachers, general education teachers, and school-based speech-language pathologists may increase generalization of targeted skills to other communication environments and partners. The unique role of how each of these professional groups can serve students with characteristics reflecting emotional or behavioral disorders is summarized below.

**Medical doctors.** Primary care physicians are usually the first professionals to see children prior to school (Stafford, 2011). As such, they may be the first to identify characteristics of an emotional or behavioral disorder. Stafford (2011) recognizes the importance of early identification. Specifically, primary care physicians are in a position to increase referrals to other services for earlier treatment and better long-term outcomes when behaviors reflecting an emotional or behavioral disorder are identified and addressed. Stafford (2011) posits that because only 18% of parents of children exhibiting characteristics of emotional or behavioral disorders report elevated behavioral problems to the primary care physician, many children are underserved. As a result, mental health screenings have become standard practice during pediatric appointments (Stafford, 2011). The protocols that have been developed to identify children that demonstrate behaviors consistent with emotional or behavioral disorders are designed to be able to be completed quickly (i.e., most average between 5 and 15 minutes to complete) and reliably. Examples of valid assessment measures include the Pediatric Symptoms Checklist (Kostanecka, Power, Clarke, Watkins, Hausman, & Blum, 2008), Parents Evaluation of Developmental Status (Brothers, Glascoe, & Robertshaw, 2008), and the Ages and Stages, Socioemotional (Briggs-Gowan & Carter, 2008).

If a screening is positive for an emotional or behavioral disorder, a differential diagnosis will be completed (Sykora, Welsh, & Swope, 2011). Sykora and colleagues (2011) posit that general medical or neurologic conditions may reflect behaviors characteristic of emotional or behavioral disorders, and must be examined so that the underlying issue is treated. Examples of such conditions include hearing and/or visual impairment, learning disability, Tourette syndrome, seizure disorders, intellectual disability, and medication effects (Smocker & Hedayat,

2001). Furthermore, Smocker and Hedayat (2001) identify environmental conditions that may manifest as emotional or behavioral disorders. These conditions include an unsafe or disruptive learning environment, disparity between student abilities and the curricula they are expected to perform, family stress or dysfunction, abuse, or psychopathological conditions in immediate family members. Interestingly, results from a 2007 study indicate that the previously mentioned conditions are also risk factors for developing an emotional or behavioral disorder (Nelson, Stage, Duppong-Hurley, Synhorst, & Epstein, 2007). Nelson and colleagues (2007) developed a robust list of predictive factors to determine variables that could be used to develop more sensitive screening measures. The factors that commonly precede receiving a label of emotional or behavioral disorder included externalizing and internalizing behaviors, child maladjustment, family functioning, and maternal depression (Nelson et al., 2007).

In addition to behavioral therapies provided by other professionals, some families also choose to incorporate psychopharmacologic treatment to treat a possible comorbid condition that may exacerbate the characteristics of an emotional or behavioral disorder; however, if an emotional or behavioral disorder is the only diagnosis (i.e., the child does not reflect behaviors consistent with common comorbid conditions such as attention-deficit hyperactivity disorder) there is disequilibrium among professionals pertaining to the extent of the use of medication (Sykora et al., 2011). For example, some professionals will prescribe medications such as selective serotonin reuptake inhibitors, stimulants, or selective norepinephrine reuptake inhibitors, which are helpful in treating other behaviors of diagnoses that the emotional or behavioral disorder may reflect, such as anxiety or depression disorders or attention deficit hyperactivity disorder (Steiner & Remsing, 2007). Steiner and Remsing (2007) agree that



medication should not be the sole treatment provided to these individuals, as it is not curative; however, it can be beneficial to enhance the effects of other treatment if the medication can target as specific a disorder as possible.

The response of the medical field to increasing its professionals' competency in identifying, treating, and making appropriate referrals for a child with behaviors consistent with an emotional or behavioral disorder has led to providing professionals with the following:

1. A variety of screening tools;
2. Research demonstrating a breadth of underlying conditions that may manifest as an emotional or behavioral disorder as part of a differential diagnosis;
3. A significant amount of literature available to primary care physicians on referral options;
4. Treatment options within the scope of practice of a primary care physician (e.g., pharmacologic treatment options).

Although there is still ongoing research to increase the efficacy of assessment and treatment procedures, medical students are required to have a basic understanding of psychiatric disorders, which are included on licensing board exams (National Board of Medical Examiners, 2012). Specifically, the National Board of Medical Examiners (NBME) produces the high-quality assessments that grant licensure to practice medicine (2012). According to the National Board of Medical Examiners (2012), medical students are expected to have proficiency in three areas that may include content specific to emotional or behavioral disorders. The first section includes pharmacology, or the treatment of emotional or behavioral disorders from a medical perspective. The second is family medicine. On this section, 5 to 10% of the content may reflect mental

disorders and 10-25% of the content may reflect the school-age population (i.e., childhood to adolescence). The physician tasks that medical students are required to have some degree of competency including “promoting health and health maintenance, understanding mechanisms of a disease [or disorder], establishing a diagnosis, and applying principles of management” (National Board of Medical Examiners, 2012, p. 92). Thus, medical students are to be prepared to provide services to the school-age population in a comprehensive manner. The third subject area, psychiatry, is similar to family medicine in the physician tasks delineated to the physician in providing services to the target population, but the content is more heavily focused on mental disorders, which comprise 75 to 85% of the content. Examples of such diagnoses that may fall under the definition of an emotional or behavioral disorder include conduct disorders or oppositional defiant disorders.

Beyond the academic instruction provided to medical students, clerkships are also offered to give interested students an in-depth clinical experience in psychiatry and exposure to emotional or behavioral disorders in a variety of patients with varying severities. For example, Georgia Regents University (GRU) offers a four-week clerkship in psychiatry, during which students are exposed to inpatient and outpatient treatment (Georgia Regents University, 2013). Furthermore, students are required to participate in journal club meetings to promote the use of evidence-based practice, and case conferences to share their own experience as well as learn about the experiences of other students. Students are also expected to be able to demonstrate competencies following completion of the four week experience, including the ability to develop a comprehensive treatment plan which includes an “understanding of different therapeutic modalities” (Georgia Regents University, 2013).

Although this experience (i.e., provision of academic instruction and clerkship experience to foster competency as documented by a national exam), may not be representative of all medical schools in the United States, it demonstrates key elements that are lacking in the preparation of speech-language pathology graduate students. For example, students are provided rigorous academic instruction followed by a board exam, the option of clinical experience guided by a team of licensed physicians who specialize in psychiatry, opportunities to incorporate current research in case management, and an understanding of other professionals who may treat persons with emotional or behavioral disorders in other contexts (Georgia Regents University, 2013). Even with the board exams to monitor effectiveness of academic instruction and clinical experience provided to students with an interest in psychiatric disorders, the medical profession still identifies gaps in the services available to patients diagnosed with an emotional or behavioral disorder (Cummings, 2013). For example, the current mental health infrastructure makes it difficult for the uninsured to receive appropriate services. Specifically, youth populations in rural areas are widely underserved due to lack of outpatient facilities as only one third of the facilities have programs designed to treat the pediatric population (Cummings, 2013).

**Psychologists.** According to the Board of Examiners of Psychology (2002), it is within the scope of practice for both school and clinical psychologists to provide diagnostic and treatment services to students with emotional or behavioral disorders. A psychologist may (a) diagnose an emotional or behavioral disorder in various settings such as school, private practice, or hospital; (b) complete evaluations and treatment for individuals with characteristics consistent with an emotional or behavioral disorder; (c) participate or lead program planning and coordination of services; (d) supervise health service delivery; and (e) evaluate a treatment

program being delivered to students with emotional or behavioral disorders (Board of Examiners of Psychology, 2002).

Identification of behaviors that may precede the diagnosis of an emotional or behavioral disorder is imperative to recommend the completion of an assessment to begin treatment. Skiba & Cummings (2008) outline characteristics of students that should alert the psychologist to explore the pervasiveness of the potential emotional or behavioral disorder. Social learning theorist Walter Mischel's (1973) view on a person's ability to manage behavior according to the situation (i.e., settings and communication partners) may be applied to investigate the students whose challenging behaviors in the classroom may have potential for a diagnosis and subsequent treatment. Mischel (1973) proposes that changes in the individual cannot occur until the individual recognizes a behavior as inappropriate. Following this line of thought, Skiba & Cumming (2008) argue that emotional or behavioral disorders stem from a student's inability to "recognize teacher expectations" that in turn, correlates with the failure in adapting behavior based on environment (e.g., classroom vs. home). Other identification factors include an unstable home life, depressed caregivers, predisposition to aggression, lack of support and structure, a sense of learned helplessness, and inconsistency in reprimanding of challenging behaviors (Skiba & Cummings, 2008).

Once a child has been identified as at risk for or currently demonstrating characteristics of emotional or behavioral disorders, a psychologist may perform a formal assessment. An assessment may serve as a tool to qualify a student for services or to gain additional information regarding the student's current level of functioning. Two examples of assessment measures include the Global Assessment of Functioning, which has moderate reliability and high validity,

and the Child Adolescent Functional Assessment Scale, which is widely used for determining eligibility and treatment planning with good inter-rater reliability, but lacks empirical evidence to support its validity (Aas, 2011; Startup, Jackson, & Bendix, 2004; Bates, 2001).

Based on the current treatment options available to psychologists, Brown (2006) posits that, currently, the best treatment protocol for a student with an emotional or behavioral disorder is a sequence that starts with psychosocial treatment. Because of the adverse effects of some pharmacological interventions, they are secondary to psychosocial treatment. Furthermore, The Food and Drug Administration will have approved any drug that is available for the treatment of emotional or behavioral disorders, however, these drugs may not have been tested in populations ages five or younger so short-term and long-term effects have not been documented (American Psychological Association, 2013).

Skiba & Cummings (2008) review different intervention options for students with emotional or behavioral disorders as these characteristics disrupt the classroom setting. Thus, school psychologists become integral in the academic and social success of students with emotional or behavioral disorders. The five step intervention approach includes (a) emphasizing positive behaviors, (b) developing an understanding for the situations that trigger or exacerbate challenging behaviors, (c) utilizing information collected about the triggers to create a treatment program individualized to each student's needs, (d) working toward prevention of challenging behaviors after providing strategies to deal with the undesirable behaviors as they arise, and (e) continually monitor progress to adjust the treatment program as necessary (Skiba & Cumming, 2008).

Although psychologists have standardized assessment measures, evidence-based treatment options, and research to refer to regarding students with emotional or behavioral disorders, the profession still recognizes the gaps in the literature and has addressed these paucities by reporting calls for research (Brown, 2006). Brown (2006) suggests the following research topics to supplement the existing literature: (a) longitudinal studies to explore the efficacy and effectiveness of treatment available as they pertain to the population they serve with specific focus on “gender, age, ethnic and racial groups, and children with comorbid disorders;” (b) research the most effective sequence of treatment components, combination of therapies (e.g., psychosocial and psychopharmacological treatments), and dosages; (c) the roles of frequent communication partners of the student with an emotional or behavioral disorder such as the family, teacher, and mental health professionals, and how their role affects treatment outcomes; (d) public disclosure of efficacy of the available treatments; (e) and a continuing emphasis on evidence-based practice regarding both psychosocial and pharmacological treatment.

### **School-Based Treatment**

Outside of the educational milieu, diagnoses of emotional or behavioral disorders might come from medical doctors or clinical psychologists (Stafford, 2011). In terms of treatment, medical doctors might provide students with emotional or behavioral disorders with pharmacological treatment (Stafford, 2011). Likewise, psychologists working outside of the educational milieu might provide treatment services to students with emotional or behavioral disorders (American Psychological Association, 2013). Within the educational milieu, however, intervention services are often provided by special education teachers, general education teachers, and speech-language pathologists (Stafford, 2011).

**Special education teachers.** Popular treatment approaches utilized by special educators focus on providing students with strategies to “plan, work, evaluate, and adjust” for academic success (Martin, Mithaug, Cox, Peterson, Van Dycke, & Cash, 2003, p. 431). Thus, current best practice in special education emphasizes a student directed approach that focuses treatment on these self-determination skills. Anecdotally, these approaches also target executive functioning skills, which will increase the students’ ability to manage social behaviors (Nelson, Smith, Young, & Dodd, 1991). Although there are different approaches to working with students with emotional or behavioral disorders, there are some components that are beneficial regardless of the chosen method of treatment. In general, the immediate goal for instructional practice of special educators is to identify the abilities and needs of the students (Martin et al., 2003). Thus, assessment measures have been outlined to provide guidance to special educators as they assess the needs of these students who exhibit behaviors reflective of emotional or behavioral disorders.

Research in the field of special education emphasizes the importance of including parents in behavioral treatment strategies to maximize outcome efficacy (Ingersoll & Dvortcsak, 2006; Lucyshynn, Horner, Dunlap, Albin, & Ben, 2002). Following this approach, a summary was developed to outline the stages for successful integration of parents as intervention agents (Park, Alber-Morgan, & Fleming, 2011). In order for behavioral treatment to be successful with this approach, professionals are advised to (a) listen to the family’s concerns and struggles in order to build rapport and obtain a history of the child’s challenging behaviors; (b) counsel and provide information to parents regarding the general construct of behavioral approach, its advantages, and why it is appropriate for their child; (c) collaborate with parents through observation of the child to identify events that trigger challenging behaviors and consequences following the

behavior; following, supplemental information may be added to the child's history to guide the goals and procedures that will be utilized; (d) train the parents to successfully respond to their child's challenging behaviors per the plan of care created (Park et al., 2011). Per Park and colleagues' protocol (2011), parent training requires that special educators review five steps to ensure proper understanding and administration of the behavioral approach, which include:

1. Training parents to "identify and record" challenging behaviors (p. 26);
2. Teaching parents the appropriate response to these challenging behaviors
3. Modeling the established response to challenging behaviors;
4. Allowing the parents to practice the treatment techniques, providing multiple opportunities for practice and feedback to highlight strengths and ways to improve;
5. Encouraging parents to teach these techniques to other family members and frequent communication partners of the child to maximize opportunities for the child to practice newly learned skills with different partners and contexts (Park et al., 2011).

This approach requires that the parents support and agree with the goals established with the practitioner. Thus, there exists a variety of methods for special educators to implement to target objectives for students with emotional or behavioral disorders. Special educators may refer to this literature as needed and modify strategies used to better serve the student. There are shortcomings to the preparedness of special educators who may serve students with characteristics consistent with an emotional or behavioral disorder. Landrum et al. (2003) site that it is unclear whether teachers who work with emotional or behavioral disorders receive distinct training of skills required. There is a discussion as to whether secondary teachers who provide services to students with emotional or behavioral disorders should fulfill additional



certification requirements (Department of Education, 2006). Professionals fear that additional certification may cause some educators to leave the field; to avoid a loss of educators to work with this population, it is suggested that certification be required for “one core area, plus a reasonable amount of training in other areas” (Department of Education, 2006, p. 46556). Thus, there are requirements for special educators to fulfill in order to effectively serve students with emotional or behavioral disorders.

**General education teachers.** Similarly, general education teachers, who may have students with behaviors consistent with an emotional or behavioral disorder, can also apply these modifications to the classroom setting. The modification listed above (e.g., modifications to seating arrangements, progress monitoring, modifying antecedents and consequences) can be incorporated into a classroom with little disruption to the typical students. Furthermore, students with emotional or behavioral disorders may benefit from peer models who embody appropriate and acceptable behavior (Kamps, Wendland, & Culpepper, 2006). Kamps et al. (2006) also state that peer models may increase self-control in students with emotional or behavioral disorders, and benefits are increased with teacher attention (e.g., praise) and modeling to lessen perceived difficulty of academic tasks that may exacerbate challenging behaviors.

Although general education teachers may not provide direct treatment to students with emotional or behavioral disorders, they may use treatment techniques utilized by other professionals to increase the rigor of the objectives. As a result, the student has consistency in multiple academic environments (i.e., with both the special educator and general education teacher) or, if the student does not qualify for special education services because these characteristics do not prevent them from fully participating in the academic curriculum, then the

modifications can help increase success in a general education setting. Routine yields consistent expectations across settings (Lane, Umbreit, & Beebe-Frankenberger, 1999). Beyond these classroom modifications and the facilitation of peer interaction, the research is limited specific to general educators regarding emotional or behavioral disorders. Because instruction provided to students in education programs is limited regarding emotional or behavioral disorders, researchers recognize that for inclusion programs to be successful, general educators must be provided support and consultation services (Shapiro, Miller, Sawka, Gardill, & Handler, 1999). Shapiro et al. (1999) identifies that lack of support for general educators has been a weakness in inclusionary practices, as demonstrated by their three year study on facilitating inclusion of students with emotional or behavioral disorders in general education classrooms. The results of this study suggest that general educators may need to be provided academic instruction or offered intensive in-services to be successful in managing students with emotional or behavioral disorders in the classroom setting (Shapiro et al., 1999).

**Speech-language pathologists.** The research conducted by other disciplines (i.e., special education, psychiatry/psychology, and medical doctors) has created new assessment measures and treatment procedures that are specific to both the scope of practice of each discipline and the population these procedures claim to serve (i.e., children with emotional or behavioral disorders). This research may also be beneficial to other disciplines as it can be used to enrich understanding of the disorder through multiple perspectives. While all disciplines document that a shortage of research still exists regarding emotional or behavioral disorders, certain academic programs have taken steps to better prepare their students to serve the unique characteristics a student with an emotional or behavioral disorder may present (Stafford, 2011).

Speech-language pathologists should have an integral role in the treatment of school-age students exhibiting characteristics of emotional or behavioral disorders. The American Speech-Language-Hearing Association (2013) identifies nine competency areas, referred to as The Big Nine, in which graduate level speech-language pathology students should obtain a level of proficiency. On this list, the eighth component is “Social Aspects of Communication,” which includes “challenging behavior[s], ineffective social skills [and] lack of communication opportunities” (American Speech-Language-Hearing Association, 2013). These competencies are consistent with characteristics that are reflective of an emotional or behavioral disorder as defined by the United States Department of Education (2004). For example, ineffective social skills are consistent with the difficulty students with emotional or behavioral disorder have in developing appropriate relationships with others. Similarly, challenging behaviors may be representative of the symptoms of an emotional or behavioral disorder; physical symptoms are consistent with externalizing behaviors and fear or anxiety is consistent with internalizing behaviors. Thus, speech-language pathologists are expected to have a unique skillset that is specific to assessing and treating students with emotional or behavioral disorders regarding the social communication aspect of the disorder.

Furthermore, between 50 and 80% of students with emotional or behavioral disorders have a comorbid language impairment, qualifying them for speech-language services (Armstrong, 2011; Audet & Hummel, 1990; Gallagher, 1999; Hyter, Rogers-Adkinson, Self, Simmons, & Jantz 2001); according to Hyter and colleagues (2001), however, 88% of this population has not received a speech-language evaluation. If an underlying language disorder is unidentified and goes untreated, these individuals are at risk for maintaining or exacerbating

behavioral problems, which could negatively impact academic and vocational success (Armstrong, 2011).

Specifically, academic performance is compromised as students with emotional or behavioral disorders tend to demonstrate below average achievement in schoolwork, a lack of motivation toward school in general, and “deficiencies in school related skills such as note taking and test taking” (Anderson, Kutash, & Duchnowski, 2001). Because language disorders are often comorbid with emotional or behavioral disorders, the speech-language pathologist should have background knowledge of emotional or behavioral disorders to maximize treatment efficacy and minimize future difficulties secondary to the disorders. As per Armstrong (2011), this transition-age population with emotional or behavioral disorders is at risk for later developing issues with substance abuse or criminal activity, due to poor verbal and nonverbal skills becoming impressed in the individual. Smith (2007) posits that delinquency is one of the most common externalizing behaviors associated with an emotional or behavioral disorder, with between 30 to 50% of individuals in correctional facilities being diagnosed with a disability. Of this population, approximately 42% has a diagnosed emotional or behavioral disorder (Smith, 2007). Thus, a risk exists for students with an emotional or behavioral disorder to be involved in the juvenile delinquent system, as they are 13 times more likely to be arrested than a student with a different disability (Smith, 2007). It is the responsibility of speech-language pathologists to provide strategies to increase social language skills and competence; however, without adequate instruction, speech-language pathologists are left untrained and ill equipped to meet the complex needs of this population.

Though the research and assessment measures available are limited, there are some options available to speech-language pathologists who encounter a student or are part of a multidisciplinary team diagnosing a student exhibiting behaviors consistent with an emotional or behavioral disorder. The Child Behavior Checklist (Qi & Kaiser, 2004) is one assessment that can be used by speech-language pathologists; although there are no specification as to who may administer the checklist, it is suggested that it is interpreted by persons who have earned a master's degree and experience in working with the corresponding population. Because a test score is usually not sufficient to view the student holistically, observational data of the child's behaviors are important to supplement the results from a battery. Nelson and colleagues (2007) identified behaviors that consistently preceded a diagnosis of an emotional or behavioral disorder. These behaviors include "restlessness, overactivity, aggression...truancy, [and] low academic achievement" (Nelson et al., 2007, p. 368).

Research suggests that students with emotional or behavioral disorders are not a significant proportion of a speech-language pathologist's caseload, although most would qualify (Brinton & Fujiki, 1993; Hyter, 2001; Sanger, Maag, & Shapera, 1994). Specifically, the expertise of speech-language pathologists may be particularly beneficial to students with emotional or behavioral disorders in terms of providing social skills training, conflict resolutions strategies, and peer mediation (Nishida, Montgomery, Sanger, & Moore-Brown, 2002). Nishida and colleagues (2002) explore the communication profiles of incarcerated females youth and documents expressive and receptive language impairments in addition to the behavioral issues that resulted in delinquency. While many studies have shown the relationship between emotional or behavioral disorders and language impairments, how the lack of intervention is likely to yield

truancy, few studies are available to discuss treatment that is effective (Nishida et al., 2002). Gaps in the literature available to speech-language pathologists have been documented; thus, those preprofessional speech-language pathology students that seek information in order to better serve students with emotional or behavioral disorders may be unable to enrich their knowledge (Brinton & Fujiki, 1993). At present, researchers have questioned the extent of training provided to speech-language pathology students in their preprofessional graduate level programs to sufficiently prepare them for the complex needs of this population (Hyter, 2001).

### **Purpose**

Speech-language pathologists are among the school-based professionals that serve students with the label of emotional or behavioral disorder. Brinton & Fujiki (1993) report this paucity in the literature available to speech-language pathologists regarding the assessment and treatment of clients who present with a comorbid emotional or behavioral disorder. As of March 2013, the American Speech-Language-Hearing Association has not issued a position statement regarding emotional or behavioral disorders; thus speech-language pathologists are not provided guidelines and principles specific to this population. Furthermore, it remains unclear how preprofessional speech-language pathology students are prepared by academic and clinical experience to provide evidence-based practice to students with a range of emotional or behavioral disorders. As such, this study seeks to explore the preparedness of preprofessional speech-language pathology students to work with and advocate for students with emotional or behavioral disorders. The surgeon general has issued a statement on treatment as part of a multidisciplinary team so that professionals who work with students with emotional or behavioral disorders can collaborate to provide treatment that is comprehensive and consistent

(US Department of Health and Human Services; US Department of Education; US Department of Justice, 2000). Although many professionals are to be included toward this aim (e.g., physicians, nurses, hospital emergency personnel, day care providers, probation officers, and other child health care providers), this study will explore the progress made by speech-language pathologists to train and prepare preprofessional students with the skills to address and enhance, and identify symptoms for proactive treatment (US Department of Health and Human Services et al., 2000). Toward this aim, three lines of investigation will be explored. These lines include: (a) formal documentation of instruction provided to preprofessional students in graduate level speech-language pathology as explored via an evaluation of course syllabi; (b) in-depth, semistructured interviews that aim to document the self-reflections of preprofessional speech-language pathology students on their academic instruction and clinical experience with students or clients with emotional or behavioral disorders; (c) a case review of one preprofessional speech-language pathology student's experience in assessing and treating a client with a diagnosed emotional or behavioral disorder.

**Theoretical framework.** Lev S. Vygotsky's Social Interaction approach to understanding the relationship between development and learning will be used to anchor these lines of inquiry. This theory may not provide an appropriate context to discuss other professions involved in the assessment and treatment of students with emotional or behavioral disorders; however, it provides a natural foundation to discuss the unique characteristics this population presents that are of interest to speech-language pathologists. Specifically, the Social Interaction Theory speaks to speech, language, and communication (including communicative behaviors) as opposed to a medical or psychological angle. Thus, Vygotsky's Social Interaction Theory and his

concept of the zone of proximal development are applied to each of the lines of inquiry individually. It should be recognized, however, that each line of inquiry is interrelated and cannot be viewed separately.

Vygotsky (1978) posits that the relationship between learning and development is interrelated. According to Vygotsky, social processes facilitate development. As a result, learning opportunities and available tools may be imperative to the mediate development of a skill in an appropriate and successful approach. Using these available tools (i.e., scaffolds) the processes that are in a state of formation can be determined, allowing for the developmental state of the child to be assessed. Following, the teacher may predict what skills may emerge and foster an environment conducive to facilitating the maturation of these developing skills. Regarding school-age students, guided participation in a classroom setting may allow the child to learn and develop to adopt patterns of use of a skill (be it behavioral or academic in nature) in such a way that is representative or appropriate to his or her culture (Vygotsky, 1978). The Social Interaction Theory differs from the theories proposed before it, due to the previously mentioned emphasis on interactions between the student and his or her environment. Vygotsky posits that learning and development are interdependent, thus rejecting three major theoretical positions that had been proposed. These theories are discussed below.

First, Jean Piaget and Alfred Binet suggest a nativist approach to understanding learning and development. They agree that development precedes learning; thus, development is unaffected by learning experiences. More specifically, Piaget proposes that learning utilized the “achievements of development rather than providing an impetus for modifying its course” (Vygotsky, 1978, p. 79). Similarly, Binet argues that if instruction is provided beyond the



developmental level of the child, it is impractical because it is higher than the threshold of development (Vygotsky, 1978). The next theory holds the view that “learning is development,” the processes cannot be viewed as separate events (Vygotsky, 1978, p. 80). Referred to as the learning process by William James, he describes this theory as the organization of innate responses to include more complex versions of the reflexes with which an individual is born (James, 1958). The final theory suggests a composite of the two theories discussed above. Development occurs as a biological process (i.e., the maturation of the nervous system), but learning also occurs as a developmental process (Vygotsky, 1978). Thus, learning is both a developmental process by nature, preparing an individual for learning, and it is also the result of interaction. Expanding this theory, Kurt Koffka postulates although the relationship between learning and development is undoubtedly complex, development is a more significant factor of a child’s knowledge than learning (Vygotsky, 1978).

Vygotsky offers a different approach than those suggested by his predecessors including Piaget and Binet, James, and Koffka. The Social Interaction Theory has two main proposals that distinguish it from the three theories proposed by the previous thinkers. First, it identifies at least two developmental levels including the actual developmental level and the potential level of development (Vygotsky, 1978). Second, Vygotsky (1978) recognizes learning changes as a child transitions from preschool learning (i.e., prior to attending school) and school learning. Thus, using Vygotsky’s Social Interaction Theory is reasonable to provide a framework to discuss the data sources that will explore the preparedness of preprofessional speech-language pathology students to provide services to students with emotional or behavioral disorders across the three research questions.

**Syllabi.** One of the core constructs that can be derived from Vygotsky's Social Interaction Theory is that instruction precedes maturation of a skill. Vygotsky recognizes that instruction is not necessarily confined to the classroom, as he posits children have already developed certain skills prior to preschool without formal academic instruction (Vygotsky, 1978). A syllabi review will seek to explore formal documentation that instruction is provided to preprofessional speech-language pathology students regarding emotional or behavioral disorders. In traditional graduate programs, however, the measurement often used to assess new material (i.e., emotional or behavioral disorders) is through testing. Vygotsky posits that the use of exams measures actual level of development because the questions lead the student and provide a guide to organize material (Vygotsky, 1978). Thus, a syllabi review alone is not sufficient to consider the preparedness of preprofessional speech-language pathology students because it does not provide a measure of potential, but merely implies whether or not instruction occurred exposing students to this unique population (i.e., students with emotional or behavioral disorders).

**Interviews.** Guided by Vygotsky's (1978) zone of proximal development, interviews with preprofessional speech-language pathology students serve as a lens to view the independent knowledge of the preparedness of these professionals to serve the needs of students with emotional or behavioral disorders. These interviews will probe self-beliefs of preparedness. Although academic instruction in a classroom setting will be explored (i.e., thus investigating the actual development level that the students have obtained with material pertaining to emotional or behavioral disorders), this medium also allows clinical experience to be explored, which better demonstrates the potential of students to apply the conceptual knowledge of a lecture to a clinical environment (i.e., how well conceptual knowledge becomes procedural within the student)

academic experience). Although students have a certain level of competency when provided instruction, their actual level of development pertaining to the assessment and treatment of students with emotional or behavioral disorder is the skillset they will need to have acquired in order to provide services independently. Because treatment is individualized, having a development level that is imitative will not be functional and may compromise the efficacy of treatment for students with emotional or behavioral disorders (Vygotsky, 1978).

**Case Review.** According to Vygotsky (1978), when skills have not matured to an independent level, students may rely on the support and experience of an instructor to increase success. As skills mature, the student may require less support as their mental abilities indicate development due to experiential and guided learning. A case review will show the progression of development of a preprofessional speech-language pathology student via working with a student diagnosed with an emotional or behavioral disorder. Thus, the skills may reflect a certain level of imitation. As skills mature, the student may require less support as their mental abilities indicate development due to experiential and guided learning. Thus, the case review can be viewed using Vygotsky's Social Interaction Theory as the learning of a student guides development. That is, the dynamic between learning and development is complex and highlights the importance of instruction to the success of students and the development of skills required for their profession.

### **Research Questions**

Three specific questions are explored in this study: (a) how do graduate level speech-language pathology programs prepare their students to provide clinical (i.e., assessment and treatment) services to individuals exhibiting behaviors characterized as reflecting emotional or behavioral disorders; (b) how do graduate level speech-language pathology students self-reflect

on their own preparedness (via academic instruction and pre-professional clinical experiences) to assess and treat individuals characterized as reflecting emotional or behavioral disorders; and (c) how does a pre-professional speech-language pathology student reflect (via case review) on the specific characteristics and modifications needed while working with a client diagnosed with an emotional or behavioral disorder?

### **Method**

Qualitative research was used to answer the three research questions posed in the present study. As summarized by Jackson and Verberg (2007), qualitative research has different assumptions and approaches than does quantitative research. A qualitative design allowed the researcher to explore a topic where “the concept [was] ‘immature’ due to a conspicuous lack of theory and previous research” (Creswell, 2005, p. 75). As opposed to presenting a priori hypotheses, qualitative research methods seek to make sense of and understand phenomena from the data (Creswell, 2003).

In the following sections, the three research questions were presented separately. Each research question viewed the preparedness of preprofessional speech-language pathology students from a different lens or standpoint. This method is referred to as triangulation, which sought to provide a balanced picture of the phenomenon being reviewed by using multiple sources of data (Cohen & Manion, 2000). As such, the data sources were selected in order to lead to the same result; that is, they each provided a potentially similar answer in regards to how graduate level speech-language pathology students were prepared to work with students with emotional or behavioral disorders (i.e., through academic instruction, clinical experience, and a case review focused on modifications implemented for a specific student with emotional or

behavioral disorders). Because each research question utilized a different data source, information regarding the participants, instruments, procedures, and data analysis varied and were discussed for each research question separately.

### **Research Question 1**

How do graduate level speech-language pathology programs prepare their students to provide clinical (i.e., assessment and treatment) services to individuals exhibiting behaviors characterized as reflecting emotional or behavioral disorders?

Research question 1 sought to explore how graduate level speech-language pathology programs prepared their students to provide clinical (i.e., assessment and treatment) services to individuals exhibiting behaviors characterized as reflecting emotional or behavioral disorders. Although the American Speech-Language and Hearing Association (ASHA) had not issued a position statement at the time of this study regarding the role of the speech-language pathologists in providing services to this particular population (i.e., students with emotional or behavioral disorders), there existed a literature calling for improved assessment and treatment procedures, as well as a call for research specific to the role of the speech-language pathologist in providing services to this population (e.g., Hyter et al., 2001; Brinton & Fujiki, 1993).

**Participants.** Programs accredited by the American Speech-Language-Hearing Association, as opposed to persons, were the subjects of this research question. At the time of this study, the Council on Academic Accreditation (CAA), an entity of the American Speech-Language-Hearing Association, was authorized to credit qualifying programs (American Speech-Language-Hearing Association, 2013). For example, an accredited program had a curriculum that provided its students with the knowledge needed to be competent in their scope of practice,

provided students with opportunities to acquire and demonstrate knowledge related to speech, language, and swallowing disorders, and informed students of ethical practice (American Speech-Language-Hearing Association, 2013). Thus, universities with graduate level speech-language pathology programs in the United States were eligible to be included in the syllabi review. An initial list was collected using the Edfind search engine. Following, the list was cross-referenced with the list of universities accredited by the Council of Academic Accreditation. The name and location (i.e., city and state) of each eligible university (i.e., those with a speech-language pathology graduate program accredited by the Council of Academic Accreditation) was written individually on equally sized index cards and put in an opaque box. The cards were shuffled and then 100 cards were randomly selected, one at a time. A list was maintained of the universities in the order in which they are drawn.

**Instruments.** No special instrumentation was used to answer research question 1.

**Procedures.** Random selection was used to acquire a random and representative sample of the universities with graduate level speech-language pathology programs accredited by the American Speech-Language-Hearing Association. Ideally, the sample would have been diverse in terms of geographic location (e.g., northeastern, Midwestern, or southern institutions), type of institution (e.g., research or teaching universities), and setting (e.g., suburban, rural, or urban).

Following, the author grouped universities by certain features so that patterns emerged according to the major characteristics of the universities. First, the speech-language pathology graduate programs were divided by geographic location. Regions of the United States were divided guided by the United States Census regulations (National Institute for Occupational Safety and Health, 2012). Universities were divided into the following geographic regions:

1. West
  - a. Pacific (Washington, Oregon, California, Alaska, Hawaii)
  - b. Mountain (Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico)
2. Midwest
  - a. West North Central (North Dakota, South Dakota, Minnesota, Iowa, Nebraska, Kansas, Missouri)
  - b. East North Central (Wisconsin, Michigan, Illinois, Indiana, Ohio)
3. South
  - a. West South Central (Texas, Oklahoma, Arkansas, Louisiana)
  - b. East South Central (Kentucky, Tennessee, Mississippi, Alabama)
  - c. South Atlantic (Delaware, West Virginia, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, Florida)
4. Northeast
  - a. Middle Atlantic (New York, Pennsylvania, New Jersey)
  - b. New England (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut).

Universities were also divided by type of institution based on Carnegie Mellon's Basic Classifications (n.d.). The following categories were identified within the sample of 100 universities:

1. Baccalaureate/Art and Science (BAC/A&S): baccalaureate colleges – arts & sciences
2. Master's: Teaching/master's colleges and universities

3. SPEC/Health: Special Focus Institutions – other health professions schools
4. Doctoral/Research Universities
5. Research Universities (high research activity)
6. Research Universities (very high research activity).

Finally, these academic institutions were classified by setting. Three broad settings (i.e., urban, suburban, and rural) were used to classify the 100 selected universities.

Following the random selection of the 100 universities, a syllabi review was conducted for each graduate level speech-language pathology program selected. Programs' websites and university registrar websites were explored for the syllabi and course offerings for the graduate level speech-language pathology program. The goal was to obtain a syllabus for each course the graduate level program offered; however, programs that provided some, but not all, syllabi were also included. Although it was ideal that syllabi are part of the curriculum for the 2012 to 2013 academic year, the most recent version of the syllabi was reviewed. As such, syllabi from previous semesters also provided insight into the programs' previous instruction regarding emotional or behavioral disorders, which could have potentially allowed for documentation of change over time. If a program did not make this information readily available to the public, it was excluded from the study and was not replaced with an additional randomly selected program. After syllabi were collected from each program, they were reviewed for common themes.

**Data analysis.** The researcher used a qualitative approach where “open-ended, emerging data” was collected with the “primary intent of developing themes from the data (Creswell, 2003, p. 18). These common themes were identified and categorized. Specifically, themes pertaining to



the instruction offered related to characteristics of assessment and treatment of emotional or behavioral disorders were documented. Following, similarities were acknowledged such as course titles that offer information on emotional or behavioral disorders or course modules that target the assessment or treatment of the population. Although the data collected was semantic in nature, significance was demonstrated by numeric representation of how common a theme was among the sample.

### **Research Question 2**

How do graduate level speech-language pathology students self-reflect on their own preparedness (via academic instruction and pre-professional clinical experiences) to assess and treat individuals characterized as reflecting emotional or behavioral disorders?

Research question 2 sought to explore the preparedness of preprofessional speech-language pathology students through self-reflection of their own academic and clinical experiences in providing services to students with emotional or behavioral disorders. Based on the documented paucity in the literature for speech-language pathologists regarding this population (Brinton & Fujiki, 1993), the self-reflections expanded to include what the students felt was lacking in their academic, if anything, and clinical experiences regarding evidence-based practice, to qualify their competence, knowledge, and level of comfort in working with students with comorbid emotional or behavioral disorders.

**Participants.** Interview participants were selected from a purposeful sample of the author's peers in terms of who would best assist the researcher in understanding the preparedness of speech-language pathology students in providing services to students with emotional or behavioral disorders (Creswell, 2003). Specifically, the interviewees were a first year graduate

student, a second year graduate student, and a clinical fellow completing her first year post-graduation. All three participants attended master's programs accredited by the Council on Academic Accreditation. Furthermore, the group of three individuals was chosen to achieve some degree of diversity in regards to educational experience. That is, the participants selected were chosen to reflect a variety of universities based on geographic location, type of institution, and setting. Approval from Radford University's Institutional Review Board was obtained for the participation of these participants.

**Instruments.** Interviews were audio recorded using a Coby brand digital voice recorder (model CXR190-2G). This instrumentation reflected high fidelity digital recording equipment.

**Procedure.** The procedures described below were consistent with the application approved by Radford University's Institutional Review Board. The participants participated in individual telephone interviews, one-on-one with the interviewer (i.e., the author). Prior to the interview, the interviewee gave written consent that they agreed to their responses being audio recorded and included in this study. The interviews took place during a mutually agreed upon time decided by both the participant and interviewer. Prior to the interview, consent was verbally obtained and recorded. If verbal consent was not obtained, the interview would not be included in the study. A predetermined interview protocol was utilized with the addendum that any questions that arose may be asked based on the responses of each individual participant. The interview protocol was based on two published interview forms (i.e., Blanks, 2011; Schwartz & Draeger, 2008). The interview protocol is as follows:

1. Describe what you know about emotional or behavioral disorders.
  - a. Who may be diagnosed?

- b. What characteristics might they present?
  - c. How does an emotional or behavioral disorder affect treatment?
  - d. Advantages/disadvantages to an emotional or behavioral diagnosis/label?
2. Describe your training regarding emotional or behavioral disorders.
  - a. What have you learned about emotional or behavioral disorders?
  - b. Where did you learn about emotional or behavioral disorders?
  - c. Who taught you about emotional or behavioral disorders?
3. For what (if any) reasons should a speech-language pathologist be aware of emotional or behavioral disorders?
4. Other questions that emerge within interviews and across the project.

**Data analysis plan.** The researcher used a qualitative approach where “open-ended, emerging data” was collected with the “primary intent of developing themes from the data (Creswell, 2003, p. 18). Each interview participant was assigned a pseudonym to protect anonymity, and the university they attended was not disclosed. The author transcribed the interviews. Following, to answer research question 2, the linguistic data from the interviews was analyzed for themes, similar to the procedure to answer research question 1 (Creswell, 2003). In effect, this line of inquiry attempted to capture the experiences of the participants and break down information into semantic categories, based on terminology used, specific experiences reported based on client or setting, and descriptions of academic instruction provided. Semantic categories were organized, grouping similar linguistic data for ease of interpretation. Data compared and contrasted the reports of each participant.

### **Research Question 3**

How does a pre-professional speech-language pathology student reflect (via case review) on the specific characteristics and modifications needed while working with a client diagnosed with an emotional or behavioral disorder?

Research question 3 sought to examine how a preprofessional speech-language pathology student self-reflected on an experience providing services to a student diagnosed with a language impairment and comorbid emotional and behavioral disorder. This data source was explored using a process called phenomenology, which sought to discern the essence of a lived experience of a participant (i.e., the speech-language pathology student) in a particular situation (i.e., providing speech-language services to a student with an emotional or behavioral disorder) (Jackson & Verberg, 2007).

**Participants.** Research question 3 involved a chart review of data collected throughout the 2011 to 2012 academic year regarding the treatment of a student at a university clinic. The data collected regarding the treatment for a student receiving speech-language services was reviewed. The student was referred to using a pseudonym.

**Instruments.** No instrumentation was used to answer research question 3.

**Procedures.** Creswell (2003) identified the use of chart reviews as a strategy of inquiry for which the researcher may make knowledge claims to establish a pattern. Thus, a chart review was completed to explore the data collected over the course of one academic year (i.e., September 2011 to May 2012). Common themes were tallied and explored for relevance and importance to the instruction of preprofessional speech-language pathology students who may serve individuals with similar diagnoses. The data collected from the chart review was both linguistic and nonlinguistic in nature to discuss the strategies implemented and their success.

That is, data was represented by language the clinician used to self-reflect on the experience or by numeric figures of the student's success in treatment as modifications were made relating to the emotional or behavioral disorder.

**Data analysis.** Phenomenology was utilized to analyze the data collected as the researcher identifies the “essences of human experience concerning a phenomenon” (Creswell, 2003, p. 15). The linguistic and nonlinguistic themes were tallied and categorized in order to find trends that are either novel or in congruence with those found regarding research questions 1 and 2. Thus, the themes identified were semantic and numeric. Thus, they were consistent with data transformation, whereby qualitative data was converted into numbers by recording frequency of use (Creswell, 2003).

## **Results**

The results obtained for the three research questions provided will be discussed separately.

### **Research Question 1**

How do graduate level speech-language pathology programs prepare their students to provide clinical (i.e., assessment and treatment) services to individuals exhibiting behaviors characterized as reflecting emotional or behavioral disorders?

### **Syllabi Review Results**

**Obtaining the sample.** Research question 1 sought to explore the academic instruction provided to graduate level speech-language pathology students. Toward this aim, a syllabi review was completed to seek themes regarding the classes in which content was provided as it related to emotional or behavioral disorders. An initial list of graduate level speech-language

pathology programs was obtained using the Edfind search engine. From this initial search, a pool of 224 universities was identified. This list was cross-referenced with the Council of Academic Accreditation's list of graduate level programs to determine the accreditation status of the university. Following, 22 additional universities were identified and added to the pool, bringing the total number of universities to 246.

Random selection was used to obtain a list of 100 universities; thus, the sample represented approximately 41% of all universities with accredited speech-language pathology graduate programs. After 100 universities were randomly selected, the first researcher explored the university website of each institution to obtain course syllabi from the master's level speech-language pathology program. Syllabi were obtained between October 17, 2012 and March 17, 2013. Program websites, registrar websites, and student information portals (e.g., Blackboard, Desire2Learn, Oasis, AsULearn, and Learn@) were each explored to determine availability of syllabi. The speech-language pathology program title varied per university. As a result the following key words were used to search for content specific to speech-language pathology: speech-language pathology, speech pathology, speech therapy, communication disorders, communicative disorders, communication sciences and disorders, speech and hearing science, speech-language and hearing science, and communication science. Of the 100 programs randomly selected, six universities offered course syllabi that were made publically available. These six universities were not listed by name, but rather will be identified by an assigned number (i.e., University 1, University 2, University 3, University 4, University 5, and University 6). The number assigned to each university reflects the order in which they were chosen through

the process of random selection. Each university is also described in terms of geographic location, institution type, and setting.

**Demographics.** Geographic regions were determined using the guidelines offered by the Centers for Disease Control and Prevention (Centers for Disease Control, 2012). The subgroup of the six universities that offered syllabi made available to the public represented two of the nine categories listed in the methods chapter: South Atlantic and West South Central. The proportion of the universities represented by these two regions is not reflective of the overall distribution of speech-language pathology programs. Of the 246 universities identified, 23 are included in the south Atlantic and west south central regions. Thus, a pool of approximately 9.35% of the eligible universities is representing the whole.

The six universities were then divided into classifications of institution type offered by the Carnegie Foundation for the Advancement of Teaching (n.d.). Speech-language pathology master's level programs were represented by six classifications total. The six universities being reviewed for this study, however, totaled four categories: one is a master's: teaching/master's university, one is a doctoral research university, two were classified as research universities (high research activity), and two were classified as research universities (very high research activity).

Two settings are identified by the United States Census Bureau (2013), which include urban and rural. These terms are used to discuss population densities for a given area. According to the United States Census Bureau classifications, an urban setting is an area with more than 1,000 occupants per square mile; by exclusion, a rural setting is an area that does not meet the

criteria to be considered urban. Two of the six universities are classified as rural and four are classified as urban.

Regarding the demographics of the university participants, 67% (2/3 universities) of the South Atlantic offered information regarding emotional or behavioral disorders. Of the West South Central universities, 33% (1/3 universities) provided academic instruction regarding emotional or behavioral disorders. The type of institution did not demonstrate any pattern regarding academic information regarding emotional or behavioral disorders. That is, a teaching/master's university, a research university with a high level of research activity, a research university with a very high level of research activity each provided information regarding emotional or behavioral disorders, whereas a doctoral research university, a research university with a high level of research activity, and a research university with a very high level of research activity did not. Thus, 100% teaching/master's universities sampled (1/1 universities) provided academic instruction related to emotional or behavioral disorders, whereas 100% (1/1 universities) of doctoral research universities did not offer course syllabi that indicated instruction regarding emotional or behavioral disorders. Conversely, 50% (1/2 universities) of research universities with a high level of research activity and 50% (1/2 universities) of research universities with a very high level of research activity in the sample provided instruction regarding emotional or behavioral disorders. Regarding setting, 100% (2/2 universities) of the rural universities sampled provided some degree of academic instruction regarding emotional behavioral disorders. Conversely, 25% (1/4 universities) of urban universities provided their graduate level speech-language pathology students with academic instruction specific to emotional or behavioral disorders. Please see Table 1 (Demographic Results of Syllabi Review).



Table 1

*Demographic Results of Syllabi Review*

University	Geographic Region	Institution Type	Setting	Syllabi Offered
1	South Atlantic	Master's: Teaching/Master's University	Rural	25
2	West South Central	Doctoral Research University	Urban	18
3	West South Central	Research University (High Research Activity)	Urban	23
4	South Atlantic	Research University (High Research Activity)	Urban	31
5	West South Central	Research University (Very High Research Activity)	Urban	15
6	South Atlantic	Research University (Very High Research Activity)	Rural	21

**Syllabi content.** Of the syllabi collected from the six universities, Universities 1, 3, and 6 offered instruction regarding emotional or behavioral disorders; conversely, Universities 2, 4, and 5 did not demonstrate instruction was provided to preprofessional speech-language pathology students regarding emotional or behavioral disorders. University 1 offered this information in the context of a class titled Social Communication in Autism. The syllabus indicated that behavioral concerns of clients with autism should be discussed while collecting a case history from the parents. University 3 incorporated a learning objective for a course (i.e., in

a class titled Disorders in Children) that aimed to discuss problems associated with comorbid behavioral and language disorders. Finally, University 6 addressed potential behavioral disorders by incorporating one lecture in a class (i.e., Language Assessment and Intervention with School-Age Children) regarding behavioral management. Please see Table 2 (Results from Syllabi Review Specific to Emotional or Behavioral Disorders).

Table 2

*Results from Syllabi Review Specific to Emotional or Behavioral Disorders*

University	Relevant Information Provided?	Relevant Course Names	Relevant Information Included in Syllabi
1	Yes	Social Communication in Autism	Case histories of clients with autism should explore potential behavioral disorders.
2	No	N/A	N/A
3	Yes	Disorders in Children	Language disorders may be comorbid with behavioral disorders.
4	No	N/A	N/A
5	No	N/A	N/A
6	Yes	Language Assessment and Intervention with School-Age Children	Behavioral management is important for language assessment and intervention.

**Themes.** Themes include the course names in which content provided was relevant to emotional or behavioral disorders. These courses include Social Communication in Autism, Disorders in Children, Language Assessment and Intervention with School-Age Children. The content provided in these course offerings varied and the themes derived include using a case history to explore potential emotional or behavioral disorders in children with an autism spectrum disorder, language disorders that may be comorbid with emotional or behavioral disorders, and behavioral management techniques for language assessment and treatment strategies.

Because graduate level speech-language pathology programs provide both academic instruction and clinical experiences to their students, syllabi were not appropriate to be the sole source of data to review overall preparedness of preprofessional speech-language pathology students. Thus, research question 2 seeks to supplement the syllabi by obtaining insight into both specific coursework and practicum experiences related to emotional or behavioral disorders.

### **Research question 2**

How do graduate level speech-language pathology students self-reflect on their own preparedness (via academic instruction and pre-professional clinical experiences) to assess and treat individuals characterized as reflecting emotional or behavioral disorders?

### **Interview Results**

Three interviews were conducted toward this aim. Interviews took place between March 12, 2013 and March 25, 2013 and were between 10 and 13 minutes in duration. Verbal consent was obtained prior to the onset of each interview. Additionally, written consent was obtained via email; each participant was provided with a statement of research and an invitation to participate

to which they were asked to respond either agreeing to participate or declining to participate. Participation was voluntary (i.e., not required), which was indicated in the statement of research.

**Demographics.** The interview participants ranged in age from 22 to 25 years of age. One participant was a first year graduate student, one was a second year graduate student, and one was currently completing a clinical fellowship experience. Each participant has graduated, or will graduate, from a program accredited by the Council of Academic Accreditation, an entity of the American Speech-Language-Hearing Association. The information obtained from each participant will be discussed separately. Educational background of the interview participants is provided in the following table to depict the geographic region, institution type, and setting for their respective graduate level academic experiences. Following, participants will be identified by randomly assigned pseudonyms: Emma, Bridgette, and Kirsten. Please see Table 3 (Demographic Results of Interview Participants).

Table 3

*Demographic Results of Universities Attended by Interview Participants*

Participant	Graduate Program Geographic Region	Graduate Program Institution Type	Graduate Program Setting
Emma	West South Central	Doctoral Research University	Urban
Bridgette	South Atlantic	S-Doc/Ed: Single Doctoral (Education)	Urban
Kirsten	New England	Research University (Very High Research Activity)	Urban

**Themes.** Please refer to Appendix A for the interview protocol utilized in this study. In brief, the interview participants each identified minimal academic instruction specific to emotional or behavioral disorders. Themes were identified related to the classes in which academic instruction was offered regarding emotional or behavioral disorders (i.e., courses on autism spectrum disorders, child language disorders, the birth to 3 years population, the birth to 5 years population, and child psychopathology). Furthermore, academic instruction regarding emotional or behavioral disorders was more prevalent in graduate level courses than the undergraduate experience. Themes relevant to the content regarding emotional or behavioral disorders divulged in the classroom experience include diagnostic criteria, comorbid conditions, and how to manage challenging behaviors. These details are summarized in brief in Table 4 (Results from Interviews Specific to Experience with Emotional or Behavioral Disorders).

Table 4

*Results from Interviews Specific to Experience with Emotional or Behavioral Disorders*

Participant	Classes offered relevant content?	Provided relevant clinical experience?	Benefitted most from classroom instruction or clinical experience?
Emma	Birth to Three Years; (undergraduate) Child Psychopathology	Yes	Clinical Experience
Bridgette	No specific class identified	Yes	Clinical Experience
Kirsten	No specific class identified	Yes	Clinical Experience

Other themes identified were specific to the self-reflection of the interview participants' confidence in the knowledge obtained to effectively provide services to students with emotional or behavioral disorders. These themes include the following: feelings that clinical experience was more beneficial than academic instruction in learning about characteristics and challenges associated with emotional or behavioral disorders; the gaps in clinical experience and academic instruction which left students to independently seek information and learn incidentally through practicum opportunities; information regarding emotional or behavioral disorders that was learned from other professionals (e.g., behavioral therapists and special education teachers); experience with emotional or behavioral disorders often being limited to a characteristic under a different diagnosis (e.g., autism or pervasive developmental disorder – not otherwise specified); seeing the label as an advantage in the schools due to additional support provided to students with a diagnosed emotional or behavioral disorder; the label being viewed as a disadvantage due to the stigma and permanency associated with the label of an emotional or behavioral diagnosis; and the overall importance for speech-language pathologists to be aware of emotional or behavioral disorders in students who are seen for speech-language assessments and treatment in the public school system. Themes that may not have been consistent across interview participants included recognition that students from low socioeconomic statuses and unstable home lives were overrepresented in the clinical experiences in working with students with emotional or behavioral disorders.

Summaries of the interview transcripts are available in Appendix B. Each participant's (i.e., Emma, Bridgette, and Kirsten) responses are recorded separately.

### **Research Question 3**

How does a pre-professional speech-language pathology student reflect (via case review) on the specific characteristics and modifications need while working with a client diagnosed with an emotional or behavioral disorder?

### **Case Review Results**

The goal of the case review was to identify effective strategies implemented by a preprofessional speech-language pathology student during the first year of a graduate level program (i.e., September 2011 to May 2012). The Institutional Review Board accepted a waiver of consent to allow for the review of information pertaining to the assessment and treatment processes of one student. Participation was not required and allowing data collected during the academic year to be used as part of this study was completely voluntary.

**Demographics.** The case review pertained to an experience in providing speech-language services to an adolescent, Ben, with a language disorder and comorbid emotional or behavioral disorder as diagnosed by a psychiatrist. That is, Ben was provided a medical diagnosis as well as a label in the public school system until he reached high school. At that time, the label of emotional or behavioral disorder was removed from his individualized education plan (IEP).

The services provided by the preprofessional speech-language pathology student took place at a university clinic. Treatment sessions were primarily individual (i.e., one-on-one sessions between the student and student clinician); however, there were infrequent opportunities for group sessions (i.e., an additional student and/or student clinician might participate in treatment sessions).

**Themes.** The strategies used to account for the confounds in treatment secondary to the emotional or behavioral disorder were found through a combination of independent research regarding emotional or behavioral disorders and suggestions from the clinical supervisor. These strategies, however, are specific to the case review of one adolescent student diagnosed with an emotional or behavioral disorder. That is, they may not be applicable to all students because the nature of emotional or behavioral disorders is highly variable. The strategies included establishing a safe learning environment and positive rapport with the client, taking time in establishing treatment goals, utilizing active listening, and providing ample time for responses to allow for self-correction. Each theme is discussed below.

*Safe learning environment and positive rapport.* Prior to beginning treatment, it is imperative that a safe learning environment is established. This environment does not simply refer to the physicality of the treatment room, but extends to the relationship between the student clinician and the student. Building a positive rapport with the student is necessary for learning to occur. Regarding the case review, at the onset of treatment, Ben was hesitant to provide responses when there was a potential risk of being incorrect. The student clinician was unfamiliar, and he was unsure of how the student clinician would react to incorrect responses or substandard performance. When the student clinician provided feedback to foster learning, Ben would also become defensive and unresponsive; as such, little progress was documented throughout the first sessions.

It was at this point in the treatment semester, where the student clinician began to understand the impact of an emotional or behavioral disorder on treatment. Although Ben's emotional or behavioral disorder manifested primarily with internalizing behaviors (e.g., being



withdrawn), aggressive behaviors were exhibited in the school setting. Although these behaviors were not demonstrated at the university clinic, certain precautions were put in place to avoid a potentially unsafe situation for the student clinician, such as a seating arrangement that allowed for an exit strategy from the treatment room and stepping out of the treatment room if the student became noticeably frustrated. Although these measures were meant to ensure a certain level of security, it also made the student clinician tense to have knowledge of the potential for violent behavior. Because Ben was unlikely to verbalize when he was frustrated, it put pressure on the student clinician to recognize these behaviors without truly knowing Ben and his triggers.

As Ben became more comfortable with the student clinician, he was more willing to participate in activities with the risk of being incorrect. He also became more receptive to feedback. Feedback was often provided with acknowledgement of the material being difficult due to the student not being taught the content previously (e.g., “I know this is difficult because you haven’t been taught how to do this before”). Thus, the burden of the content removed from Ben, who no longer showed strong reactions to avoid revealing his lack of knowledge.

***Wait to establish goals.*** Because it may take time to establish rapport and an environment conducive to learning, it is important to wait to establish goals and objectives. If goals and objectives are established before the client feels comfortable with the student clinician and setting, they may not reflect the client’s true ability level. For example, in the case review, Ben began the semester by offering responses such as “I don’t know” instead of making thoughtful attempts to work with the material. These responses were also impulsive and often unrelated to the target response. At this point, the student clinician’s view of the student did not reflect his actual ability level. Ben appeared unmotivated to apply himself in treatment sessions, which was

consistent with reports regarding his academic performance in school, but he also appeared to have little knowledge regarding the probes provided by the student clinician.

At this point in the treatment semester, little progress was being made toward establishing rapport and understanding the nature of the student's language impairment and the impact of his emotional or behavioral disorder. Thus, the student clinician began to feel the discrepancy between this student and her others. Although it was recognized that all students have different comfort levels in working with new student clinicians, learning curves, and responses to treatment approaches, it was difficult to have success with other students and feel like no benefit was being provided to another.

As Ben became more comfortable with the student clinician, however, he began to share more information that demonstrated increased knowledge of certain interests, as well as put forth more effort in completing homework assignments and activities during the treatment sessions. His motivation was exemplified through frequently checking in with the student clinician (e.g., "How am I doing? What would happen if I finished all my work?"). That is, he began to seek feedback, rather than shut down when feedback was offered unsolicited. Thus, through establishing a safe learning environment and positive rapport with the student clinician, the student demonstrated great motivation to improve targeted skills, which had not been apparent at the onset of treatment. As a bonus to the graduate level speech-language pathology student, once a positive rapport is established, it was easier to explore the student's personal interests and attempt to incorporate these interests into treatment to make it more authentic and meaningful for the student. For example, Ben expressed an interest in certain activities (e.g., yo-yos). When the clinician showed interest in these hobbies and incorporated them into treatment, Ben began to

take a more active role in guiding his treatment as he saw the influence he had to participate in the planning of sessions. He made suggestions of materials to use that would motivate him, and began to demonstrate skills of how his actions (e.g., recommendations of clinical materials to obtain) may affect other students (e.g., they also would benefit from new supplies that they also might find interesting). Taking into account the student's interests and making them valid by using them in treatment, seemed to impact Ben's confidence regarding the target skills.

*Active listening.* Once goals and objectives were established, treatment sessions were planned in such a way to provide both moments of teaching targeted skills and moments that allow for repeated opportunities for the student to demonstrate progress regarding the target skills. Due to the variable nature of emotional or behavioral disorders, treatment might not show a consistent trend of progress. Regarding the case review in particular, performance in treatment sessions was often influenced by Ben's perception of his school day that preceded his sessions at the university clinic. For example, on days where he reported being misunderstood by a teacher, being referred to as incapable of learning by students or professionals, or feelings of isolation (e.g., "No one at the school cares"), the data collected typically demonstrated a regression in skills that had been improved upon compared to baseline data. As the academic year progressed, however, the student clinician began to use active listening, whereby she attempted to listen for the underlying meanings in Ben's message (Apel & Swank, 1999). Ben tended to be fairly neutral in responses (e.g., school, his weekends, and holidays were often described as "okay" with no memorable events or news to share). As a result, the student clinician used active listening to determine if the data collected was skewed by Ben's current mental state. For example, on days when Ben was less responsive to positive feedback or resisted certain tasks, the

student clinician would redirect the conversation to discuss how school was going. Ben would often lament that teachers would tell him he could not read. The student clinician would acknowledge his feeling, but emphasize his success (e.g., “They may say that, but you have worked so hard here to improve your reading and have accomplished a great amount”). Often, this dynamic of acknowledgement negative feelings and refuting these feelings with concrete examples of his progress would yield a more productive treatment session.

***Provide ample time for self-correction.*** Lastly, the student clinician identified and implemented strategies used during treatment that increased success of the student. Because of the nature of the student’s emotional or behavioral disorder, the student clinician found that providing ample time for Ben to respond afforded him with a more positive experience in treatment sessions. He was not rushed, so he did not feel a pressure to perform at a certain rate. In fact, one session was spent entirely on a social story regarding the importance of taking time to consider all options before responding, which was helpful in addressing the impulsive nature Ben often demonstrated. Because Ben felt he could take his time, thus decreasing his impulsiveness, the answers he provided were more appropriate to the target than when he was trying to complete an activity quickly. Before, it seemed that Ben equated a rapid response with success regardless of the relevance of the response. The student clinician noticed by not providing feedback instantly (e.g., telling the student if his response was correct or incorrect), and instead used an expectant delay that the student was more likely to self-correct. Thus, these self-monitoring skills also increased his accuracy and success with the objectives identified on his treatment plans of care. A cueing hierarchy was established so that the student clinician could document the level of scaffolding required to increase Ben’s accuracy in target skills. The cueing

hierarchy utilized during treatment included the following steps after Ben provided a response: (1) pause, using an expectant delay to allow for self-correction; (2) redirect; (3) provide supportive dialogue (i.e., think aloud); then (4) discuss the correct response if scaffolding from previous steps was not sufficient.

To review, the themes identified in the case review included establishing a safe learning environment and positive rapport with the client, taking time in establishing treatment goals, utilizing active listening, and providing ample time for responses and allow for self-correction.

### **Discussion**

The purpose of this study was to investigate the academic and clinical experience provided to preprofessional speech-language pathology students in graduate level programs. Toward this aim, three research questions were proposed including: (a) how do graduate level speech-language pathology programs prepare their students to provide clinical (i.e., assessment and treatment) services to individuals exhibiting behaviors characterized as reflecting emotional or behavioral disorders, (b) how do graduate level speech-language pathology students self-reflect on their own preparedness to assess and treat individuals characterized as reflecting emotional or behavioral disorders, and (c) how does a specific graduate level speech-language pathology student self-reflect on her own clinical experience. Given that academic and clinical preparedness should yield a more confident and competent clinician, these two areas (i.e., academic instruction and clinical experience) were explored through a syllabi review (i.e., research question 1), interviews with preprofessional speech-language pathology students (i.e., research question 2), and a case review of a student with a diagnosed emotional or behavioral

disorder who was provided speech-language services by one preprofessional speech-language pathology student (i.e., research question 3).

The results from this study intended to bear on the preparedness of preprofessional speech-language pathology students to provide services to school-age students with emotional or behavioral disorders based on academic instruction, clinical experience, and self-reflection of one student’s experience and the modifications and strategies that proved beneficial throughout the assessment and treatment process. Although some overlap existed regarding the data collected for each research question, different themes emerged when considering the preparedness of preprofessional speech-language pathology students to provide services to students with emotional or behavioral disorders. Themes identified for each research question will be considered below. Please refer to Table 5 (Themes for Research Questions 1, 2, and 3) for a summary of the themes identified per each line of inquiry.

Table 5

*Themes for Research Questions 1, 2, and 3*

Identified Themes for Each Research Question		
<i>Research Question 1: Syllabi Review</i>	<i>Research Question 2: Interviews</i>	<i>Research Question 3: Case Review</i>
Social Communication in Autism	Diagnostic Criteria	Safe Learning Environment and Positive Rapport
Disorders in Children	Comorbid Conditions	Wait to Establish Goals

Language Assessment and  
Intervention with School-  
Aged Children

Managing Challenging  
Behaviors

Active Listening

Gaps in Academic  
Instruction and Clinical  
Experience

Allow Time for the  
Student to Self-  
Correct

Multidisciplinary  
Approach

Advantages of an EBD in  
the Public School System

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### **Syllabi Review**

The syllabi review intended to obtain data pertaining to the academic instruction that is provided to preprofessional speech-language pathology students at the graduate level. At first glance, there was no conspicuous overlap of content that each course provided regarding emotional or behavioral disorders. As such, each course offering was discussed separately in terms of what content was provided to preprofessional speech-language pathology students to prepare them to effectively assess and treat students with emotional or behavioral disorders.

**Social communication in autism: Effective use of a case history.** One graduate level speech-language pathology program offered information regarding emotional or behavioral disorders in the context of autism spectrum disorders (i.e., University 1). These two disorders (i.e., emotional or behavioral disorders and autism spectrum disorders) were often paired in the literature because of their high comorbidity rates (e.g., Simonoff et al., 2008). Furthermore,

research supported the use of questionnaires to help clinicians obtain some information regarding students' social and behavioral backgrounds that might impact speech-language treatments. For example, the Autism Spectrum Screening Questionnaire (ASSQ) was identified as a management survey to provide to parents prior to meeting the student. This questionnaire intended to provide insight on the student's behavior that had the potential to affect the assessment and subsequent treatment (Ehlers, Gillberg, & Wing, 1999). Thus, this study was consistent with the academic instruction provided in the Social Communication in Autism course offered by University 1.

**Disorders in children: Language disorders may be comorbid with behavioral disorders.** University 3 offered academic instruction regarding emotional or behavioral disorders, as they might be comorbid with a language disorder. Discussing these two disorders jointly recognized the high comorbidity rates of language disorders and emotional or behavioral disorders. For example, between 50 and 80% of students with emotional or behavioral disorders were also identified as having a comorbid language impairment (e.g., Armstrong, 2011). Based on the course title, the primary population discussed included children. Because language so closely affected academic achievement, it was important that these students were appropriately identified for both disorders as an emotional or behavioral disorder might also impact academic and vocational success (Armstrong, 2011). Thus, the academic content that was provided to graduate level speech-language pathology students in this particular course at University 3 was consistent with the current research regarding emotional or behavioral disorders and comorbid language disorders. Preprofessional students in this course might be better prepared to provide services to a child with a language disorder and recognize characteristics that might reflect an



emotional or behavioral disorder, thus providing them the opportunity to make an appropriate referral.

**Language assessment and intervention with school-aged children: Behavioral management strategies.** Though not explicitly specific to emotional or behavioral disorders, University 6 offered a course (i.e., Language Assessment and Intervention with School-Aged Children), which was designed to provide academic instruction regarding behavioral management strategies in the assessment and treatment processes for students with a language impairment. High comorbidity rates of language disorders and emotional or behavioral disorders supported the need to provide instruction related to minimizing the negative effects emotional or behavioral disorders might have on the data collected during assessment and treatment (Armstrong, 2011). Although students with disorders other than emotional or behavioral disorders might require behavioral management, these strategies would be particularly important to facilitate effective treatment for a student with an emotional or behavioral disorder. For example, Fujiki, Brinton, Morgan, and Hart (1998) explored characteristics of an emotional or behavioral disorder (i.e., social withdrawal) and concluded assessment and treatment procedures should account for the effect these characteristics may have (i.e., if behavior was not addressed, treatment might not have been as successful). As a result, the strategies discussed in the context of this course might have extended to help preprofessional speech-language students as they prepared to provide services to students with emotional or behavioral disorders.

**Summary.** The academic instruction provided to preprofessional speech-language pathology students regarding emotional or behavioral disorders was not widely available based on the results obtained from the syllabi review. Fifty percent of the universities that made their

course syllabi publically available incorporated some level of information regarding emotional or behavioral confounds to services a speech-language pathology might provide. Although it is recognized that the content from the syllabi review might not reflect the entire academic experience for these graduate level students, students might benefit from more rigorous academic instruction regarding emotional or behavioral disorders. Thus, findings provided modest support for the need for academic instruction in order to mature and develop a skillset that is beyond being imitative.

### **Interviews**

In order to supplement the syllabi review and the data regarding academic instruction, interviews with preprofessional speech-language pathology students were utilized. The interviews intended to provide insight as to the clinical experience that graduate level students gained in providing services (i.e., assessment and/or treatment) to students with emotional or behavioral disorders and how their clinical experience was supported by academic instruction. The themes from the interview are discussed below. These themes included: diagnostic criteria, comorbid conditions, managing challenging behaviors, gaps in the academic instruction and clinical experience, multidisciplinary approach, and advantages to a label of an emotional or behavioral disorder in the school setting.

**Diagnostic criteria.** Because the Individuals with Disabilities Education Act (2004) was authored to identify emotional or behavioral disorders as a label that might be provided in the school setting, speech-language pathologists should have background knowledge of the diagnostic criteria so that an appropriate referral may be made because of the high comorbidity rates (e.g., Armstrong, 2011). One interview participant, Emma, reported being provided with

the diagnostic criteria in an academic setting (i.e., an undergraduate course specific to child psychopathology) (personal communication, March 12, 2013). All the interview participants (i.e., Emma, Bridgette, and Kirsten) identified characteristics of an emotional or behavioral disorder, indicating background information gained from clinical experience that afforded them with knowledge of how to recognize a potential emotional or behavioral disorder on their respective caseloads. Kirsten, however, qualified the characteristics she identified by reporting her specific experiences with students might not be representative of the entire population of students with emotional or behavioral disorders, thus recognizing the limits to her clinical experience and gaps in her knowledge (personal communication, March 23, 2013).

**Comorbid conditions.** Overall, the interview participants identified three diagnoses that might be comorbid with an emotional or behavioral disorder. These included autism spectrum disorders, speech-language disorders, and intellectual disabilities. Two interview participants (i.e., Emma and Bridgette) identified autism spectrum disorders as being comorbid with emotional or behavioral disorders. While the comorbidity of these two disorders had been documented to be high (e.g., Simonoff et al., 2003), it was important to note that the presence of one does not indicate the presence of the other; emotional or behavioral disorders and autism spectrum disorders also exist separately. Kirsten recognized this separation of labels when discussing her academic instruction (personal communication, March 23, 2013).

Through clinical experience, Emma and Bridgette both identified speech-language disorders as conditions that might be comorbid with an emotional or behavioral disorder (personal communication, March 12, 2013; personal communication, March 19, 2013). As documented by Armstrong (2011), between 50 and 80% of students with emotional or behavioral

disorders also had a comorbid language impairment. Thus, the assumptions of Emma and Bridgette were consistent with current research. Kirsten, however, identified instances in her clinical experience where students that had emotional or behavioral disorders were referred for a speech-language evaluation, but did not qualify for subsequent services (personal communication, March 23, 2013). Kirsten recognized the potential for speech-language services specific to social communication, which might be identified as the discrepancy of language abilities might become more obvious as the demands of the student's academic and social environments increase (personal communication, March 23, 2013). Thus, reassessment might benefit older students with emotional or behavioral disorders.

Bridgette also reported potential intellectual disabilities that might be comorbid with emotional or behavioral disorders (personal communication, March 19, 2013). Although she was the only interview participant to identify this particular diagnosis, her suggestion was supported by current research. For example, Einfeld & Tonge (1996) found that approximately 41% of students between the ages of 4 and 18 years who had an intellectual disability also had a comorbid emotional or behavioral disorder.

**Managing challenging behaviors.** Behavioral management is applicable to all students--regardless of having a diagnosed emotional or behavioral disorder. Strategies might become especially helpful to speech-language pathologists who assess and treat students with emotional or behavioral disorders, as the characteristics these students present might be particularly challenging and persistent. Each interview participant reported academic instruction and/or clinical experience regarding how to manage challenging behaviors.

Emma and Bridgette each reported a degree of success in using these techniques to manage challenging behaviors in treatment sessions. Emma reported using redirection, substitute activities, and providing breaks from treatment as effective strategies in her clinical experience with a student who had an emotional or behavioral disorder (personal communication, March 12, 2013). Bridgette identified individual therapy (one-on-one sessions between the speech-language pathologist and student) as being a strategy that might be used to manage behaviors and maximize treatment efficacy (personal communication, March 19, 2013).

Although Kirsten did not identify specific strategies, she reported that the behavioral management techniques taught in a graduate program were not always effective when applied to clinical practice (personal communication, March 23, 2013). This speaks to the paucity in the literature regarding the treatment of emotional or behavioral disorders. The literature available to speech-language pathologists was scarce, leaving those interested in strategies to effectively treat speech or language disorders in students with comorbid emotional or behavioral disorders without a breadth of research to consider, which seems consistent with other professions that continue to identify the gaps in their respective research bases (Brinton & Fujiki, 1993).

**Gaps in academic instruction and clinical experience.** The data collected from the interviews with graduate level students suggested preprofessional speech-language pathology students might have more opportunities to gain experience with students who have emotional or behavioral disorders in a clinical setting than through academic instruction. Each student identified minimal academic instruction regarding emotional or behavioral disorders. This finding was problematic when considering the Social Interaction Theory, which posits instruction must precede maturation of a skill (Vygotsky, 1978). Specifically, Emma reported

that she had not “learned much about [emotional or behavioral disorders] in [her] classes” (personal communication, March 12, 2013), with Bridgette echoing the sentiment in that she was provided “no formalized instruction” regarding emotional or behavioral disorders (personal communication, March 19, 2013). Kirsten also reported minimal academic experience specific to emotional or behavioral disorders; however, she reported a lecture that provided information regarding managing challenging behaviors (personal communication, March 23, 2013). Kirsten cautioned that although academic instruction was provided, it was not consistent with clinical practice. That is, Kirsten felt the “[strategies] learned that were supposed to [minimize challenging behaviors did] not work” with all students (personal communication, March 23, 2013). She felt as if the strategies available do not encompass all the complex issues that students with emotional or behavioral disorders may present. Thus, the data obtained regarding academic instruction on emotional or behavioral disorders was consistent with studies that question the preparedness of preprofessional speech-language pathologists to treat students with emotional or behavioral disorders (Brinton & Fujiki, 1993).

**Multidisciplinary approach.** A collaborative assessment and treatment approach was identified as the ideal method for treating emotional or behavioral disorders and had been the standard which professionals were asked to use to maximize treatment efficacy (e.g., Stafford, 2011). A multidisciplinary approach was demonstrated by the clinical experiences of the interview participants. Bridgette identified learning “the most about the emotional [or behavioral] disorders” from a behavioral therapist with whom she provided treatment to jointly target pragmatic skills (personal communication, March 19, 2013). Kirsten also reported that much of her experience with emotional or behavioral disorders had been guided by special

education teachers who were part of the diagnostic and treatment team for these students (personal communication, March 23, 2013). Thus, the collaborative experiences of Bridgette and Kirsten were somewhat supported by the initiatives that called for a collaborative and comprehensive treatment approach for students with emotional or behavioral disorders (Chesapeake Institute, 1994). Although these multidisciplinary teams do not incorporate all professionals discussed in this study, the professionals involved have training specific to behavioral management, which would be particularly beneficial for a speech-language pathologist to observe and learn.

**Advantages of an emotional or behavioral disorder in the public school system.** The interview participants also discussed the advantages of a student receiving a label of an emotional or behavioral disorder in the public school system. Emma, Bridgette, and Kirsten all identified a benefit to be the additional support that would be provided to the student (personal communication, March 12, 2013; personal communication, March 19, 2013; personal communication, March 23, 2013). These supports, however, were contingent on the expertise and preparedness of speech-language pathologists and other members of the multidisciplinary team to provide services to students with emotional or behavioral disorders. Kirsten identified special education teachers as having supported her in providing strategies to maximize treatment efficacy (personal communication, March 23, 2013). Although it was unclear as to the level of instruction special education teachers receive in preprofessional training (Landrum et al., 2003), there was literature specific to the profession that provided protocols for effective behavioral intervention (e.g., Park et al., 2011). Thus, Kirsten's experience was supported by current research. Although behavioral therapists were not individually discussed in the context of this

study, their unique expertise would likely benefit a student with emotional or behavioral disorder, as Bridgette suggested through her clinical experience. Emma discussed the advantages general education teachers might provide if a student is provided a label of an emotional or behavioral disorder (personal communication, March 12, 2013). General education teachers may be able to draw on the literature of other professionals to benefit the student with an emotional or behavioral disorder (e.g., Kamps et al., 2006; Lane et al., 1999). For example, they may utilize the positive behavior supports and seating arrangements identified by research that sought to supplement the strategies available to special education teachers.

**Summary.** Overall, the interview participants reported that clinical experience afforded them more information regarding emotional or behavioral disorders than did academic instruction at their respective graduate level programs. Most identified that they learned through observing clinical supervisors or other professionals that may be a part of the diagnostic or treatment team. As a result, these experiences are specific to one student and might not be generalized to other students with an emotional or behavioral disorder due to the high variability of characteristics and confounds to treatment. Thus, these findings are consistent with the need for academic instruction regarding emotional or behavioral disorders so that content can be taught and then put into clinical practice.

### **Case Review**

The case review allowed for the exploration of a preprofessional speech-language pathology student's experience in providing services to an adolescent with a diagnosed emotional or behavioral disorder. The case review attempted to demonstrate how a graduate level student clinician modified treatment to meet the unique needs of the student, as well as allow for



self-reflection on how academic instruction and the available literature supported the modifications made to facilitate treatment efficacy. The themes identified through this line of inquiry included: establishing a safe learning environment and positive rapport, waiting to establish goals, active listening, and allowing time for self-correction during treatment.

**Safe learning environment and positive rapport.** As the results suggested, establishing positive rapport with students is imperative for treatment to be effective. Regarding the case review, once the student clinician and the client, Ben, had some degree of rapport, treatment became more profitable for him and successes were documented. That is not to say that he began to meet his objectives steadily with weekly improvement. On the contrary, his progress was inconsistent throughout the academic year, secondary to other events (e.g., difficult school days, experiences with bullying) that impacted motivation and participation. Overall progress, however, was shown and Ben either met or was close to meeting all objectives at the time of the reassessment. Establishing rapport was a slow process because of Ben's wariness of unfamiliar people who may potentially have a negative view of him. For example, he often lamented that the teachers at the high school already had negative perceptions of him without having meeting him due to the opinions of his middle school teachers and principal.

Rapport was formed organically and some of the techniques used were supported by Pattison and Powell (1989-1990), although no specific protocol or evidence-based practice was sought prior to interactions to facilitate the process. Pattison and Powell (1989-1990) considered the techniques used "common sense rapport building constructs," and these included adaptations to different students, making the experience enjoyable, encouragement, friendliness, expressing interest in the child, praise, and making small talk (p. 78).

Given Ben's distrust of unfamiliar people, adaptations were made specific to him that might not have been used with a different student. For example, the first treatment session was very conversational in nature with little formal assessment measure being completed. The student clinician asked about Ben's hobbies and what subject was his favorite in school. This conversation was not very productive because of Ben's withdrawnness secondary to his emotional or behavioral disorder. That is, instead of responding to social bids, he asked why he was being asked such questions. Thus, the student clinician focused on introducing herself (e.g., she showed Ben pictures of her pets, talked about her hobbies) to help familiarize him, which was an adaptation that had not been needed when working with other students.

When the true assessment procedures began to determine maintenance of previous objectives, the assessment procedures were designed to be a departure from a typical testing format that might be used with the typical adolescent population. Activities were hands on (e.g., Ben manipulated cards with parts of words to form valid words) and slowly increased in difficulty so that Ben was guaranteed feelings of initial success with the new student clinician. Similarly, praise was used throughout. Both correct responses and genuine attempts were praised so that Ben was encouraged to attempt new material without the fear of repercussions for incorrect responses.

Throughout assessment and extending into the treatment, the student clinician was conscientious of creating an environment in which Ben was successful and calm, but challenged. Small talk was also incorporated into each session (e.g., "*How's it going,*" "*Did anything cool happen today,*" "*What was something interesting you learned at school?*"). The use of small talk maintained a friendly dynamic and was meant to show Ben that what he had to say about his day

was important, valued, and interesting to another person. Thus, the means used to establish rapport and a safe learning environment were supported by studies such as that put forth by Pattison and Powell (1989-1990).

**Wait to establish goals.** The concept of waiting to determine goals was closely associated with ensuring that rapport and a safe learning environment were established. Once rapport and a safe learning environment were established, the student clinician obtained a much different view of the student. At first, Ben had seemed uncooperative and unmotivated based on an apparent unwillingness to participate in treatment sessions perhaps secondary to his unfamiliarity with the student clinician. Other studies have reported similar findings while working with adolescents, but these studies contributed mistrust of the clinician and treatment process with self-concepts of inadequacy and lack of success from previous treatment (Apel & Swank, 1999). Thus, this research was consistent with the case review.

Ben lamented the lack of confidence teachers at his school had in his ability to achieve correlating with the poor self-concept identified by Apel and Swank (1999). Although Ben had demonstrated progress with his treatment goals in previous academic semesters, he had little motivation to work on certain areas (e.g., his speech) because he did not see it as an issue in his overall communicative profile. Although Ben demonstrated progress in all treatment semesters at the university clinic, his willingness to participate varied by his interest in the established goals. If goals had been established at this point in the case review, they would have reflected lower expectations than Ben was capable of because of the time spent prompting Ben to participate and respond to the activities presented. By waiting, goals were identified that were consistent with

what Ben was self-motivated to improve (i.e., his decoding skills) and the rapport established helped diminish his negative self-concept, at least in the context of the university clinic.

**Active listening.** Active listening is defined by Apel and Swank (1999) as listening for the “underlying meaning in an individual’s message, developing a hunch or hypothesis about the meaning, and then verbalizing that hunch” (p. 238). Active listening was a particularly helpful strategy employed by the student clinician regarding the case review. Because Ben was very guarded with personal information, at first, he was not forthcoming with details about his day that affected his participation and performance during treatment sessions. Thus, the clinician was left to extrapolate the underlying message to repeat for Ben to either confirm or reject.

Although it may seem counterproductive to dwell on events that are negative to the student, it was actually beneficial for Ben. Having someone take an interest in his feelings helped establish that necessary rapport that served as a catalyst for the rest of treatment. Thus, active listening helped increase productivity during treatment sessions because negative feelings and attitudes were identified and addressed, allowing treatment to progress. Furthermore, the use of active listening was supported by the study by Apel and Swank (1999), which also explored providing speech-language services to an adolescent with poor self-concept and mistrust of the treatment process.

**Allow time for the student to self-correct.** Consistent with Vygotsky’s Social Interaction Theory, a cueing hierarchy was established so that Ben’s actual and potential developmental levels could be observed with and without influence from scaffolding. More specifically, the degree of scaffolding could be identified (Vygotsky, 1978). To review, the cueing hierarchy utilized during treatment included the following steps after Ben provided a

response: (1) pause, using an expectant delay to allow for self-correction; (2) redirect; (3) provide supportive dialogue (i.e., think aloud); then (4) discuss the correct response if scaffolding from previous steps was not sufficient. If Ben either initially responded correctly or self-corrected following the student clinician's pause, the ability was determined to be representative of his actual developmental level. If additional scaffolding (i.e., redirection, supportive dialogue, or discussion of the correct response) was provided to increase accuracy, then these were considered to be within Ben's potential developmental level.

Overall, allowing ample time for Ben to self-correct was helpful in decreasing some of the more prevalent challenges related to his emotional or behavioral disorder. At the onset of treatment, he was very impulsive in his responses. For example, he would use the first letter in decoding a novel word and make an estimate based on this information alone (e.g., he would see the word "make" and guess "Mickey" although he had ample experience in distinguishing vowel patterns and structures). Because Ben was very defensive to the student clinician's initial attempts to use these teachable moments, incorporating teaching into the cueing hierarchy was important. The student clinician found that using a think-aloud approach was more effective to teach new content (Apel & Swank, 1999). That way, the burden of being incorrect was taken off of Ben, and he learned indirectly through listening to how the student clinician handled similar problems. Thus, this procedure (i.e., the cueing hierarchy) was effective in managing some of the confounds of the emotional or behavioral disorder and was supported by other studies that applied similar techniques to adolescent students receiving speech-language services.

**Summary.** The most important strategy learned during the clinical experience in working with a student diagnosed with an emotional or behavioral disorder was the importance of

establishing rapport. Without this, it did not seem treatment would have been as effective as it was and the time of the student would not have been as beneficial as all other strategies implemented were based off the established rapport.

### **Integrating the Data Collected**

Viewing the results separately (i.e., academic instruction versus clinical experience) did not provide a complete description of the graduate level experience of a preprofessional speech-language pathology student. As such, it was important that the results obtained through this study were integrated to show the interaction between academic instruction and clinical experience. Several important issues arose during the synthesis of results, which included two main categories. First, factors specific to students with emotional or behavioral disorders were identified as being consistent among more than one data source. These factors included the relationship between emotional or behavioral disorders and comorbid conditions, the age range in which an emotional or behavioral disorder was most likely to be diagnosed, and the student's home environment. Second, factors specific to the preprofessional speech-language pathology student emerged as themes, which related to strategies utilized to decrease the impact of an emotional or behavioral disorder. These strategies included establishing rapport, providing a safe learning environment, and modifying treatment to match the student's potentially variable temperament. Please refer to the Table 6 (Themes Consistent in More than One Data Source) for a summary of which lines of inquiry provided information relevant to the themes identified when viewing the three data sources collectively.

Table 6

*Themes Consistent in More than One Line of Inquiry*

Line of Inquiry	Did the following lines of inquiry provide information regarding the integrated themes?		
	<i>Syllabi Review</i>	<i>Interviews</i>	<i>Case Review</i>
<b>Student Factors</b>			
Autism Spectrum Disorders	Yes	Yes	No
Student Age	Yes	Yes	Yes
Home Environment	No	Yes	Yes
<b>Treatment Strategies</b>			
Establishing Positive Rapport and Providing a Safe Learning Environment	No	Yes	Yes
Matching Treatment to the Student's Needs	No	Yes	Yes

**Student factors.** Although students with emotional or behavioral disorders were highly variable in the characteristics they presented, three major themes developed throughout this study that warrant further analysis. Although separate labels in the United States public education system, autism spectrum disorders were often linked to emotional or behavioral disorders. A limited age range was also presented in the information obtained regarding emotional or behavioral disorders. While this study focused on the school-age population, which was defined as being between the ages of 3 and 21 years, many participants focused on a more narrow range: birth through childhood (National Center of Education Statistics, 2010). Finally,

the overrepresentation of certain demographics (e.g., low socioeconomic status combined with the type of health insurance used by the family) also warranted further exploration.

***Autism spectrum disorders.*** The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM – IV) included behaviors under the criteria for autism that might be construed as an emotional or behavioral disorder (American Psychiatric Association, 2000). They were very similar in nature to the definition of emotional or behavioral disorders put forth by the United States Department of Education (2004). For example, the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition of the American Psychiatric Association (2000) identified a failure to develop appropriate peer relationships as one item used to diagnose autism, whereas the United States Department of Education (2004) identified a student with an emotional or behavioral disorder as having “an inability to build or maintain satisfactory interpersonal relationships with peers and teachers.” Although the Individuals with Disabilities Education Act (2004) noted that a label of an emotional or behavioral disorder would be listed as the primary disability rather than a label of an autism spectrum disorder in the United States public school system (i.e., if both coexist and affect academic performance), it was important that these two diagnoses were distinguished so that the student might receive appropriate services.

The syllabi available for Universities 3 and 6 discussed emotional or behavioral disorders separately from autism. Specifically, University 3 offered a syllabus for a course regarding language disorders in children, with a specific learning objective that sought to provide preprofessional speech-language pathology students with information regarding comorbid behavioral disorders. Because studies reported the likelihood of students with an emotional or



behavioral disorder to have a comorbid language impairment (i.e., comorbidity has been documented to be between 50 and 80%), the learning objective was consistent with research that suggests these students would be on the caseload of school based speech-language pathologists (Armstrong, 2011; Audet & Hummel, 190; Gallagher, 1999; Hyter et al., 2001). The syllabus obtained from University 6 documented academic instruction that would provide students with information on behavioral management skills necessary for language assessment and treatment. This topic was scheduled to be discussed in one lecture over the course of the semester. Thus, it too recognized the high comorbidity rates of language impairments and characteristics that may reflect emotional or behavioral disorders. Because course syllabi did not provide a wealth of detailed information, it was uncertain whether the professors of these courses would distinguish autism and emotional or behavioral disorders in context, although the course syllabi did not group the two labels into one unit.

One interview participant recognized this distinction between the labels of an emotional or behavioral disorder and an autism spectrum disorder. During her interview, Kirsten noted that her academic instruction regarding emotional or behavioral disorders led her to conclude that it was a separate diagnosis from autism spectrum disorders (personal communication, March 23, 2013). She did not address comorbidity of the two conditions, but was the only interview participant that identified them as separate entities. Emma reported that her academic instruction had provided her with the fact that emotional or behavioral disorders “relate[d] directly to autism” (personal communication, March 12, 2013). She did not distinguish these terms when discussing her clinical experience; the student on her caseload who had characteristics consistent with an emotional or behavioral disorder also had a diagnosis of autism. Bridgette also did not

differentiate emotional or behavioral disorders from autism spectrum disorders, as she used clinical experience regarding a student with a diagnosed pervasive developmental disorder to guide her responses to interview questions (personal communication, March 19, 2013).

Research Questions 1 and 2 obtained information that associated emotional or behavioral disorders with autism spectrum disorders. That is, University 1 and interview participants Emma and Bridgette each related emotional or behavioral disorders to students with an autism spectrum disorder. From the syllabi obtained from University 1, academic instruction involved the process of collecting a comprehensive case history in order to provide a complete profile of the student's communication skills and potential confounds. In this case, the potential confound being discussed was an emotional or behavioral disorder. The syllabi did not offer information that addressed whether emotional or behavioral disorders would be discussed in subsequent assessment and treatment following a case history.

Based on the clinical experience of two preprofessional speech-language pathology students, however, direct treatment regarding emotional or behavioral disorders had been documented, which would make academic instruction beneficial to students with a similar practicum experience. Emma reported that her academic instruction offered her a list of conditions that frequently present with autism spectrum disorders (personal communication, March 12, 2013). On this list, emotional or behavioral disorders were listed. This information was consistent with a study completed by Simonoff and colleagues (2008), who found that emotional or behavioral disorders co-occurred with autism spectrum disorders in 44.4% of students sampled between the ages of 10 and 14 years. Emma's academic experience, however, did not offer information regarding assessment, treatment or modifications and strategies that

might be helpful in providing services to a student with an emotional or behavioral disorder (personal communication, March 12, 2013). Similarly, Bridgette reported that her knowledge regarding emotional or behavioral disorders developed through “independent learning,” as “no formalized instruction” was provided (personal communication, March 19, 2013). Despite the lack of academic instruction, however, Bridgette was afforded clinical experience with a child diagnosed with a pervasive developmental disorder – not otherwise specified, who also reflected characteristics consistent with an emotional or behavioral disorder.

Thus, Emma and Bridgette each reported having only worked with one student each who presented characteristics consistent with an emotional or behavioral disorder (personal communication, March 12, 2013; personal communication, March 19, 2013). Due to the high correlation between autism and these emotional or behavioral disorders, it was understandable that the two conditions were comorbid in the experiences of both students. Furthermore, the students also addressed similar goals while working with clients. The goals of the clients related to pragmatics (i.e., social use of language). The goals of treatment were consistent with research that demonstrated children with emotional or behavioral disorders benefit from pragmatic language treatment (Hyter et al., 2001). Hyter and colleagues (2001) posited that treatment that targeted pragmatic behavior skills could also positively affect language skills (i.e., in the context of their study, they reviewed skills related to sequencing and describing).

Despite the evidence, it is important to call attention to the potential over-identification of students as having autism spectrum disorders in the public school system. Studies have demonstrated that 11 to 31% of children diagnosed with an autism spectrum disorder at age 3 years no longer qualify for a diagnosis at 4 years of age (e.g., Michiels & Oetting, 2010). Thus,

many children diagnosed with autism at a young age might not reflect characteristics of an autism spectrum disorder by the time they reach school; however, the label might remain with the student because of the residual impairments (e.g., language disorders) that were not distinguished from an autism spectrum disorder (Michiels & Oetting, 2010). Similar to the overrepresentation of certain demographics when considering emotional or behavioral disorders, certain demographics might be overrepresented in autism spectrum disorders (e.g., Baio, 2012). Baio (2012) reported data that showed white, non-Hispanic males tended to receive an autism diagnosis more so than females or other racial groups (e.g., black, non Hispanic, Asian and pacific islander, and Hispanic). Thus, it is important to consider the comorbidity regarding emotional or behavioral disorders and autism spectrum disorders might be skewed because of misdiagnoses that occurred at a seemingly high rate according to the study by Michiels and Oetting (2010).

***Student age.*** The information regarding academic instruction provided by the universities selected as participants in the syllabi review identified two broad age ranges in which students were provided information regarding emotional or behavioral disorders: early childhood to school-age. The academic instruction provided to their respective preprofessional speech-language pathology students correlated with the academic instruction described by the interview participants. Emma reported emotional or behavioral disorders being referenced in a course on the birth to 3 years population (personal communication, March 12, 2013). Similarly, Bridgette discussed the characteristics of emotional or behavioral disorders using content from the instruction received in a course on the birth to 5 years population.

Although the importance of early identification had been discussed and should not be dismissed (e.g., Stafford, 2011), incidence of emotional or behavioral disorders in children had been documented to be lower in young children. For example, Pastor and colleagues (2012) documented emotional or behavioral disorders to have a significantly higher prevalence among the school-age children ages 8 to 17 years, with a much lower prevalence among children aged 4 to 7 years. Thus, while speech-language pathologists seemed to be provided experience in working with younger children, they might not be provided information regarding school-age students and adolescents.

Overall, the interview participants reported clinical experience providing them with more knowledge than that offered through academic instruction. Descriptions of the clinical experience obtained, however, did not diversify the assessment and treatment strategies obtained specific to the younger childhood population. For example, Emma and Kirsten both identified their clinical experiences as being specific to preschool-aged children (i.e., ages 3 to 5 years), but had little to no academic instruction or clinical experience relevant to adolescents. Kirsten, however, recognized how treatment might change to serve the students differently as they age. For example, she reported that given the opportunity to work with older students, treatment should focus on social use of language as demands for pragmatic skills increased (personal communication, March 23, 2013).

While it is possible to apply certain strategies specific to younger students to an older population, it is important to note key differences that an adolescent student may present. For example, older students might have developed a sense of learned helplessness and poor self-image that requires metacognitive skills and life experience that younger children have not

acquired or experienced (Apel & Swank, 1999). The clinical experience as described by the case review was consistent with these idiosyncrasies an adolescent student might present. Thus, of the four preprofessional speech-language pathology students, none had received thorough academic instruction or were provided clinical experience that afforded them with knowledge regarding emotional or behavioral disorders across the entire age range for public schools.

***Home environment.*** Research had identified a consistent overrepresentation of certain demographic groups in the diagnosis of emotional or behavioral disorders (Pastor et al., 2012). Specifically, students from racial and ethnic minorities and low socioeconomic statuses were at higher risk for receiving a label of an emotional or behavioral disorder (Armstrong, 2011; Centre for Social Justice, 2011). When discussing her clinical experience, Kirsten reported characteristics that may predispose a student to being diagnosed with an emotional or behavioral disorder that were consistent with these findings. Specifically, each student she worked with who had a label of an emotional or behavioral disorder in the school had a “chaotic home life” and low socioeconomic status (personal communication, March 23, 2013). Low socioeconomic status is one factor that is overrepresented in school-aged children with emotional or behavioral disorders. For example, Pastor and colleagues (2012) found that school-age children (i.e., ages 4 to 17 years) were twice as likely to be identified as having an emotional or behavioral disorder if they on Medicaid as opposed to private insurance.

Kirsten cautioned, however, that it was difficult to distinguish if a student actually had an emotional or behavioral disorder due to “internal” disruptive behaviors or if he or she was reflecting the dynamic of his or her home life in the school setting (personal communication, March 23, 2013). This caveat reported by Kirsten was consistent with two lines of study. First,

this qualification supported a study put forth by Smocker and Hedayat (2001), that developed a list of environmental factors that might manifest as an emotional or behavioral disorder, but did not necessarily equate an appropriate diagnosis. These factors included family stress or dysfunction, which was consistent with Kirsten's notes of "a chaotic home life," and an unsafe or disruptive learning environment (Smocker & Hedayat, 2001; personal communication, March 23, 2013). Kirsten stressed the importance of establishing a safe learning environment for all students, but with special importance for those diagnosed with an emotional or behavioral disorder (personal communication, March 23, 2013). Second, although Kirsten identified that an unstable home environment might correlate to a child reflecting characteristics similar to an emotional or behavioral disorder, she reported for a true diagnosis there must be factors internal to the child (personal communication, March 23, 2013). Nelson and colleagues (2007) developed a list of factors that predispose a child to become diagnosed with an emotional or behavioral disorder including internalizing behaviors (e.g., fearful, socially withdrawn, preferring to be alone, shy, or timid). Thus, Kirsten's clinical experience and observations are supported by the current literature regarding emotional or behavioral disorders.

The student described in the case review, however, had a medically diagnosed emotional or behavioral disorder, and demonstrated characteristics consistent with Kirsten's experience (i.e., working with clients who had received labels of emotional or behavioral disorders through the school setting), as well as the previously mentioned research. For example, Ben had an unstable childhood with a family history and structure that was consistent with the predisposing factors identified by Nelson and colleagues (2007). He demonstrated externalizing factors (e.g., impulsive and stubborn), internalizing factors (e.g., socially withdrawn and cautious), as well as

characteristics of his home environment that correlated with Kirsten's experience. These factors included parent-child dysfunction, having one or more parents not present, and a familial history of substance abuse (Nelson et al., 2007). Ben's socioeconomic status was also consistent with the findings of Pastor and colleagues (2012) in that being a student on Medicaid, he was more likely to get a label of an emotional or behavioral disorder than a student on private insurance or a student with no health insurance.

**Treatment strategies.** Although understanding factors that the student with an emotional or behavioral disorder brings to treatment is important, it is also important that the service provider know how and when to make modifications to benefit the student. Before productive learning can occur, it is important that speech-language pathologists provide a safe learning environment for students and establish positive rapport. Due to the inconsistent performance and participation in treatment sessions, it is also important for the clinician to maintain a certain amount of flexibility so that the clinician matches the student's unique needs.

***Establishing positive rapport and providing a safe learning environment.*** Pattison and Powell (1989-1990) discussed the importance of establishing rapport and its close relationship with providing a safe learning environment before expecting the student to comfortably participate in speech or language evaluation procedures. Information gathered from the syllabi review did not suggest that students were provided with academic instruction regarding the importance of positive rapport and a safe learning environment; however, absence of this information in course syllabi does not denote that the information was not taught.

Bridgette developed the concern regarding how the dynamic between the student and speech-language pathologist could affect treatment: if the speech-language pathologist was "*seen*



*as an unfamiliar, outside, strange person*” it could affect the student’s participation (personal communication, March 19, 2013). The case review yielded a similar experience, in that Ben was very hesitant to interact with the student clinician until he recognized and became comfortable with the consistently calm and predictable demeanor she employed in treatment sessions. Thus, it was important to consider both the service provider as well as the environment.

Kirsten was very explicit in describing these two elements (i.e., rapport and environment) and how, although they are imperative for all student-clinician relationships, they could be of particular importance when providing services to a student with an emotional or behavioral disorder (personal communication, March 23, 2013). Specifically, she explained that once the student understood that the clinician “*cared about them and [was] willing to be involved in [his or her] life in a positive way,*” this open and encouraging dynamic could have a huge impact on treatment (personal communication, March 23, 2013). If anything, Kirsten identified working on developing a rapport with the student as the one aspect of treatment that should be incorporated into the assessment and treatment of every student. For example, “*even if the same [treatment strategies do not] work for [each student with the same emotional or behavioral diagnosis]*” having a positive relationship with that student could provide unmatched benefits than any speech-language services if the relationship was not constructive (personal communication, March 23, 2013).

***Matching treatment to the student’s needs.*** Information obtained from the syllabi review (i.e., research question 1) was not sufficient to provide information regarding modifications to treatment. It was important to note that simply because this information was not readily available in the syllabi obtained, it did not mean that graduate level speech language pathology students

were not provided with instruction related to modifying treatment. Thus, information obtained from research questions 2 and 3 were utilized to explore how a preprofessional speech-language pathology student might modify treatment to increase efficacy for a student with an emotional or behavioral disorder.

Students with emotional or behavioral disorders were documented to have a multitude of characteristics that varied per individual. Although each student might present challenging behaviors, they ranged from anxiety to aggression with a wide array of potential environmental factors that triggered such characteristics (Armstrong, 2011). Interview participants were each asked to provide characteristics of students with emotional or behavioral disorders and how treatment might be impacted specific to the services provided by a speech-language pathologist.

Each interview participant reported that the profile of emotional or behavioral disorders she had related to her clinical experience; that is, the academic instruction provided at their respective graduate level programs did not define, characterize or discuss emotional or behavioral disorders in terms of assessment or treatment, which was consistent with the data gathered for the syllabi review (personal communication, March 12, 2013; personal communication, March 19, 2013; personal communication, March 23, 2013).

In terms of characteristics, Emma offered that she has observed difficulties related to emotional regulation, maintenance of arousal, and exaggerated reactions to typical environmental stimuli (personal communication, March 13, 2013). Kirsten provided reports of a similar experience, whereby students with emotional or behavioral disorders presented challenges related to defiant behaviors (e.g., “*touching other [students], pushing, kicking*”); however, she noted that her experience was skewed toward the behavioral aspects, with limited knowledge and

experience of disorders that are more emotional in nature (personal communication, March 23, 2013). Bridgette, on the other hand, emphasized the speech and language characteristics that she observed that were comorbid with an emotional or behavioral disorder. These characteristics included pragmatic disorders and the “*lack of verbal or nonverbal gestures [and] greetings,*” but she also reported some behavioral characteristics that were similar to the defiant behaviors described by Emma and Kirsten, such as “*outbursts of screaming [and] crying*” (personal communication, March 19, 2013). Thus, the interview participants were consistent in how their clinical experiences shaped their perspective of students with an emotional or behavioral disorder.

The chart review in research question 3 presented a student with somewhat different behavioral challenges. This difference might be due to the fact that he was an adolescent, whereas each interview participant reported with students from preschool to elementary ages. Ben, however, did not demonstrate behavior reflective of “*outbursts,*” but rather was passive, timid, and shy in his learning experience and did not fully participate due to a tendency to withdraw. One similarity that existed among each student discussed was that it was difficult to find treatment activities that would target objectives while maintain the interest of the client.

With these characteristics in mind, interview participants discussed how treatment was impacted and adjusted according to the needs of the child. Emma reported how challenging behaviors such as refusal to participate in planned activities affects therapy in many ways. She identified how transitioning from one activity to another combined with the mental breaks her student required affected data collection because the sessions were not as productive secondary to these challenging behaviors (personal communication, March 12, 2013). Bridgette’s

experience supported Emma's reports. Bridgette identified "*inconsistencies in the data collected due to the outbursts or...uncooperative nature of the child*" (personal communication, March 19, 2013). Furthermore, she identified that the effects of medication may also "*affect treatment if the child [was unable to] perform to [his or her] full potential in therapy time*" (personal communication, March 19, 2013).

Bridgette's reference to medication being an effect on therapy was consistent with reports of the potential side effects of medications used to treat conditions comorbid with an emotional or behavioral disorder. For example, selective norepinephrine reuptake inhibitors were one type of pharmacologic treatment offered by primary care physicians to patients with an emotional or behavioral disorder (Steiner & Remsing, 2007). Hajos, Fleishaker, Filipiak-Reisner, Brown, and Wong (2004) reported that selective norepinephrine reuptake inhibitors have side effects such as gastrointestinal complications, which could affect the student's participation and attendance regarding speech-language therapy.

To compensate for participation issues during treatment, Emma often planned substitute activities in order to target objectives in a different way if the student did not respond to redirection back to the desired activity (personal communication, March 12, 2013). This flexibility was consistent with recommendations put forth by Pattison and Powell (1989-1990), who identified patience and flexibility as being key to adjust assessment procedures appropriately to obtain a valid profile of the student's communication abilities. When working with an adolescent client, however, there were certain advantages. The results from the case review show that Ben, an adolescent, was able to make suggestions to treatment (i.e., discuss

activities or materials that are meaningful and interesting to him), which in turn, increased participation, motivation, and success tremendously.

### **Limitations**

This study had limitations that should be noted. Some of the foremost limitations to consider included: (a) the small sample sizes, and (b) the lack of additional peer reviewers. Small sample sizes might affect generalization of the results to other academic programs and may not yield consistent self-reflections of other preprofessional speech-language pathology students regarding their comprehensive instruction regarding emotional or behavioral disorders (i.e., academic and clinical experiences). Furthermore, students with emotional or behavioral disorders who might not have the same characteristics as the student described in the case review may not have the same success with the modifications discussed. Regarding the lack of additional peer reviewers, it might affect validity and reliability of results, as they could be interpreted differently from other perspectives and additional themes may have emerged.

Thus, future research regarding the preparedness of preprofessional speech-language pathology students may focus on obtaining a larger sample of universities to increase the data regarding academic instruction and additional interview participants from diverse academic programs to explore the interaction between academic instruction and clinical experience in greater depth. Additionally, peer reviews to improve the validity and reliability of the themes that surfaced throughout the study would increase the study's rigor.

### **Conclusion**

These findings supported the theoretical framework in which they were viewed: academic instruction precedes maturation of a skill. With minimal academic instruction,

preprofessional speech-language pathology students reported skills that were derivative of observations of clinical supervisors or other professionals and their interactions with students with emotional or behavioral disorders. Thus, the lack of rigorous formal instruction regarding emotional or behavioral disorders led to a potentially undeveloped skillset to effectively serve the population, leaving graduate level students to do independent research, utilize clinical experience to fill the gaps in their knowledge, or seek continuing education specific to emotional or behavioral disorders.

As per the American Speech-Language-Hearing Association (2013), preprofessional speech-language pathology students should have some level of academic experience regarding social communication and its subsequent confounds to treatment (i.e., challenging behaviors, inappropriate social skills, and lack of opportunity to utilize social communication skills in authentic contexts) (American Speech-Language-Hearing Association, 2013). As such, this study may serve as a call to action for graduate programs to provide additional coursework regarding social aspects of communication so that preprofessional speech-language pathology students feel better prepared to serve students with emotional or behavioral disorders. Hopefully, the emphasis on the importance of a multidisciplinary team was highlighted so that graduate level programs also offer coursework in other disciplines (e.g., special education, psychology). As such, preprofessional speech-language pathology students may expand their knowledge of behavioral management and are better prepared to collaborate with other professionals as they provide services to students with emotional or behavioral disorders.

For the time being, however, the clinical experience of preprofessional speech-language pathology students may better prepare them to provide services to students with emotional or

behavioral disorders than academic instruction and the available research. Fortunately, it seems that graduate level speech-language pathology students are provided exposure to emotional or behavioral disorders through practicums at their respective programs. This is understandable given the high comorbidity of language impairments and emotional or behavioral disorders.

As with any student, establishing a positive rapport and providing a safe learning environment is imperative prior to establishing goals and objectives, making assumptions about the student's abilities, and learning taking place. Using the expertise of clinical supervisors, observing or co-treating with professionals from other disciplines, or utilizing the research for related fields may lead to more effective strategies in assessing and treating students with emotional or behavioral disorders.

Although some degree of academic instruction is provided, the instruction is viewed as minimal or inconsistent when considering the success of applying learned content to the clinical setting, which is understandable given the variable nature of students with emotional or behavioral disorders. Furthermore, the research literature specific to the role of the speech-language pathologist and how to manage a comorbid emotional or behavioral disorder remains limited in terms of specific modifications to assessment and treatment that may allow for more refined interactions that facilitate learning for the student. Thus, for now, effective treatment will depend on the speech-language pathologist's clinical experience at the graduate level.

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## **Appendix A**

### Interview Protocol

(Based on Blanks, 2011)

1. Describe what you know about emotional or behavioral disorders.
  - a. Who may be diagnosed?
  - b. What characteristics might they present?
  - c. How does an emotional or behavioral disorder affect treatment?
  - d. Advantages/disadvantages to an emotional or behavioral diagnosis/label?
2. Describe your training regarding emotional or behavioral disorders.
  - a. What have you learned about emotional or behavioral disorders?
  - b. Where did you learn about emotional or behavioral disorders?
  - c. Who taught you about emotional or behavioral disorders?
3. For what (if any) reasons should a speech-language pathologist be aware of emotional or behavioral disorders?
4. Other questions that emerge within interviews and across the project.

## **Appendix B**

### Interview Summaries

#### **Interview Participant: Emma**

Emma reported being provided academic experience at the graduate level related to behavioral management in the context of autism spectrum disorders, but not specific to emotional or behavioral disorders. This information was provided in a course focused on the populations from birth to three years of age. A list of comorbid conditions provided to students indicated that behavioral disorders may co-occur with autism, which led Emma to postulate that behavioral disorders likely co-occur with other communication disorders as well (e.g., sensory integration disorder). The information provided regarding potential behavioral disorders in autism spectrum disorders, however, was not discussed in terms of how to define the disorder, what characteristics qualify a person for a label of an emotional or behavioral disorder, or how to treat such disorders. Although this study seeks to explore graduate level instruction, it is noteworthy that Emma reported that an undergraduate course in psychology provided academic instruction related to emotional or behavioral disorders. In this course (i.e., Child Psychopathology) Emma learned about diagnostic criteria from a psychological perspective and specifically mentioned anxiety, depression, and phobias as potential disorders.

Clinical experience provided through the university afforded Emma with some knowledge regarding the characteristics that a child with an emotional or behavioral disorder may present. Emma identified difficulties such as maintaining arousal, regulating arousal, being able to self-regulate emotions, lashing out, and displaying exaggerated reactions to certain stimuli. Emma continued to describe how these difficulties impact the treatment delivered by the



speech-language pathologist. For example, the challenging behaviors consistent with an emotional or behavioral disorder may affect treatment due to the client's need to take breaks, redirect, and have different activities to substitute as needed. The effects of a client with an emotional or behavioral disorder may also impact the emotional state of the clinician; Emma reported that these sessions may be time-consuming and stressful, as data collected may not be sufficient to approach treatment goals due to inconsistencies in behavior.

Overall, Emma reported the need for speech-language pathologists to be aware of emotional or behavioral disorders. From clinical experience, patterns emerged that led Emma to report that emotional or behavioral disorders likely occur more often than they are diagnosed. Learning about such disorders will allow for speech-language pathologists to better deal with challenging characteristics and manage these features during treatment. Furthermore, Emma reported that a label of an emotional or behavioral disorder might be beneficial to a student in a school setting; the student may be better understood with such a label and might be punished differently as professionals recognize the unique constellation of characteristics in the diagnosis.

#### **Interview Participant: Bridgette**

Although academic instruction provided at the graduate level did not offer a specific course or provide content regarding emotional or behavioral disorders, Bridgette drew from instruction in a Child Language course to offer information that may be relevant to emotional or behavioral disorders. Specifically, Bridgette reported that emotional or behavioral disorders directly relate to autism and other developmental disorders, as well as intellectual disabilities. Overall, however, Bridgette reported that information regarding emotional or behavioral disorders was obtained through independent learning and clinical experience.

Bridgette reported an experience with a client diagnosed with pervasive developmental disorder – not otherwise specified (PDD – NOS) was the primary source of clinical experience regarding emotional or behavioral disorders. Guided by this experience, Bridgette identified possible characteristics of emotional or behavioral disorders that relate to the expertise of speech-language pathologists. Specifically, pragmatic differences were identified including lack of nonverbal, verbal gestures and greetings, inappropriate reactions involving screaming and crying, as well as inability to effectively control body and emotions. An emotional or behavioral disorder was also discussed in terms of its impact on treatment provided by a speech-language pathologist. Bridgette reported that a clinician might be viewed as an unfamiliar person, which may affect therapy time as the child may be less inclined to interact or cooperate. This dynamic might affect data collection and might provide an inaccurate representation of the child's abilities. Bridgette's clinical experience is also unique from Emma and Kirsten because of opportunities to collaborate with a behavioral therapist and co-treat students with behavioral disorders in the school setting. Bridgette continued that this collaboration afforded the student with opportunities to generalize skills learned in the treatment setting with the speech-language pathologist to more natural environments encountered with the behavioral therapist (e.g., recess).

Bridgette also recognized the role of the speech-language pathologist in providing services to students with emotional or behavioral disorders. Speech-language pathologists have specific skills in providing students with strategies to enhance cognitive, linguistic, and pragmatic abilities. Bridgette continued to discuss that strategies may also be provided to peers, family members, and teachers so that the student has success in more than just the academic environment. Furthermore, Bridgette viewed a label of an emotional or behavioral disorder as an

advantage in the school system because of the extra supports provided to the student. Bridgette modeled her response using a Response to Intervention (RTI) approach in that once a student is identified as having a disability that affects academic performance (e.g., an emotional or behavioral disorder) additional resources would be provided. A label of an emotional or behavioral disorder may also provide the student with the opportunity to learn in a self-contained classroom. Bridgette reported that this self-contained classroom may offer the student additional one-on-one support from an educator, who may have a better understanding of the student's ability level. On the other hand, Bridgette also identified potential disadvantages to a student given an emotional or behavioral disorder label in the school setting. The student may be treated to a different standard (e.g., being permitted to not participate in certain fieldtrips or extracurricular activities), which may lead to using the label as an excuse to decrease participation in undesirable activities.

**Interview Participant: Kirsten**

Kirsten reported that the extent of academic instruction regarding emotional or behavioral disorders was provided through classroom discussions on managing challenging behaviors. Unlike Emma and Bridgette, however, Kirsten's graduate program discussed behavioral disorders separately from autism spectrum disorders. As a result, rather than discussing diagnoses that are often comorbid with emotional or behavioral disorders, Kirsten reported the following risk factors that may predispose an individual to being diagnosed with an emotional or behavioral disorder: chaotic home life and low socioeconomic status. Kirsten cautioned, however, that an unstructured home life, for example, might not reflect an actual disorder, thus

causing overrepresentation of certain groups being classified as having emotional or behavioral disorders.

Kirsten described characteristics of emotional or behavioral disorders through self-reflection of contact with students diagnosed with behavioral disorders through clinical experiences. The following characteristics were reported: defiant behaviors (e.g., refusing to complete tasks, preferring to select own activities, leaving classroom), destructive behaviors (e.g., kicking, pushing, touching other students), and failure to participate (e.g., turning away from teacher or other students). Although Kirsten reported being provided with clinical experience with behavioral disorders, no opportunities were provided that also incorporated an emotional aspect to the disorder. Furthermore, Kirsten reported that these experiences might not be representative of other clinician's experiences regarding emotional or behavioral disorders. Students may present a variable range of characteristics and school districts may interpret the definition of an emotional or behavioral disorder differently. Kirsten did offer that the disorder must affect academic skills in order to receive a diagnosis or label in a school system.

Once a label is given to a child, however, Kirsten reported mixed feelings regarding the advantages and disadvantages of that label. For example, the label may be beneficial in that the student receives extra support. Kirsten identified the following disadvantages that the label follows the child (e.g., from class to class, grade level to grade level, and school to school), and there are many negative perceptions regarding emotional or behavioral disorders that may taint the attitudes of those professionals that may work with the student. Kirsten stated that the perceived disadvantages outweigh the possible advantage of a label. This focus is different than

those provided by Emma and Bridgette, who mainly focused on the benefits of a student receiving a label of an emotional or behavioral disorder.

Kirsten discussed additional limitations in experience with emotional or behavioral disorders. For example, Kirsten reported working with a population restricted to ages 3 to 5 years. Because of this, Kirsten explained the evaluations completed on students with emotional or behavioral disorders did not qualify them for speech-language services at the time; however, Kirsten recognized that in the future, the same students might qualify for services particularly regarding pragmatic skills. Specifically, Kirsten reported other professionals (e.g., special education teachers) might be able to provide a more complete view of the student in addition to supports that may foster treatment efficacy. If these students qualify for speech-language services, however, Kirsten identified the most important aspect of the treatment process to be establishing rapport with the client. Providing a safe and secure environment for the child to learn is important so that the child does not feel threatened and has someone in his or her life involved in a positive way. Kirsten reported, however, that it is important for speech-language pathologists working with all populations to be aware of emotional or behavioral disorders. By being aware of a student's background, a speech-language pathologist has the opportunity to prepare and not be surprised by characteristics of the student that are not commonly seen in therapy.

## Appendix C

### Tables 1-6

Table 1

*Demographics Results of Syllabi Review*

University	Geographic Region	Institution Type	Setting	Syllabi Offered
1	South Atlantic	Master's: Teaching/Master's University	Rural	25
2	West South Central	Doctoral Research University	Urban	18
3	West South Central	Research University (High Research Activity)	Urban	23
4	South Atlantic	Research University (High Research Activity)	Urban	31
5	West South Central	Research University (Very High Research Activity)	Urban	15
6	South Atlantic	Research University (Very High Research Activity)	Rural	21

Table 2

*Results from Syllabi Review Specific to Emotional or Behavioral Disorders*

University	Relevant Information Provided?	Relevant Course Names	Relevant Information Included in Syllabi
1	Yes	Social Communication in Autism	Case histories of clients with autism should explore potential behavioral disorders.
2	No	N/A	N/A
3	Yes	Disorders in Children	Language disorders may be comorbid with behavioral disorders.
4	No	N/A	N/A
5	No	N/A	N/A
6	Yes	Language Assessment and Intervention with School-Age Children	Behavioral management is important for language assessment and intervention.

Table 3

*Demographic Results of Universities Attended by Interview Participants*

Participant	Graduate Program Geographic Region	Graduate Program Institution Type	Graduate Program Setting
Emma	West South Central	Doctoral Research University	Urban
Bridgette	South Atlantic	S-Doc/Ed: Single Doctoral (Education)	Urban
Kirsten	New England	Research University (Very High Research Activity)	Urban



Table 4

*Results from Interviews Specific to Experience with Emotional or Behavioral Disorders*

Participant	Classes offered relevant content?	Provided relevant clinical experience?	Benefitted most from classroom instruction or clinical experience?
Emma	Birth to Three Years; (undergraduate) Child Psychopathology	Yes	Clinical Experience
Bridgette	No specific class identified	Yes	Clinical Experience
Kirsten	No specific class identified	Yes	Clinical Experience

Table 5

*Themes for Research Questions 1, 2, and 3*

Identified Themes for Each Research Question		
<i>Research Question 1: Syllabi Review</i>	<i>Research Question 2: Interviews</i>	<i>Research Question 3: Case Review</i>
Social Communication in Autism	Diagnostic Criteria	Safe Learning Environment and Positive Rapport
Disorders in Children	Comorbid Conditions	Wait to Establish Goals
Language Assessment and Intervention with School-Aged Children	Managing Challenging Behaviors	Active Listening
	Gaps in Academic Instruction and Clinical Experience	Allow Time for the Student to Self-Correct
	Multidisciplinary Approach	
	Advantages of an EBD in the Public School System	

Table 6

*Themes Consistent in More than One Line of Inquiry*

Line of Inquiry	Did the following lines of inquiry provide information regarding the integrated themes?		
	<i>Syllabi Review</i>	<i>Interviews</i>	<i>Case Review</i>
<b>Student Factors</b>			
Autism Spectrum Disorders	Yes	Yes	No
Student Age	Yes	Yes	Yes
Home Environment	No	Yes	Yes
<b>Treatment Strategies</b>			
Establishing Positive Rapport and Providing a Safe Learning Environment	No	Yes	Yes
Matching Treatment to the Student's Needs	No	Yes	Yes