

Language Deficits in Students With Emotional and Behavioral Disorders: Practical Applications for Teachers

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A limited body of research on language deficits in children with emotional and behavioral disorders (EBD) exists (Cantwell & Baker, 1991; Ruhl, Hughes, & Camarata, 1992; Beichman, Cantwell, Forness, Kavale, & Kaufmann, 1998; Cohen, Barwick, Horodezky, Vallance, & Im, 1998; Gallagher, 1999; Fujiki, Brinton, Morgan, & Hart, 1999). However, initial studies have found a direct relationship between language deficits and EBD (Hyter, 2003; Hyter, Rogers-Adkinson, Self, Simmons, Jantz, 2001). Reading, writing, and math deficits have been found to co-occur in children with EBD and language deficits (Nelson, Benner, and Rogers-Adkinson, 2003). Additionally, antisocial behaviors (Gallagher, 1999; Asher & Gazelle, 1999) have also been reported in children with EBD and language deficits.

A limitation of the research addressing the co-occurring conditions of EBD and language deficits is that it has focused on studying children in institutionalized and residential settings (Benner, Nelson, & Epstein, 2002). However, educators can utilize the research findings to develop initial practical classroom and individualized interventions for students with EBD and language deficits. The purpose of this paper is to (a) review the literature regarding children with EBD and language deficits (Benner, Nelson, & Epstein, 2002), (b) discuss implications of co-occurring disorders (Beichman et al., 1998; Cantwell & Baker, 1991), (c) make suggestions for teachers and the school-based speech-language pathologists, and (d) suggest areas of need in the EBD and language research.

Research to Practice: A Review of the Literature

Applying research to practice is always difficult. However, many of the articles reviewed have noteworthy, applicable, and practical information that is beneficial for educational professionals. Benner, Nelson, and Epstein (2002) examined 26 studies ($n = 2,796$) that addressed students with EBD and language deficits. The authors reported three out of four, or 71%, of the students in the studies identified with a label of EBD had concurrent language deficits. Furthermore, the authors reported two out of three, or 57%, of the students with diagnosed language deficits were also found to be identified as EBD. In regard to the types of language disorders, approximately 71% of the students in the studies were identified as having pragmatic language deficits (language use), 64% displayed expressive deficits (language choice), and 56% experienced receptive deficits (language understanding). The authors surmised five findings: (1) students with EBD tend to have high co-occurrence rates of antisocial behavior and language deficits; (2) students with receptive language deficits have increased rates of behavior problems as compared to students with expressive language deficits; (3) the estimate of co-occurring language deficits in students with EBD is ten times greater than the general population; (4) language disorders in students with EBD appear to have a devastating effect on interpersonal relationships; and (5) the information gleaned from these studies was limited, as there was incomplete information on such variables as ethnicity, socioeconomic status, and setting.

Educational professionals, including special education teachers, general education teachers, and speech-language pathologists in the public schools, may not find the aforementioned results surprising. However, few educational professionals have a clear understanding how to use this information to best meet the needs of students with EBD and language deficits.

General Themes in the Literature

Five general themes were extracted from the literature: (1) co-occurrence of language deficits and EBD; (2) antisocial behaviors; (3) language deficits; (4) undiagnosed and untreated language deficits; and (5) academic problems due to language deficits. A general overview of these themes was given and educational implications discussed. It should be noted that the following studies were not included in the Benner, Nelson, & Epstein (2002) study. However, the findings are noteworthy, as the authors address influencing factors and the relationship to the child with EBD.

Co-occurrence of EBD and language deficits. Researchers have addressed the co-occurrence of EBD and language deficits and found such a relationship to be stable over time and across the years, supporting the argument that early identification and intervention are essential (Beichman et al., 1998). Students do not “grow out” of language deficits anymore than they “grow out” of EBD. Moreover, Cantwell and Baker (1991) found that the co-occurrence between EBD and language deficits increased over time. This finding was somewhat expected because vocabulary, thought processes, and sentence complexity mature naturally as children develop



and are exposed to their environment. When children do not have command of language, they become less capable of effectively participating in society through verbal means.

Although the co-occurrence of language deficits with EBD has been established, the nature and extent of the relationship is uncertain. This may be due in part to the masking of language difficulties with behavioral issues. Students with EBD may not be evaluated for language deficits.

Antisocial behaviors. There is a relatively large body of research on language deficits and antisocial behaviors (Gallagher, 1999; Mack, & Warr-Leeper, 1992; Warr-Leeper, Wright, & Mack, 1994; Asher & Gazelle, 1999; Trautman, Giddan, & Jurs, 1990). Researchers (Mack, & Warr-Leeper, 1992) have provided a variety of language-based rationale as to why children engage in antisocial behaviors. Gallagher (1999) reported that children with aggressive behaviors used less verbal communication and more physical actions in attempts to communicate. Teachers, parents, therapists, and others working with children with language deficits must assist them in developing skills to redirect reactive verbal and/or physical behavior into proactive verbal behavior. Fujiki, Brinton, Morgan, & Hart (1999) noted that children with noncompliance tendencies may have receptive language deficits that limit their ability to comply to requests and directives. Receptive language deficits include a lack of understanding of words, phrases, or directions and a limited ability to process verbal statements, directives, or requests. When communication breaks down and they do not respond as required, teachers may interpret the children's actions as purposeful and deliberate.

Ruhl, Hughes, and Camarata (1992) reported that children may misinterpret communication, become frustrated, and, as a result, develop antisocial behaviors. Students who have language deficits and find themselves in an escalating emotional state may not have the knowledge or

presence of mind to articulate that they do not understand the given direction or that they are frustrated with the situation.

Language deficits. A language deficit is considered a secondary diagnosis to a primary diagnosis of EBD, as behavioral needs take precedence over other less attention-demanding needs. There is no doubt that behavior requires the immediate attention of educators. Therefore, secondary language concerns often go undetected and unaddressed. Educators must continue to strive to address all student needs, not only the obvious behavioral needs.

Nelson, Benner, and Rogers-Adkinson (2003) reported that 45% of the 152 randomly chosen students with EBD in their study were found to have a language deficit. They reported students with EBD had a high rate of other academic difficulties in addition to language. More specifically, Nelson et al. (2003) found 46% of the students had difficulties with written language, 41% had difficulties in reading, and 31% had difficulties in math. These numbers are alarmingly high and obviously warrant attention.

Rinaldi (2003) evaluated the language skills of students with EBD and analyzed their scores on language tests. The majority of the students had deficits in at least one area of Abbeduto and Nuccio's (1989) model of communicative competence, which considers social behavior, cognitive ability, and linguistic ability. These abilities can be analyzed to predict pragmatic language competence.

Some researchers (Griffith, Rogers-Adkinson, & Cusick, 1997; Warr-Leeper et al., 1994) have suggested that children with EBD have language concerns in all areas of language (syntax, semantics, phonology, and morphology). Other researchers (Hyter, 2003; Hyter et al., 2001) reported that pragmatics is the area of language most affected for students with EBD. *Pragmatics* is "the study of the rules that govern the use of language in social situations" (Hedge, 2001). Pragmatics also involve the ability to use language

for a variety of purposes (initiate, maintain, and complete conversations; request; negotiate; and describe) and the ability to participate in engaging communication behaviors (turn taking, introducing topics of conversation, conveying the need for clarification). It becomes easy to understand how the behavior of students with language-processing deficits can be classified as "inappropriate" based on these parameters.

Inadequate pragmatic language skills—not knowing what to say, how to say it, where to say it, and when to say it—pose significant difficulties for students; therefore, social work intervention may prove just as needful as language intervention. Therapists from the two disciplines (EBD and language) working collaboratively with classroom teachers likely would prove beneficial.

Undiagnosed and untreated language deficits. Preliminary research has focused on the identification of language deficits in children with EBD (Hyter, 2003; Hyter et al., 2001). Cohen et al. (1998) reported that 40% of children with EBD have language deficits that are undiagnosed and untreated. Therefore, educators need to question the language skills of any student who has been diagnosed or has a suspected diagnosis of EBD. The rate of documented co-occurrence between language deficits and EBD may increase, possibly reflecting a more accurate incidence rate, once educators begin to question and diagnose language difficulties. Early detection of language deficits by evaluation teams and collaborative treatment interventions may prevent life-long behavioral, academic, and language-based issues.

Academic problems due to language deficits. Researchers (Baltaxe & Simmons, 1988; Hummel & Prizant, 1993; Rinaldi, 2003; Sanger, Magg & Shapera, 1994) have shown how, for a child with EBD, a language deficit can interfere with academic progress. Nelson et al. (2003) reported that children with EBD and language deficits were likely to exhibit



concurrent written language, reading, and math deficits. This finding is not surprising; after all, academics are based on “languages”; a different “language” is used for each subject (e.g., reading, writing, and math). A student who has difficulty with receptive and/or expressive language skills during typical communication will undoubtedly exhibit difficulties with academics.

Implications of Co-Occurring Disorders

The data presented in the review by Benner et al. (2002) were alarming, considering most children identified with EBD were not identified as having a co-occurring language deficit. Language deficits, especially those that are undiagnosed and untreated, can have devastating effects on a student’s interpersonal (Rinaldi, 2003) and academic life (Nelson, et al., 2003). Students with language deficits may have difficulty initiating, developing, and maintaining relationships with peers, adults, and authority figures. They may not get their needs met, convey thoughts and ideas, or participate in their environment in a productive manner. Students who have language deficits often have difficulty completing assignments, organizing information, expressing themselves, and comprehending information. They may be unable to complete academic work, which may lead to inappropriate social behavior, and possibly to academic failure.

In addition, students with EBD drop out of school before completing the requirements for graduation at a much higher rate as compared to their peers with and without disabilities (Kronick & Hargis, 1998). Students with EBD have a graduation rate of 28.9%, and their drop-out rates have varied less than 5% between 1993–94 and 2000–01 (U.S. Department of Education, 2005).

Classroom Language Interventions

Students with EBD are charged with generalizing skills,

communicating with all individuals involved in their academic careers, and meeting the expectations of all team members while learning academics. This responsibility can be an overwhelming task for a typically-developing student, let alone a student with EBD and language deficits. Interventions, such as using a collaborative approach to teach content and using research-based strategies to deliver instruction, can facilitate student learning.

Speech-Language Interventions

The issue of individual vs. group language therapy for students with EBD and language deficits remains in the forefront of research. Yet, more research into individual vs. group language therapy for such students needs to be conducted, as there is no definitive data on which to base a decision about which to implement. Hyter et al. (2001) provided evidence that classroom-based language therapy proved helpful for students with EBD. Individual therapy may prove helpful in developing particular language skills among students with EBD under certain circumstances. Whether group or individual, language therapy for students that have EBD and language deficits needs to occur in a naturalistic environment so that students learn to use language skills in daily situations. Addressing such areas as syntax, semantics, morphology, phonology, and pragmatics (as well as turn-taking, topic introduction, and maintenance) in the daily environment gives students the opportunity to make mistakes, be corrected, and learn how to use language skills to effectively communicate with peers and adults.

It is crucial that classroom teachers and speech-language pathologists (SLPs) work collaboratively to encourage students to effectively use language. The input of the SLP in setting language goals for the student is important. Ultimately, though, the teacher bears the majority of the responsibility for teaching, monitoring, and evaluating progress on a daily

basis. SLPs, in most situations, just do not have the opportunity to work with students on a long-term, daily basis; therefore, classroom staff become essential to helping students develop language skills.

Educators generally follow a five-step process to help identify and remediate language skill deficits: (1) observation with documentation; (2) prereferral; (3) referral; (4) intervention; (5) and evaluation. These five steps can be further broken into actions (see *Table 1*) that make the process easier for professionals to manage.

It is best practice to implement a formal language program during the early years of education, regardless of whether students are diagnosed with EBD, EBD is suspected, or students are typically developing (Owens, Metz, & Hass, 2003). EBD may be present with or without language deficits, so educators must consider a continuum of interventions based on the needs of individual students.

Documented Interventions

Educators need to recognize and act on the fact that students with EBD have a high incidence of language difficulties. Based on a review of the literature, prevalence rates range from 35% to 97%, depending on students’ placement and the definition of a language deficit (Benner et al., 2002). The Individuals with Disabilities Education Improvement Act (IDEIA, 2004) calls for researched-based interventions, which, when implemented, effectively address student needs so that the time to address deficits is not lost. However, documented intervention methods that are successful are limited. Hyter et al., (2001) implemented a program to address the pragmatic needs of young children. Results of the preliminary study indicated that children can be positively influenced when classroom-based pragmatic interventions are implemented. However, the authors noted there were limitations of the study.

Much of the research conducted on the co-occurrence of EBD and language

Table 1 FIVE-STEP PROCESS FOR DETERMINING LANGUAGE NEEDS OF STUDENTS WITH EBD AND PLANNING INTERVENTIONS

Step	Actions	Examples
Observation	<p>Collect 100 formal and informal language samples: 50 utterances during a formal context (e.g., describing a photograph or artwork) and 50 utterances during an informal context (e.g., conversation with friend).</p> <p>Discuss the student's language skills and use with speech-language pathologist (SLP).</p>	<ul style="list-style-type: none"> Write down the student's exact words during a conversation (use tape recorder if necessary). Discuss formal and informal language samples with SLP in addition to student's language arts work (provide examples).
Prereferral	<p>Discuss findings with intervention assistance team (IAT).</p> <p>As a team, determine which strategies to employ on a classwide and individual basis.</p> <p>Collect data on the effectiveness of the strategies.</p>	<ul style="list-style-type: none"> Present student history and examples of language samples and work examples. Ask for specific strategies to utilize with the student. Decide how you will collect data and for how long.
Referral	<p>Reconvene IAT to discuss student progress.</p> <p>Make a referral if necessary.</p>	<ul style="list-style-type: none"> Present data collected and progress to date. Complete paperwork to initiate a referral. Have the appropriate professionals evaluate the student.
Intervention	<p>If an intervention plan is warranted, work collaboratively with other professionals.</p> <p>Provide a language-based approach that can be implemented in the classroom.</p>	<ul style="list-style-type: none"> Determine student accommodations/modifications across the curriculum. Collaborate with SLP to determine which language curriculum, strategies, interventions, and systems (verbal, visual, etc.) to employ.
Evaluation	<p>Teacher and SLP evaluate whether student is making progress in language deficit areas determined by the evaluation.</p> <p>The student's goals are evaluated at least once per year to determine progress.</p>	<ul style="list-style-type: none"> Discuss data collected over specified time period (e.g., every marking period) and make modifications as necessary. Review IEP and student's progress at least once per year in all areas of the curriculum.

deficits has been conducted in clinical settings. Educators need to research how to implement programs for students in general education, special education, and other settings. Using a proactive, rather than a reactive, approach may reduce the number of difficulties students with EBD and language deficits encounter.

Research-based interventions promote collaboration among professionals, which facilitates consistency for students. Collaboration is essential in creating a comprehensive educational plan.

Helping Students Develop Language Skills

Critical to serving students with EBD and language deficits is the understanding that they do not learn the social appropriateness of language through incidental learning. They may exhibit pragmatic language difficulties in establishing and maintaining topics; determining the type of information to be shared; understanding the purpose of communication; and determining how much information should be shared, in what context, and with whom. Negative social interactions, more specifically, the inability to initiate, develop, and maintain relationships, may be the result of poor pragmatic skills.

Using multiple approaches to language development may prove most beneficial. Educators can greatly assist students by teaching pragmatic language skills as well as expressive and receptive language skills. Students that do not understand the subtleties of pragmatics may benefit from literal explanations or role playing that demonstrate the components of pragmatic language.

Using Strategies to Assist Students

Teachers, SLPs, social workers, and other education professionals can employ a variety of strategies to assist students in learning and expressing information. Effective language-based strategies (see *Table 2*) include teaching students how to use mnemonic

devices (Kleinheksel & Summy, 2003), bibliotherapy (Forgan, 2002), think aloud (Ramirez, 2000), self-instruction training (Meichenbaum & Goodman, 1971), self-monitoring (Hoover & Oliver, 1996), self-evaluation (Rhode, Morgan & Young, 1983), group process (Coleman and Webber, 1988), WATCH strategy (Young, West, Smith, & Morgan, 1995), SOCS problem-solving strategy (Gallagher, 1997), and life space interviewing (Redl, 1959). These strategies address receptive, expressive, and pragmatic language needs.

Proposed Future Research

As more students with co-occurring EBD and language deficits are recognized, the call for intervention will become greater. More questions will arise as educators learn how to best address the language needs of students with EBD. In 1989, Casby reported that only 9% of students with EBD in special education programs were also receiving speech and language services. Given the research conducted since 1989, educators must question whether that percentage has increased. Furthermore, educators need to question what types of services students are receiving and whether those services are meeting the needs of students with co-occurring EBD and language deficits.

Co-occurring EBD and language deficits is an area of special education that warrants continued investigation. Currently there are a limited number of studies that have been conducted in public school settings at the various educational levels. Educators need this information in order to begin to address the academic and social needs of students across the grades. Educators may believe they are utilizing best practices based on historical perspective, but, without research, they must question the validity of their interventions.

Language programs are necessary for all students but especially for those with EBD or with suspected EBD. Preliminary research has indicated

a high rate of language disorders with students with EBD, specifically within the area of pragmatic language (Benner, Nelson, & Epstein, 2002). Yet, classroom teachers may perceive other issues as more important than language needs. In addition, SLPs are typically not involved in the educational plans of students with EBD (Briton & Fujuki, 1993; Sanger et al., 1994) and may not have formal instruction in how to implement language programs for students with EBD.

In order to further understand the role language plays in the challenges faced by students with EBD, continued research is needed. Variables such as socioeconomic status, gender, grade level (preschool through high school and beyond), age, and setting have yet to be studied in depth. These proposed areas of research cross at least two disciplines (education and speech-language pathology) and involve a variety of professionals (e.g., counseling, social work, and vocational).

More research is needed to understand how language skills play a role in the life of a student with EBD. To date, studies have been focused primarily on elementary students. Few studies have been conducted on the adolescent population. It is critical that educators understand how language deficits add to the already complex issues that surround EBD. Educators must examine the role of the various components of language and learn how to best address them, depending on students' identified problematic behaviors.

In addition, educators must examine language skills and deficits across the curriculum and throughout the school day, in both formal and informal settings. Until they understand the nuances of co-occurring EBD and language deficits, educators may strive in vain to effectively teach students. More importantly, students will continue to struggle.

Table 2 TEACHING STRATEGIES FOR USE WITH STUDENTS WHO HAVE CO-OCCURRING EBD AND LANGUAGE DEFICITS

Strategy	Description	Language Area	Language Area
Mnemonic Devices	Use association to assist students in the recall of information (e.g., each letter of an acronym represents a step in the process to be conducted).	<ul style="list-style-type: none"> • Receptive language 	Kleinheksel & Summy (2003)
Bibliotherapy	Use books/literacy to help students solve problems through verbal exchange between teacher and peers.	<ul style="list-style-type: none"> • Expressive language • Receptive language • Pragmatic language 	Forgan (2002)
Think Aloud	Present students with a situation and ask them to verbalize their thinking process.	<ul style="list-style-type: none"> • Expressive language 	Ramirez (2000)
Self-Instruction Training	Teach behavior while verbalizing the steps and then have students perform the behavior while telling themselves the steps.	<ul style="list-style-type: none"> • Expressive language • Receptive language 	Meichenbaum & Goodman (1971)
Self-Monitoring	Have students record data about their own behavior and verbally interpret it.	<ul style="list-style-type: none"> • Expressive language • Receptive language 	Hoover & Oliver (1996)
Self-Evaluation	Have students observe and record data about their own behavior and assess their progress toward a predetermined goal.	<ul style="list-style-type: none"> • Receptive language 	Rhode, Morgan, & Young (1983)
Group Process	Teachers and students share feelings, ideas, thoughts, and concerns to establish interpersonal relationships.	<ul style="list-style-type: none"> • Expressive language • Receptive language • Pragmatic language 	Coleman & Webber (1988)
WATCH Strategy	Teach students to: W rite down the assignment and due date. A sk yourself if you understand the assignment, if not ask for clarification. T ask analyze the assignment. C heck each of the tasks for completeness, accuracy and neatness.	<ul style="list-style-type: none"> • Receptive language 	Young, West, Smith, & Morgan (1995)
SOCS Problem-Solving Strategy	Teach students the SOCS acronym and steps: S ituation (discuss the situation). O ptions (state various options). C onsequences (list possible consequences of options). S elect solution (determine best solution).	<ul style="list-style-type: none"> • Expressive language • Pragmatic language 	Gallagher (1997)
Life Space Interviewing	Have adults who are part of students' daily environment talk with them to ascertain their point of view regarding an event.	<ul style="list-style-type: none"> • Expressive language • Pragmatic language 	Redl (1959)

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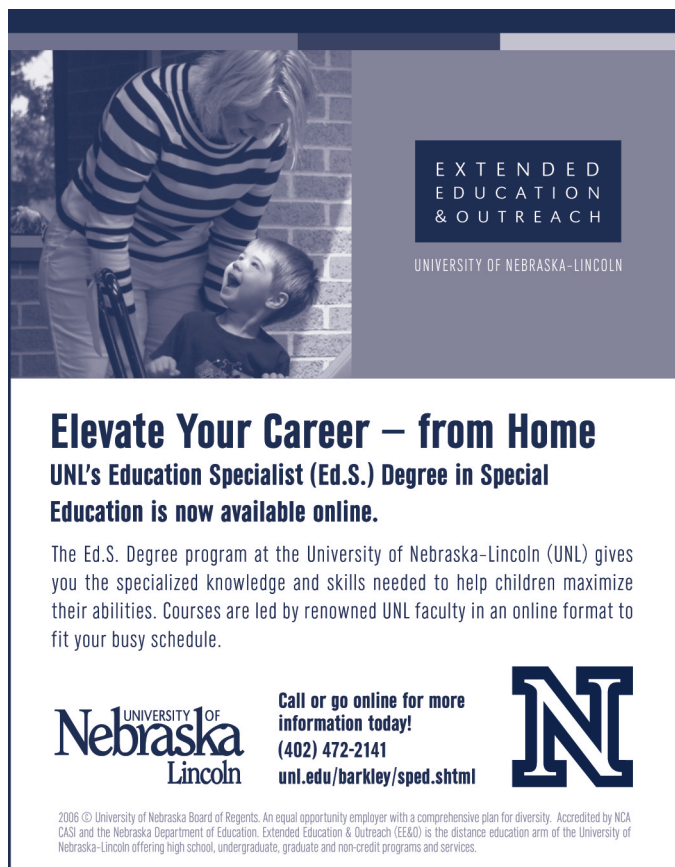
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