Classwide Peer Tutoring for Students with Emotional and Behavioral Disorders: A Strategy for Increasing Academic Achievement and Positive Behaviors

Students with emotional or behavioral disorders (EBD) suffer some of the worst school outcomes of any group of students. Students identified with EBD are most likely to experience academic difficulties, not finish high school, be unemployed, and have problems with social adjustment (Jolivette, Stichter, Scott, & Liaupsin, 2000). Existing research indicates that in order to improve post-secondary outcomes for students with EBD, schools should implement research-based interventions that focus on both academics and behavior (Scott, Nelson, & Liaupsin, 2001; Jolivette et al., 2000). Negative post-secondary outcomes for students with EBD may be due in part to a system where we do not intervene early enough, combine behavioral and academic interventions, or implement interventions with fidelity (Landrum, Tankersley, & Kauffman, 2003).

Students with EBD tend to be one to two years behind peers in regards to basic academic skills, and learning disabilities (LD) are frequently co-morbid with EBD (Coleman & Vaughn, 2000). With this high co-morbidity of EBD and LD, it is imperative for interventions to focus on both academic and behavioral deficits, and take into account the complex contextual factors that may impact the success of these interventions (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008). These complex contextual factors include designing interventions that can target both academic and behavioral skills, interventions that teachers are likely to implement, and interventions with proven effectiveness.

Researchers have shown interventions that include reinforcement, precision requests, behavioral momentum, time-out, response cost, group contingencies, monitoring of student performance, classroom management (including clear expectations and routines), and pre-
correction strategies are all behavioral interventions with proven effectiveness for students with EBD (Landrum et al., 2003; Sutherland et al., 2008). In addition, a large number of problem behaviors are associated with escaping academic tasks, and interventions that improve academic achievement are related to a decrease in delinquency (Scott et al., 2001). However, few academic interventions have proven effectiveness for students with EBD. Those that have shown promise for remediating academic deficits for students with EBD are: direct instruction, self-monitoring, peer tutoring, and monitoring of student progress (Landrum et al., 2003; Sutherland et al., 2008).

Coleman and Vaughn (2000) reviewed the literature to determine what reading interventions were effective for students with EBD. They found only eight research studies that met their search criteria and were able to draw only one encouraging conclusion from the review—that there was a positive effect when peer-tutoring programs were used. Coleman and Vaughn (2000) supplemented their review with information from a focus group of teachers. One theme that emerged from the focus group was the “variability of student functioning due to emotional or behavioral issues and the subsequent challenge of keeping the students motivated and engaged in reading” (p. 102). The focus group agreed that peer tutoring was an effective way to both increase academic skills and motivation.

**Classwide Peer Tutoring**

Classwide peer tutoring (CWPT) is one form of peer tutoring frequently used in schools. Table 1 describes the necessary components of CWPT. Developed originally for use with poor, culturally diverse students, CWPT has been shown to be more effective than traditional classroom instruction (Greenwood & Delquadri, 1995). Greenwood and colleagues reviewed Educational Resources Information Center (ERIC) and found 25 published studies that supported
the use of CWPT as an intervention for reading fluency, reading comprehension, and other academic skill acquisition (Greenwood, Arrega-Mayer, Utley, Gavin, & Terry, 2001). Research supports the use of CWPT for students with learning disabilities (LD), mild cognitive disabilities, and English language learners when compared to traditional teacher mediated instruction (Greenwood & Delquadri, 1995). Much of the research for CWPT has focused on academic skills such as reading comprehension or math computation. Researchers have studied the utility of CWPT for students with EBD, and a limited body of evidence exists supporting the use of CWPT for students with EBD.

CWPT has the potential to be an especially effective intervention for students with EBD because it combines academic and behavior components into one intervention package. CWPT includes group contingencies, monitoring of student performance, classroom management (including clear expectations and routines), pre-correction strategies, direct instruction of academic skills, and peer tutoring of academic skills. All of these components are interventions with proven effectiveness for students with EBD (Landrum et al., 2003; Sutherland et al., 2008). The primary purpose of this literature review is to examine the utility of CWPT for students with EBD across dependent variables (i.e. behaviors and academic skills). A secondary purpose of this literature review is to examine the utility of CWPT for students with EBD across settings (i.e. elementary schools, secondary schools, self-contained classrooms, general education classrooms).

**Method**

I conducted a review of the literature using the electronic databases of EBSCOhost and PsycINFO. The search included Academic Search Elite, ERIC, and Teacher Reference. I selected key terms based on commonly used terms in literature. Terms searched included
emotional disorder, behavioral disorder, emotional disability, behavior disability, peer tutoring, peer mediated instruction, and classwide peer tutoring. A review of the abstracts and methods sections was conducted, and articles were selected that met the following criteria: (a) have been published after 1990 in a peer reviewed journal, (b) participants were identified as having EBD, and (c) the intervention was same age reciprocal CWPT. I then selected five articles that met the search criteria and represented a range of settings (i.e. elementary and secondary; self-contained and general education).

**Results**

**Behaviors**

Locke and Fuchs (1995) examined the effects of CWPT on students with EBD in the areas of reading, on-task engagement, and social interactions. The participants in this study were male, age 11, and met the state criteria for seriously emotionally disturbed (SED). In addition, the researchers selected the students because of their reported difficulties staying on task, following directions, and below grade level reading achievement. Locke and Fuchs (1995) reported that the classroom teacher implemented the intervention, which included most of the necessary components for CPWT as detailed in Table 1.

Results supported a positive relationship between the CWPT intervention and increases in on-task and social interaction behavior (Locke & Fuchs, 1995). Average levels of on-task behavior increased from 56% during baseline to 88% during the second intervention phase. Average levels of social interaction behavior increased from 4.17% during baseline to 17.50% during the second intervention phase. The limitations of the study include the following: the researchers did not collect academic data, relatively few observation sessions were used for data collection, and stable baselines were not achieved for all students (Locke & Fuchs, 1995).
Behaviors and Academic Skills

Spencer, Scruggs, & Mastropieri (2003) examined the effectiveness of peer-tutoring to increase comprehension and retention of social studies content material and the on-task behavior for students with EBD. The participants in this study were 30 seventh and eighth grade students, who attended an alternative middle school for students with EBD, in a suburban community. All students had been classified as emotionally disturbed (ED). Spencer et al. (2003) reported that two social studies teachers at the school, who were also special education teachers, implemented the intervention. The researchers compared traditional classroom instruction with classroom instruction that included CWPT. During the CWPT intervention, the teachers followed the components outlined in Table 1.

For all dependent measures, students in the peer tutoring condition scored higher than students in the traditional condition. Spencer et al. (2003) concluded that peer tutoring increased academic achievement, and the students and teachers indicated they preferred the peer-tutoring condition. One limitation for the study included the use of a summary sheet in the peer-tutoring condition that may have contributed to the increased scores (Spencer et al., 2003).

Sutherland and Snyder (2007) investigated the use of Peer Assisted Learning Strategies (PALS), a version of CWPT (Fuchs, D., Fuchs, L., Mathes, & Simmons, 1997). The researchers investigated the effects of the PALS intervention on the disruptive behavior, active responding, and reading fluency of students with EBD. Participants in this study were four male students in a self-contained classroom for students with EBD. All students were identified with ED by Virginia state guidelines. The students ranged in age from 11-13. The teacher, with 16 years of teaching experience, implemented the intervention. During the intervention phase, Sutherland and Snyder (2007) report that the teacher followed PALS procedures for reading. These include
the typical components of CWPT as detailed in Table 1. The researchers added two additional features—social skills ratings to pair students, and students were taught to self-graph their reading fluency scores.

Overall, the results indicated decreased disruptive behavior, increased active responding, and decreased errors per minute (Sutherland & Snyder, 2007). The results demonstrated the utility of a CWPT procedure to reduce disruptive behavior and increase active responding while focusing on academic skills (Sutherland & Snyder, 2007). The limitations include that the baseline condition allowed little opportunity for active responding, making an increase in active responding likely with the implementation of CWPT.

**Academic Skills**

Bell and Young (1990) examined the effects of CWPT on the academic success of students with EBD, and their high, middle, and low performing non-disabled peers. The participants were 59 students in a general education history class at an unspecified location. Six of the 50 students were classified as BD, and five of these students were in a district program for students with severe behavior disorders. The teacher was a general education teacher with seven years of experience but no experience with CWPT or teaching students with special needs. The intervention consisted of applying CWPT with a key word strategy to study social studies content material (Bell & Young, 1990). This study included all the components of the intervention as outlined in Table 1.

All students with EBD increased from failing grades to passing grades on social studies tests during CWPT implementation. Bell and Young (1990) discussed implications, including that this procedure increased academic performance while supplementing classroom instruction instead of replacing it. One limitation of this study was the lack of treatment integrity data.
Falk and Wehby (2001) examined the effectiveness of a CWPT procedure, Kindergarten PALS, for improving the early literacy skills of kindergarten students with EBD. The participants were six males, all in a self-contained classroom for students with EBD, in an urban school district. A master’s level student, trained in PALS procedures, implemented the intervention. Prior to intervention, the students were not receiving formal reading instruction. The teacher implemented procedures according to the PALS manual and included the components outlined in Table 1.

The dependent measures in the study by Falk and Wehby (2001) were letter sound fluency, segmenting, and blending. The intervention produced positive results for the students on letter sound fluency and blending (Falk & Wehby, 2001). One student required an additional behavioral contingency in order to show appropriate behaviors. The lack of formal reading instruction prior to the intervention is a limitation.

**Discussion**

The five studies I examined support the use of CWPT for students with EBD to increase both academic skills and positive behaviors. Bell and Young (1990), Falk and Wehby (2001), and Spencer et al. (2003) were all able to increase academic skills for students with EBD using CWPT. Locke and Fuchs (1995), Spencer, et al. (2003), and Sutherland and Snyder (2007) were all able to increase positive behaviors, and Sutherland and Snyder (2007) were also able to reduce disruptive behavior for students with EBD. In addition, the articles reviewed demonstrate the utility of CWPT across settings. Two studies (Falk & Wehby, 2001 and Locke & Fuchs, 1995) showed positive results at the elementary level, and three studies (Bell & Young, 1990; Spencer, et al, 2003; and Sutherland & Snyder, 2007) showed positive results at the secondary level. Four of the five reviewed studies were in self-contained classrooms or special schools for
students with EBD, and one study (Bell & Young, 1990) was able to show positive results in a general education classroom. This review of the literature supports CWPT as an effective intervention for students with EBD across dependent variables and across settings.

Overall, the five studies demonstrate that when the key components of CWPT are implemented increases in both academic skills and positive behaviors are likely. All of the reviewed studies followed most of the major components of CWPT. One notable exception was that only one study assigned new partners each week. Although none of the researchers gave a reason for this omission, one could assume new partners were not assigned each week because of the patterns of challenging behavior seen in students with EBD (Scott et al., 2001). Sutherland and Snyder (2007) went as far as to use behavior rating scales to pair partners in order to minimize any potential conflicts in partners. Three studies (Falk & Wehby, 2001; Spencer et al., 2003; and Sutherland & Snyder, 2007) did not specify if all the procedures for earning points were followed. However, Falk and Wehby (2001) and Sutherland and Snyder (2007) indicated they followed PALS procedures, and these procedures include this type of reinforcement. In addition, Spencer et al. (2003) indicated they folded points earned into an existing behavior management system. Therefore, all five of the studies did utilize reinforcement through dyads earning points as an important component of their implementation of CWPT.

The studies reviewed all used reinforcement, monitoring of student performance, classroom management (including clear expectations and routines), error correction, and peer-tutoring strategies. All of these are academic and behavioral interventions identified as effective for students with EBD (Landrum et al., 2003; Sutherland et al., 2008). This makes CWPT one intervention that can be implemented in order to improve post-secondary outcomes for students with EBD by focusing on both academics and behavior.
The implications for this review are important as together these studies demonstrate that CWPT is a strategy that can be applied efficiently by teachers, across settings, to increase both academic and behavior skills for students with EBD. Four of the five studies used the classroom teacher as the interventionist, and one study (Bell & Young, 1990) used a general education teacher. In addition, the intervention characteristics in Table 1 show the CWPT intervention was in place for an average of only four hours across studies. This small amount of time makes CWPT appealing to teachers. Sutherland et al. (2008) reported teachers are most likely to implement interventions they perceive as being easy to implement. With the minimum time commitment for CWPT, teachers may perceive CWPT as an easy-to-implement intervention. One reason CWPT can be implemented for such a small amount of time and still produce significant results is that it is designed to help students learn more in less time. Students are provided with increased opportunities for rehearsal, practice, feedback, and reinforcement through peers, which results in increased academic achievement in less time than traditional classroom instruction (Greenwood & Delquadri, 1995).

There are several limitations of the findings in this review. One limitation is the small sample sizes. A total of 49 students with EBD were studied across the five reviewed studies. This makes generalizations to all students with EBD less valid. A second limitation is that although the settings were different in each study, four of the five studies were in self-contained classrooms and not with non-disabled peers. This makes it impossible to know if the behavior improvements would generalize to settings such as general education classrooms. A third limitation of the findings of this review is that in two of the studies there was little, if any, effective instruction taking place (Falk & Wehby, 2001; Sutherland & Snyder, 2007) before the
introduction of the intervention. Therefore, the positive gains could have been because of the introduction of instruction and not because of CWPT itself.

Despite the limitations of the reviewed studies, the results are promising, and CWPT should be considered as an emerging evidenced based practice for students with EBD. Especially promising are the findings that CWPT can be used to intervene with both academic skills and behaviors, simultaneously. Future research should focus on replicating single case designs for students with EBD in order to move CWPT from an emerging practice to one with a clear evidence base. In addition, researchers should look to conduct group design research in order to help determine the effectiveness of CWPT. Because CWPT encompasses so many key components, future research should look at the utility of each component (e.g. new partners each week, reinforcement procedures, etc.). Future research should also continue to investigate the use of CWPT in general education classrooms. It may prove to be a powerful tool for facilitating inclusion for students with EBD.

Even with the variability in functioning for students with EBD, CWPT is one intervention that combines both academic and behavioral components in order to improve outcomes for students with EBD.
References
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<tr>
<th>Author</th>
<th>Key Components for Teachers</th>
<th>Key Components for Students</th>
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<tbody>
<tr>
<td></td>
<td>Introduce and/or review material</td>
<td>Select content material to be tutored</td>
</tr>
<tr>
<td>Bell &amp; Young (1990)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Falk &amp; Wehby (2001)</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Locke &amp; Fuchs (1995)</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Spencer, Scruggs, &amp; Mastropieri (2003)</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Sutherland &amp; Synder (2007)</td>
<td>Yes</td>
<td>Yes</td>
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1 The authors did specify, however, that peer assisted learning strategies (PALS) procedure were followed.
2 The points were incorporated into an existing behavior management plan.
<table>
<thead>
<tr>
<th>Author</th>
<th>Setting</th>
<th>Dependent Variables</th>
<th>Time</th>
<th>Outcome</th>
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<tbody>
<tr>
<td>Bell &amp; Young (1990)</td>
<td>Secondary; general education classroom; teacher directed</td>
<td>Academic</td>
<td>20 minutes, three times per week; each chapter was covered in one week for a minimum 1 hour of intervention</td>
<td>Increased academic performance on social studies assessments</td>
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<tr>
<td>Falk &amp; Wehby (2001)</td>
<td>Elementary; self-contained classroom; researcher directed</td>
<td>Academic</td>
<td>25 minutes, three times per week, over 11 weeks for a minimum of 13 hours of intervention</td>
<td>Increased early literacy skills</td>
</tr>
<tr>
<td>Locke &amp; Fuchs (1995)</td>
<td>Elementary; self-contained classroom; teacher directed</td>
<td>Behavior</td>
<td>20 minutes, for nine sessions for a minimum of 2 hours of intervention</td>
<td>Increased on-task behavior and positive interactions</td>
</tr>
<tr>
<td>Spencer, Scruggs, &amp; Mastropieri (2003)</td>
<td>Secondary; alternative school; teacher directed</td>
<td>Behavior &amp; Academic</td>
<td>35 minutes, five times per week, for 2 weeks for a minimum of 5.8 hours of intervention</td>
<td>Increased academic achievement on social studies assessments and increased time on task</td>
</tr>
<tr>
<td>Sutherland &amp; Synder (2007)</td>
<td>Secondary; self-contained; teacher directed</td>
<td>Behavior &amp; Academic</td>
<td>20 minutes, for 15 to 30 sessions for a minimum of 3 hours of intervention</td>
<td>Increased active responding and decreased disruptive behavior, inconsistent academic gains</td>
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