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The Use of Peer Mediated Interventions as an Academic Intervention for Students with Emotional Disorders

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THE USE OF PEER MEDIATED INTERVENTIONS AS AN ACADEMIC
INTERVENTION FOR STUDENTS WITH EMOTIONAL DISORDERS

by

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Bachelor of Science, University of Kentucky, 2005

A Research Paper
Submitted in Partial Fulfillment of the Requirements for the
Master of Science in Education.

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RESEARCH PAPER APPROVAL

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for the Degree of

Master of Science

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MAJOR PROFESSOR: Dr. Nancy Mundschenk

Students with emotional disorder (ED) present a variety of characteristics and factors that impact their ability to make academic and behavioral progress. Historically, the intervention efforts of educators to help students with ED have focused on changing student behavior. However, these efforts have been largely ineffective in helping students with ED become academically successful. There are several instructional practices that have been found to help students with ED. Peer-mediated interventions combine many of these practices and have been shown to increase the academic and behavioral functioning of students with ED. Treatment effectiveness and acceptability are discussed along with implications for future research.

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Introduction to Students with ED

Students identified with an emotional disorder (ED) make-up only 6.7 % of those served under the Individuals with Disabilities Education Act (IDEA) (Data Accountability Center, 2010), but they display a broad range of complex academic and behavioral challenges that can require significant attention and perseverance by educators who seek to deliver effective educational programs, and by researchers who seek to identify the unique and effective methods necessary to successfully serve them.

IDEA 2004 states a student has a disability under the category of emotional disturbance if they meet the following definition:

1. Emotional disturbance means a condition exhibiting one or more of the following characteristics, over a long period of time and to a marked degree, that adversely affects a child's educational performance: (a) An inability to learn which 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; or (e) A tendency to develop physical symptoms or fears associated with personal or school problems.
2. The term includes children who have schizophrenia. The term does not include children who are socially maladjusted, unless it is determined that they have an emotional disturbance (Section 300.8(c)(4)).

These criteria set forth by IDEA encompass a vast array of characteristics. Although a diverse population, it is nonetheless important to understand the defining characteristics of students with ED in order to appropriately educate them (Wagner, Kutash, Duchnowski, Epstein,

& Sumi, 2005). Researchers have identified environmental factors that may lead to the development of ED, and have noted common behaviors and characteristics exhibited by these students.

Environmental Factors Affecting Students with ED

Students with ED are more likely than students from any other disability group to come from a home that has several risk factors for poverty (Kehle, Bray, Theodore, Zhou, & McCoach, 2004). For example, 34.4% of elementary/middle school students and 38.1% of high school youth identified with ED are from single parent homes. Additionally, 45% students with ED are more likely than students with other disabilities to live in home in which another person has a disability (Wagner, et al., 2005). Drug abuse, poor nutrition, cultural deprivation, and victimization are common environmental factors that affect students with ED (Kehle et al., 2004). Furthermore, school districts do not have to offer an appropriate program for students with ED in every school building, therefore; in order to receive an appropriate education, students may attend several different schools. In fact, students with ED attend more schools than any other disability group (Wagner, et al., 2005).

Fifty percent of students with ED have a learning disability, 2/3 have a diagnosis of ADD/ADHD, and many also have a language disorder (Wagner, et al., 2005; Ryan, Reid, & Epstein, 2004). Each disability is diverse in nature and can present differently among students which makes it difficult to identify the impact one disability has on the other. For example, the frustration and academic struggles of some students with ED may stem from a learning disability, but it is possible that student misbehavior over time may cause the development of a learning disability. Students with ED and one or more comorbid disability may engage in a higher rate of misbehavior, experience a lower rate of success, and require multi-faceted

interventions to address all areas of disability. Consequently, students with ED have an increased risk for academic failure and perform below grade level when compared to non-disabled peers and peers in other disability categories (Bowmann-Perrott, 2009; Ryan et al., 2004).

Common Characteristics of Students with ED

There are many common characteristics among students with ED beginning with the fact that 80% are male and second, African American students are more likely to be diagnosed with ED than any other racial or ethnic group (Wagner, et al., 2005). They comprise 25% of all students diagnosed with ED, but account for only 14% of school-age students (Kehle et al., 2004). Students with ED often display a variety of pervasive behaviors that extend to multiple environments including: a lack of motivation, frequent disruptive and aggressive behaviors, high rates of absenteeism, low rates of task engagement, negative interactions with the teacher and peers, less time attending and complying with directions, and a high level of anxiety (Kehle, et al., 2004; Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008; Wehby, Lane, & Falk, 2003). These classroom behaviors can interrupt academic instruction impacting the ability of students to learn and of teachers to effectively educate (Sutherland, et al., 2008).

As a result of poor treatment outcomes, students with ED often experience negative societal outcomes into adulthood, and their deviant and often aggressive behavior leads to criminal activity and a high likelihood of being arrested (Bowmann-Perrott, 2009). Their nonstandard behavior and poor social adjustment make it difficult for some adults with ED to establish lasting relationships. These factors, combined with a poor educational background, may make it difficult for adults with ED to find employment and carry out the duties necessary to

keep a job (Kehle et al., 2004). In fact, students with ED have a post school unemployment rate of 52% (Ryan et al., 2004).

Academic Outcomes for Students with ED

IDEA 2004 stipulates that students with disabilities are to receive a free and appropriate public education (FAPE) in the least restrictive environment (LRE). This mandates the school system to serve children and youth identified with ED in a manner that allows them to make educational progress and be part of an inclusive educational environment to the maximum extent possible (Wagner et al., 2005). Unfortunately, the efforts of the educational system to help students with ED become academically and behaviorally successful have been largely ineffective (Vannest, Temple-Harvey, & Mason, 2009). School failure, retention and dropout rates are higher for students with ED than any other disability category (Ryan et al., 2004). In fact, approximately 50% of students with ED drop-out of school (U.S. Department of Education; Pierce, Reid, & Epstein, 2004; Wagner et al., 2005).

The behavioral issues characteristic of students with ED impact their own ability to learn as well as the environment in which they receive instruction. The result is an adverse relationship such that students who exhibit problem behavior also tend to experience academic failure (Sutherland et al., 2008). Underachievement and academic failure for students with ED often start in elementary school and become worse as they proceed into high school (Pierce et al., 2004). Students with ED in elementary school are often 1.2 to 2 grade levels behind their peers. That gap broadens to 3.5 grade levels below peers by the time many students reach high school (Ryan et al., 2004). As the achievement gap widens, students may become embarrassed and increasingly frustrated by their lack of skills and abilities, especially in comparison to their peers, which only increases the likelihood for problem behavior (Sutherland et al., 2008). Teachers

must take these factors into account when developing effective instructional practices for students with ED.

Instructional Practices for Students with ED

Educators who serve students with ED are faced with the challenge to increase academic achievement and decrease inappropriate behavior (Vannest et al., 2009) but instructional practices for these students have focused predominately on managing and changing student behavior with little priority given to the student's academic needs. This pattern stems from the belief of many educators that disruptive and inappropriate behaviors must be under control before a student can learn, which invariably leads to minimal academic instruction for students with ED, and acts as a catalyst for their poor academic and lifetime outcomes (Wehby et al., 2003).

The teacher's role is to use effective instruction and behavior management strategies to increase the likelihood students will learn and behave (Sutherland et al., 2008). It is important that behavioral intervention and supports not replace academic instruction (Wehby et al., 2003) but change the environmental variables that lead to problem behavior (Sutherland et al., 2008). The more a teacher can help a student cultivate his or her desire to learn, the more likely a student is to attempt an academic task and thus set the stage for learning to take place (Riggs & Gholar, 2009). Recognition of this fact should provide the impetus for the implementation of procedures based on the idea that academic interventions and curricular engagement are part of effective classroom management. This could potentially decrease problem behavior and increase academic success at the same time (Sutherland et al., 2008).

The scarcity of scientifically-based research on effective academic interventions for students with ED further complicates the challenge of selecting and implementing effective

curricula and interventions (Ryan et al., 2004; Vannest et al., 2009). In a review of the academic research from 1975 to 2002, Mooney and colleagues (2004) found that while several million students were identified with ED, fewer than 400 were involved in academic intervention studies. Furthermore, research on academic interventions provided only vague descriptions of participants, executed few clinical trials, and did not ensure treatment integrity (Mooney, Denny, & Gunter, 2004). These factors make it difficult to generalize research outcomes to the diverse population of students with ED and this in turn limits the number of intervention choices considered scientifically-based under the No Child Left Behind Act (Mooney et al., 2004; Vannest et al., 2009).

Academic interventions fall into three categories: child-mediated, teacher-mediated, and peer-mediated. In a child-mediated intervention, the student is responsible for intervention implementation through techniques such as self- management or strategy instruction (Ryan et al., 2004). The success of this type of intervention relies solely on the student and his or her ability to effectively execute the intervention and to gauge progress and achievement in relation to his or her goal (Ryan et al., 2004).

Teachers are responsible for intervention treatment in a teacher -mediated intervention (Ryan et al., 2004; Pierce et al., 2004) as they make the decisions related to the antecedents and consequences associated with student learning. Thus, teachers are responsible for manipulating variables that may improve student academic outcomes (Ryan et al, 2004; Pierce et al., 2004). Variables may include rewards and consequences, contingency contracting, modification of curriculum and presentation, task difficulty, etc.

Peer-mediated interventions (PMI) rely on student peers to carry out teacher-selected instruction. PMI uses peers to deliver instruction to one another in a collaborative arrangement of

two or more peers (Maheady, 2001; Kunsch, Jitendra & Sood, 2007). These components may be altered depending on the desired outcome for students, the academic subject area, student population, and instructional environment. PMI incorporates various instructional strategies to help meet the needs of diverse learners with varying levels of ability and is often based on individual and group reinforcement contingencies for performance (Landrum, Tankersley, & Kauffmann, 2003). Examples of peer-mediated interventions may include class-wide peer tutoring, cross-age tutoring, adult-mediated tutoring, and cooperative learning (Mooney et al., 2004; Ryan et al., 2004).

A review of treatment outcomes in academic research for students with ED conducted by Mooney and colleagues (2004), reported the mean effect size for child-, teacher-, and peer-mediated academic interventions. The authors considered the following effect sizes of 0.8 or above as strong: teacher-mediated studies, 1.05; child-mediated studies, 1.24; and peer-mediated studies, 1.88 (Mooney et al., 2004). This research distinguishes PMI as more effective than teacher- or child-mediated interventions. Additional research has shown peer-mediated interventions to be associated with positive academic outcomes for both tutor and tutee in academic performance, as well as a positive increase in student social behavior, interest in school and academics, and student self-concept (Ryan et al., 2004).

PMI has been shown to be a viable option to help prevent academic failure of students with ED (Bowmann-Perrott, 2009). However, due to the unique and varied characteristics of this population, there are several matters one must take into account when considering the various types of PMI that can be used as an intervention with students with ED. One starting point is recognition of the positive relationship between academic engagement time and learning and, the importance of environmental factors and teacher-student interactions that can lead to academic

success. Furthermore, educators must strive to design and deliver effective multi-component intervention packages that meet the unique academic and behavioral needs of each student while also considering the classroom environment, teacher responsibilities and available resources.

Types of Peer-Mediated Interventions

Peer tutoring utilizes peer interactions to influence the academic and social performance of students and has been shown to improve academic and behavioral deficits in students with ED (Bowmann-Perrott, 2009; Niesyn, 2009; Spencer et al., 2009). In its most basic form, peer tutoring consists of two or more students in charge of delivering and/or learning teacher-prepared instruction (Falk & Wehby, 2001). Peer tutoring shifts the responsibility of instruction from the teacher to students. The teacher becomes the supervisor of instruction while students take charge of their learning. This arrangement provides students with the opportunity to be more academically engaged through one on one instruction and allows the teacher to differentiate instruction and manage the classroom in a more effective manner (Okilwa & Shelby, 2010). Peer tutoring arrangements identify one student as the tutor (teacher) and the other student(s) as the tutee(s) and can include one or more of the following formats: cross-age tutoring, same-age tutoring, reciprocal tutoring, reverse role tutoring, Class Wide Student Tutoring Teams (CSTT), Class Wide Peer Tutoring (CWPT), and Peer Assisted Learning Strategies (PALS).

Students with ED can serve as tutor, tutee, or both depending on the format of peer tutoring utilized in the classroom. Cross-age tutoring creates tutoring pairs in which students are not the same age and are often part of different classrooms and/or schools. The older student is considered the expert and provides instruction to the younger student. There is often an age difference of at least two years between the students (Scruggs & Osguthorpe, 1985). On the other hand, same-age peer tutoring involves students of a similar age joined in a dyad working together

to teach and learn content. This format often leads to a variation in roles among the partners and is known as the reciprocal peer tutoring strategy (Spencer et al., 2009). Reciprocal peer tutoring allows each student in the pair or team to take on the role of tutor and tutee, providing each student with the opportunity to lead instruction (Bowman-Perrott, Greenwood, & Tapia, 2007). In contrast, reverse-role peer tutoring charges the student with disabilities to take the role of tutor instead of maintaining the role of tutee (Tournaki & Criscitiello, 2003).

A combination of cross-age tutoring, same-age tutoring, reciprocal tutoring, and reverse-role tutoring create the building blocks for CSTT, CWPT, and PALS. CSTT uses a team of three to five students with varying abilities, at least one high, one average and one low performing student to study and review information. Students are guided in their review by a teacher-developed study guide based on previously learned curricular information. Students in the group rotate the responsibility of tutor and tutees (Utley & Mortweet, 1997). Students are awarded points for correct answers and for following error correction procedures. The teacher facilitates PMI by timing the session, answering questions, and awarding bonus points for following rules and exhibiting appropriate behavior (Utley & Mortweet, 1997).

CWPT is also a reciprocal peer tutoring strategy which allows students to be both tutor and tutee in a one-to-one peer tutoring dyad. Class-wide group contingencies are developed based on the points the pair earns during their tutoring session(s) for correct answers, appropriate teaching behavior, and task completion. The team with the most points at the end of the session wins. Student pairs change weekly in order to maintain student motivation (Bowmann-Perrott, 2009; Bowman-Perrott et al., 2007; Utley & Mortweet, 1997). PALS is a variation of CWPT that uses class-wide curriculum based measurements (CBM) to design group and individual instruction in which higher-performing students are paired with lower-performing students in a

reciprocal peer tutoring format. The higher performing student is identified as the coach first and the lower performing student is the player. The coach helps the player review and practice the skill. The roles are then switched so each student has a chance to be the coach (Falk & Wehby, 2001; Fuchs, Fuchs, Mathes, & Simmons, 1997; Okilwa & Shelby, 2010; Utley & Mortweet, 1997).

Academic Task Engagement

The more time students spend engaged in meaningful and appropriate academic instruction, the more likely students are to learn and become academically successful (Johns, Crowley, & Guetzloe, 2008; Sutherland et al., 2008). Effective implementation of PMI for students with ED will maximize high levels of academic engagement. A student's school day can be divided into three main uses of time: allocated time, engaged time, and academic learning time (Metzker, 2003; Aronson, Zimmerman, & Carlos, 1998; Johns et al., 2008). Allocated time is the total amount of time designated for learning. This includes the total number of days and hours students are in the school setting. It is split between instructional time, the amount of time in the school day devoted to academic activities, and non-instructional time, the amount of time used for non-academic activities such as lunch or recess (Aronson et al., 1998; Metzker, 2003; Johns et al., 2008).

Instructional time can be further divided into engaged time and academic learning time. Engaged time, often referred to as time on task, is time a student spends participating in learning activities (Aronson et al., 1998; Metzker, 2003). It is characterized by student attention to task and learning materials, and making appropriate motor and verbal responses (Johns et al., 2008). However, a student may appear to be on-task and engaged in instruction, but not actually

learning. Student learning occurs when an instructional activity aligns with his or her readiness to learn and is known as academic learning time (Aronson et al., 1998; Johns et al., 2008).

Academic learning time requires a balance of teacher and student behavior. The teacher must choose instructional activities that match the student's ability and readiness level and the student must supply the motivation to learn from the chosen activities (Metzker, 2003; Aronson et al., 1998; Johns et al., 2008; Riggs & Gholar, 2009). If teachers can increase the amount of engaged time during a student's school day, it increases the likelihood a student will learn (Landrum et al., 2003).

If instructional time leads to academic learning, then it is clear that non-instructional time takes away from student learning. Non-instructional time gives students the freedom to engage in tasks unrelated to academics. When students are off-task, they look for ways to occupy their time which may lead to student misbehavior and discipline issues (Johns et al., 2008; Metzker, 2003). Furthermore, students who do not spend a majority of their school day engaged in academic learning time can become passive, give up easily, become anxious, withdraw, become angry about school, and often fail (Johns et al., 2008).

Students are not engaged in academic learning during some unavoidable times such as lunch, recess, bathroom breaks and passing times, but other interruptions often stem from a lack of classroom management and structure. Discipline issues require teachers to focus on the behavior of a few students which limits instructional time for all other students (Metzker, 2003). Teachers have responsibilities in and out of the classroom, and a certain amount of paperwork also requires their attention; if teachers do not effectively manage their school day these demands can greatly reduce instructional time. Many teachers do not allocate sufficient time to prepare

instruction, materials, and activities, and this leaves them unprepared for instruction and academic learning (Vannest, Soares, Harrison, Brown, & Parker, 2010).

The time issue has real consequences. Johns et al. (2008) found that high-achieving students are typically engaged 75% of time or more, but low-achieving 50% or less. Highly effective teachers have students on task 80% of the school day, whereas less effective teachers have students with an on-task rate of 60%. In order to reach the suggested goal of an 80% on-task rate, many teachers can take measures to increase the amount time available for academic task engagement. Instructional methods that require an active response from students and direct and explicit instructions given before assignments to help students understand what is expected and prevent confusion which can lead to off-task behavior. Teachers can also help increase academic learning by monitoring student progress and providing positive reinforcement and feedback (Johns et al., 2008).

Students who feel successful and rewarded are more motivated to learn. Teachers should, therefore, strive to provide frequent and immediate feedback which allows students to understand and learn from their mistakes while reducing feelings of frustration (Aronson et al., 1998; Johns et al., 2008). Teaching practices that are enjoyable for students and consider individual learning abilities increase the likelihood of student learning and engagement (Aronson et al., 1998; Stewart & Evans, 1997). Finally, teachers should have effective classroom management that minimizes discipline issues and disruptions, and includes a plan that minimizes the amount of instructional time lost to such interruptions (Metzker, 2003).

Lack of time spent engaged in academic learning is an issue affecting the education of all students. Teachers face a daily struggle to balance their many roles and responsibilities with their duty to deliver appropriate instruction (Vannest et al., 2010). This struggle becomes more

difficult for teachers of students with ED. Many students with ED present a number of characteristics, behaviors, and ability levels that make it even more difficult for educators to establish a desired rate of on-task behavior and academic learning time.

Students with ED experience a different academic environment than their non-disabled peers (Wehby, Tally, & Falk, 2004) and receive the majority of their instruction outside of general education classrooms, often without much contact with their same-aged peers. ED classrooms are frequently not equipped to address the academic needs of students. Instead, they focus on behavioral needs, which promotes a general mood of apathy, and implement a curriculum that is not modified to meet individual student needs nor presented in an interesting or challenging manner (Jolivette and colleagues, 2001). Furthermore, students with ED educated in an ED classroom are overly dependent on their teacher for academic help and receive less direct academic instruction than students in other classrooms (Jolivette, Wehby, Canale, & Massey, 2001). In such classrooms, teachers often provide little reinforcement for positive behavior and offer high rates of attention for problem behaviors (Sutherland et al., 2008).

The problem behaviors exhibited by students with ED do not promote academic task engagement. Students with ED often engage in high rates of aggression, out-of-seat activity, and noise making behavior. They also spend little time attending to and complying with group directions (Sutherland et al., 2008). The presence of these negative behaviors often results in a negative pattern of teacher-student interactions, which can lead to a minimal amount of task presentation and academic instruction. For example, teachers may escape from or avoid aversive situations, such as task presentation that may lead to misbehavior (Wehby et al., 2003; Wehby et al., 2004). Teachers often give attention to a student who displays inappropriate behavior and remove the aversive task (i.e. work completion), which only reinforces the inappropriate

behavior (Wehby et al., 2004). Thus, in an effort to reduce misbehavior, teachers often decrease the amount of time devoted to academic instruction, leading to a less challenging curriculum and poor academic outcomes for many students with ED (Wehby et al., 2003).

Wehby and colleagues (2004) investigated how specific types of teacher instructional behavior changed based on the function of student problem behavior. A special education teacher and seven third and fourth grade students with various disabilities (LD, ED, other-health impairment) in a self-contained elementary classroom were observed once a day. Teacher and target student interactions were observed for eight, ten- minute sessions using the Multiple Option Observation System for Experimental Studies (MOOSES). The teachers also completed a Functional Assessment Checklist for Teachers and Staff (FACTS) for each student. The FACTS survey helped identify whether student behavior was escape or attention oriented. The results showed that students who displayed attention-motivated problem behavior received a higher number of opportunities to respond (OTR), more teacher attention, and experienced more instructional talk from the teacher than students with escape-motivated behavior. Attention-seeking behavior often mimics acting out behavior and can be a distraction from instruction. This type of behavior can be difficult to manage as students will continue the negative behavior(s) until they are given the attention they desire. Therefore, students may receive more OTR and teacher attention as a means to manage student behavior and not as a way to enhance student learning and academic instruction. This may lead teachers to avoid or alter academic tasks and instruction in order to curb attention-seeking behavior (Wehby et al., 2004).

A low rate of positive reinforcement from teachers, inadequate academic instruction, and poor student self-confidence can lead to a high rate of failure for many students with ED. This combination of factors can make school an aversive environment and lead to acts of aggression

and other inappropriate behaviors. Thus, teacher interactions and academic instruction or activities are often the antecedent to inappropriate student behavior (Wehby et al., 2003). The conflict between the teacher's ability to provide academic instruction and behavior management, combined with the student's aversive response to academic work creates an environment in which students with ED only spend approximately 30% of their school day engaged in academic instruction (Wehby et al., 2004).

Student- and teacher-level interventions must occur to change environmental variables that lead to problem behavior and low rates of academic engagement for students with ED (Sutherland et al., 2008). Through PMI teachers can increase rates of effective instruction and use a variety of tasks that require active responding which may decrease the frequency of problem behavior (Stewart & Evans, 1997; Wehby et al., 2003). Effective instruction begins with clear short- and long-term academic and behavioral goals that address the needs of individual students and the class as a whole. Goals should consider the present level of student academic performance and individual rates of learning. PMI can help teachers and students reach these goals by implementing a curriculum that is matched to student need and delivered through the use of a variety of instructional techniques and methods to solicit student involvement and maintain student attention (Stewart & Evans, 1997).

Another method used to improve instruction is to increase the rate of opportunities to respond (OTR). During academic instruction, teachers should elicit 4 to 6 responses per minute from students. Student feedback gained from OTR can help teachers adjust and increase the quality of the lesson and sustain student involvement (Wehby et al., 2003). Sutherland and colleagues (2003) explored the effect of increased rates of OTR on the classroom behavior of students with ED. The study included nine students ranging in age from eight to twelve identified

with ED who were receiving instruction in a self-contained elementary ED classroom. Direct observation of students was conducted during teacher-led math instruction. The observer marked the presence of opportunities to respond, teacher praise, correct responses, disruptive behavior, and on-task behavior. The teacher worked with the researcher to increase rates of OTR from baseline levels to a predetermined number of OTR during the intervention phase. Results showed students with ED had fewer disruptions, more correct responses, and increased task engagement during intervention than in the baseline and withdrawal phases. The increase in OTR created the opportunity for higher rates of correct responses from student and an increase in praise from the teacher (Sutherland, Alder, & Gunter, 2003). PMI is also an effective means to increase student OTR. PMI naturally encourages increased levels of OTR and increased task engagement as all students are simultaneously engaged with their partners providing responses and/or feedback to one another.

Teachers who have a proactive approach to student behavior have a better chance in reducing problem behavior and increasing academic engaged time (Sutherland et al., 2008). A proactive approach to teaching students with ED may include the aforementioned OTR and choice-making strategies, as well as teaching in a small-group format using a rapid and engaging pace of instruction. Teachers should provide students with an equal and appropriate amount of learning opportunities while providing immediate error correction and positive reinforcement for success (Stewart & Evans, 1997).

The various types of PMI are based on procedures meant to provide students with opportunities for frequent error identification, repeated practice of correct responses, immediate feedback, individualized instruction, and a high level of help and encouragement from peers (Ryan et al., 2004; Utley & Mortweet, 1997). Therefore, teachers may choose to develop PMI in

order to effectively implement the instructional strategies discussed in this section and thus raise the levels of academic engagement and appropriate behavior of students with ED in the classroom (Spencer et al., 2009).

Treatment Effectiveness

Research on peer mediated interventions, specifically cross-age tutoring, same-age tutoring, reciprocal tutoring, and reverse role tutoring, provide evidence that these formats can help students with ED improve academic performance (Bowmann-Perrott, 2009; Ryan et al., 2004; Spencer et al., 2009). Other studies have shown peer tutoring to be a valuable intervention for enhancing the academic functioning of students with ED in the subject areas of reading, language, spelling, writing, math, science, history, and social studies (Bowman-Perrott, 2009; Bowman-Perrott et al., 2007; Harper, Maheady, Mallette, & Karnes, 1999; Ryan et al., 2004; Spencer, 2006; Tournaki & Criscitiello, 2003). A review that included academic variables in language arts, math, science, and social studies showed positive effects across all academic content areas, but the effects were only seen in basic skills instruction and practice, not with material that required critical thinking skills (Okilwa & Shelby, 2010). Data also show when compared to whole group, teacher-led instruction, peer tutoring has been effective in improving student test performance and accuracy. Students that participate in peer tutoring experience greater academic gains than students who are not a part of the peer tutoring program (Bowman et al., 2007; Falk & Wehby, 2001; Fuchs et al., 1997; Kamps, Barbetta, Leonard, & Delquadri, 1994)

Peer-tutoring appears to be a promising intervention to increase the reading skills of students with ED (Scruggs & Osguthorpe, 1985; Spencer et al., 2009). Following peer tutoring interventions, elementary and middle school students with ED showed an increase in the number

of words read per minute and a decrease in the amount of errors made when reading, leading to an overall improvement in student reading fluency (Scruggs & Osguthorpe, 1985; Sutherland & Snyder, 2007). Student word-attack skills, letter-sound identification, and blending skills improved after participating in peer tutoring interventions that targeted the improvement of critical reading skills (Falk & Wehby, 2001; Scruggs & Osguthorpe, 1985). Several study participants did not consistently produce gains in reading comprehension (Scruggs & Osguthorpe, 1985; Spencer, 2006), but compared to baseline levels, students with ED were better able to comprehend text and increase achievement on curriculum based reading assessments when peer tutoring instruction was combined with specific reading comprehension strategies (Spencer & Scruggs, 2003).

The effectiveness of peer tutoring on the math skills of students with ED was the focus of a literature synthesis conducted by Kunsch et al. (2007). Using these values to interpret effect size: 0.80 = large effect, 0.50 = moderate effect, and .20 = a small effect, Kunsch and colleagues concluded that the overall mean effect size of .47, suggests peer-mediated interventions are moderately effective in improving the math performance of students with ED. Treatments that addressed computational skills had an effect size of .63, while those that focused on computation and concepts and applications had an effect size of .34 (Kunsch et al., 2007). Maheady, Sacca, and Harper (1988) found that during peer-tutoring instruction, students' weekly math quiz scores increased by approximately 20 percentage points.

Peer tutoring can also increase the academic performance of students with ED in social studies. Quantitative and qualitative research findings showed that using a summarization strategy during peer tutoring led to an increase in achievement on weekly quizzes and multiple choice tests of social studies content. Overall, students performed higher in the peer tutoring

session than during the traditional teacher led session and showed an increase in engaged time on-task (Spencer & Scruggs, 2003). Peer tutoring also produced positive results in the amount of biology content knowledge gained by students with ED in 9-12 grades. The intervention provided a means to increase the opportunities students had to respond and led to an increase in their mastery of biology content (Bowman-Perott, 2009).

Peer tutoring research indicates that this is a robust intervention approach that has shown positive effects on the academic performance of students with and without ED in elementary, middle, and high school (grades K-12) (Falk & Wehby, 2001; Okilwa & Shelby, 2010; Spencer & Scruggs, 2003; Sutherland & Snyder, 2007). Peer tutoring is not exclusively used as an academic intervention for students with ED as students with other high incidence disabilities such as LD have shown the ability to teach and learn information from one another (Okilwa & Shelby, 2010). Furthermore, students with and without disabilities have experienced similar rates of progress as shown by improvements in listening skills and content knowledge (Maheady et al., 1988). Overall, students needing intense remediation and instruction have found peer tutoring especially helpful for increasing their academic skills (Fuchs et al., 1997; Kunsch et al., 2007).

The academic achievement of students with ED participating in peer tutoring is not dependent on the academic setting. Peer tutoring is an effective academic intervention for students with ED when used in general education, special education, or alternative school classrooms (Okilwa & Shelby, 2010). However, peer tutoring implemented in the general education classroom has been shown to be more effective (.56) than when implemented in special education classrooms (.32). The difference in effect sizes could possibly be attributed to the limited number of students in the special education classroom proficient enough with the material to be an effective tutor (Kunsch et al., 2007). The success experienced by students with

ED in both special and general education makes peer tutoring a viable option to help students with disabilities successfully integrate into the general education environment (Okilwa & Shelby, 2010).

Teachers of students with ED can become overwhelmed when trying to meet the diverse academic and behavioral needs of students within the parameters of limited instructional time. Peer tutoring is an academic intervention that provides a one-on-one alternative to whole-class instruction and can assist teachers in delivering academic instruction to a diverse population in an effective, timely, and meaningful manner (Kunsh et al., 2007; Maheady, 2001; Okilwa & Shelby, 2010; Utley & Mortweet, 1997). Because peer tutoring shifts responsibility of instruction to students, the teacher becomes a facilitator of instruction (Maheady, 2001). This allows the teacher to focus on aspects other than content delivery which makes classroom management easier and leads to a positive learning environment as teachers can monitor all students and provide individual attention, assistance and feedback as needed (Maheady, 2001; Okilwa & Shelby, 2010; Spencer, 2006; Sutherland & Snyder, 2007). Furthermore, the error correction procedure inherent to peer tutoring allows students to receive immediate feedback on performance, a difficult task for one teacher to do during whole-class instruction (Maheady, 2001; Niesyn, 2009; Spencer et al., 2009; Sutherland & Snyder, 2007; Utley & Mortweet, 1997).

Teachers can more easily differentiate instruction among different ability levels in the classroom using peer tutoring and their current curriculum (Bowmann-Perrott, 2009; Spencer & Scruggs, 2003). By creating tutoring pairs and modifying curricular materials, teachers support diverse ability levels while also allowing several students to learn at the same time (Kunsch et al., 2007; Spencer, 2006). The simultaneous instruction of all students maximizes instructional time and increases practice opportunities for the entire class (Okilwa & Shelby, 2010; Spencer,

2006; Spencer & Scruggs, 2003). This enables the teacher to establish a high rate of time-on-task and to positively affect academic engagement time and performance of all students (Spencer et al., 2009). For example, peer tutoring can double or triple reading practice over traditional, whole-group instruction (Spencer & Scruggs, 2003). Moreover, students that are engaged with one another and learning are less likely to misbehave, reducing the amount of instructional time spent addressing student discipline issues (Okilwa & Shelby, 2010; Sutherland & Snyder, 2007).

In addition to positive academic gains, peer tutoring has a positive impact on student behavior by increasing social competence and appropriate academic behavior. Students participating in peer tutoring interventions had a higher level of on-task behavior, were more actively engaged, increased active responding, and showed fewer inappropriate behaviors during peer tutoring than during teacher-led, whole class instruction (Bowmann-Perott, 2009; Greenwood, Maheady, & Carta, 1991; Mathes & Fuchs, 1993; Spencer, 2006; Utley & Mortweet, 1997). Additionally, on-task behavior in students with ED has increased through the use of peer tutoring interventions and self-management strategies by as much as 19%, positively impacting their behavior and academic engagement (Bowman-Perott, 2009). Students with ED were able to work cooperatively and support one another in the learning process (Bowman-Perott 2009; Bowman-Perrott et al., 2007; Sutherland & Snyder, 2007), and showed a reduction in frequency (1/3 less) and duration (2/3 less) of target disruptive behaviors during peer tutoring interventions (Tournaki & Criscitiello, 2003). Because students cannot behave appropriately and inappropriately at the same time, an increase in active responding may decrease inappropriate student behavior (Sutherland & Snyder, 2007). Research showed a reduction in off-task inappropriate behaviors such as talking, name calling, refusal to work, throwing paper, and

pencil tapping examples while active responding increased (Bowman-Perott, 2009; Bowman-Perott et al., 2007; Sutherland & Snyder, 2007).

Treatment Acceptability

Peer tutoring helped students make academic and behavioral gains while providing the teacher a method to meet the needs of several students at once and improve overall classroom management. Teachers and students alike have reported positive feelings toward participation in peer tutoring and have experienced high levels of satisfaction and increased positive outcomes as a result of the peer tutoring process (Ryan et al. 2004; Spencer, 2006). Teachers report a preference for using the peer tutoring procedure over traditional, teacher-led classroom instruction (Sutherland & Snyder, 2007).

In sum, peer-tutoring is a viable academic intervention for students with ED that provides a means for teachers to increase academic engaged time and reduce non-instructional time in order to positively boost academic learning time (Bowman-Perott, 2009; Bowman-Perott et al., 2007; Falk & Wehby, 2001; Fuchs et al., 1997; Kunsch et al., 2007; Maheady, 2001; Niesyn, 2009; Okilwa & Shelby, 2010; Scruggs & Osguthorpe, 1985; Spencer, 2006; Spencer et al., 2009; Sutherland & Snyder, 2007). Furthermore, students with ED can increase their self-confidence and decrease dependency on their teacher (Bowman-Perott, 2009). Peer tutoring allows students to have a high rate of active response while giving teachers an opportunity to monitor student progress, provide positive reinforcement and feedback, while differentiating instruction (Bowman-Perott, 2009; Kunsch et al., 2007; Maheady, 2001; Okilwa & Shelby, 2010; Scruggs & Osguthorpe, 1985; Spencer & Scruggs, 2003; Spencer et al., 2009; Sutherland & Snyder, 2007; Utley & Mortweet, 1997). A combination of these factors can lead to an increase in positive student and teacher behavior, making peer-tutoring appealing as an academic

intervention and a central component in behavior management (Tournaki & Criscitiello; Sutherland, 2003).

Limitations of PMI

Teachers and students reported that using the same type of review materials during tutoring sessions was monotonous and boring; thus, a change in the information being presented during those sessions can help keep student attention (Bowmann-Perrott, 2009). Teachers should also be aware that once the tutoring pair has mastered a skill, the instructional function of the pair working on that skill becomes obsolete. Some students reported boredom with the peer tutoring process as a whole (Bowman-Perrott et al., 2007), and boredom often leads to misbehavior (Johns et al., 2008). Therefore, teachers may want to spread peer tutoring sessions over several days and subject areas in order to maintain student involvement and motivation.

Implementation of peer tutoring can be difficult in self-contained special education or alternative classrooms due to the smaller student population in these environments. The proper pairing of students into dyads is a critical part of the peer tutoring process and fewer students in a classroom limits the number of peers students can work with throughout the intervention process (Bowmann-Perrott, 2009; Bowman-Perrott et al., 2007). The matching process for students in self-contained ED classrooms may be especially difficult. These students may have a limited number of peers they get along with and if teachers are unable to alternate tutoring pairs, it may lead to student boredom and satiation with the intervention which could negatively impact academic outcomes.

Both general education and special education teachers can face similar hurdles in the appropriate pairing of student tutoring teams. They must carefully consider behavioral and social data in order to lay the framework for a successful tutoring pair, and they need to monitor

tutoring interactions closely to further ensure students are a good match (Spencer & Scruggs, 2003). If the students do not get along with each other and cannot work together, the intervention will not be successful. Academic data should also be considered in order to pair students in a manner that supports their academic needs (Sutherland & Snyder, 2007).

An additional limitation to the implementation of peer tutoring is absence. Student absence is an issue most teachers face, but it becomes even more critical when teachers rely on student presence in order to facilitate PMI. The participation of students with and without ED in peer tutoring is affected by schedule changes and student illness. In addition, students with ED often have low-attendance rates due to suspension, truancy, and dropout (Pierce et al., 2004; Vannest et al., 2009; Wehby et al., 2003) They also frequently change schools and transfer in and out of programs because of their behavior (Wagner et al., 2005). Therefore, since it is difficult to maintain the tutoring structure if a dyad is reduced to a single student, teachers should consider using peer tutoring teams instead of dyads, especially with students with ED. They may also have a back-up plan that involves the use of an assistant or the teacher taking on the role of the absent tutor or tutee in order to maintain the intervention. An additional incentive such as a tangible reinforcer or other preferred reward for students to attend school may help improve the attendance rate of chronic truants. Teachers may also choose an alternate academic intervention for students with established patterns of non-attendance (Bowmann-Perrott, 2009).

Teachers may find the preparation of curricular materials to use during peer tutoring to be a limitation of PMI. They do not have to create a new curriculum for peer tutoring intervention, but may need to create new materials to use in the peer tutoring format (Bowman-Perrott, 2009), such as study guides, fluency passages, point sheets, graphs, instruction cards, fact sheets, assessments, etc. (Falk & Wehby, 2001; Spencer & Scruggs, 2003; Sutherland & Snyder, 2007;

Utley & Mortweet, 1997). Teachers may also find they have to create variations of these materials depending on the academic level of their tutoring pairs or teams. The creation of such materials can be labor intensive and time consuming (Bowman-Perott et al., 2007), but once teachers prepare their instructional resources they should be able to reuse them with future classes and experience a lighter instructional workload as students take over the responsibility for instruction.

Implications for Future Research

Further research is needed in several areas related to the use of peer tutoring as an academic intervention for students with ED. First, there is a lack of information given by researchers about the specific characteristics of study participants, which is important because different ED diagnoses such as bipolar disorder or schizophrenia can affect student behavior in different ways. Future research needs to detail participant characteristics, histories, and medical or behavioral diagnoses of students with ED in order to help educators generalize the usefulness of peer tutoring to other students with ED (Ryan et al., 2004; Spencer, 2006). Obviously, student behavior can play a crucial role in the success of an intervention, and without the necessary information to generalize findings; educators may be wasting their time trying to implement an intervention that may not work with a certain faction of the ED population.

Furthermore, future research should include environmental descriptions and details of the classroom context that are necessary in order to generalize results from one setting to another (Ryan et al., 2004). Peer tutoring research is conducted in diverse classrooms that represent a variety of student academic and behavioral factors that can greatly influence the outcome of an intervention. Educators may find that the research environment is not typical of the environment in which they educate students with ED.

Most of the experimental research on peer tutoring focuses on one format at a time. Further research could compare the efficacy of each peer tutoring format under the same conditions. In addition, because the academic content covered in the peer tutoring sessions can have an impact on student progress, future studies could evaluate the subject areas most likely to produce academic gains in conjunction with peer tutoring, to determine whether or not a specific peer tutoring format is more effective when paired with a specific subject area (e.g. CWPT paired with math may or may not be more effective than cross-age tutoring in math).

Research conducted on peer tutoring as an academic intervention for students with ED focused primarily on students at the elementary level (Spencer et al., 2009; Sutherland & Snyder, 2007). Although there is research to support the need for early intervention in elementary school to decrease later academic problems, there are students at the middle school and secondary levels that could greatly benefit from PMI. Future research could benefit older students with ED and their teachers by providing further insight in to the successes and failures of using different peer tutoring formats with this population.

Overall, the limited research on peer tutoring as an academic intervention specifically for students with ED makes it difficult to generalize results to the entire ED population, and thus, to identify peer-tutoring as a research-based intervention to use under NCLB. Hence, additional research is necessary to establish peer-tutoring as a viable, successful intervention to use with students with ED.

REFERENCES

- Aronson, J. Zimmerman, J., & Carlos, L. (1998). Improving student achievement by extending school: Is it just a matter of time? *Wested*. Retrieved from:
http://www.wested.org/cs/we/print/docs/we/timeandlearning/the_research.html
- Bowmann-Perrott, L. (2009). Classwide peer tutoring: An effective strategy for students with emotional and behavioral disorders. *Intervention in School and Clinic, 44* (5), 259-267.
- Bowman-Perrott, L. J., Greenwood, C. R., & Tapia, Y. (2007). The efficacy of CWPT used in secondary alternative school classrooms with small teacher/pupil ratios and students with emotional and behavioral disorders. *Education and Treatment of Children, 30* (3), 65-87.
- Data Accountability Center (2010). *IDEA Part B Child Count*. Retrieved from
https://www.ideadata.org/arc_toc12.asp#partbCC
- Falk, K., & Wehby, J. (2001). The effects of peer-assisted learning strategies on the beginning reading skills of young children with emotional or behavioral disorders. *Behavioral Disorders, 26* (4), 344-359.
- Fuchs, D., Fuchs, L.S., Mathes, P.G., & Simmons, D.C. (1997). Peer-assisted learning strategies: Making classrooms more responsive to diversity. *American Educational Research Journal, 34*, 174-206.
- Greenwood, C.R., Maheady, L., & Carta, J.J. (1991). Peer tutoring programs in the regular classroom. In G. Stoner, M. R. Shinn, & H.M. Walker (Eds.), *Intervention for achievement and behavior problems* (pp. 179-200). Washington, DC: National Association of School Psychologists.

Harper, G.F., Maheady, L., Mallette, B., & Karnes, M. (1999). Peer tutoring and the minority child with disabilities. *Preventing School Failure, 43*(2), 45-52.

Individuals with Disabilities Education Act Amendments of 2004, P.L. 108-446. 105th Congress, 1st Session.

Johns, B.H., Crowley, E.P., & Guetzloe, E. (2008). Engaged time in the classroom. *Focus on Exceptional Children, 4*(4), 1-6.

Jolivette, K., Wehby, J.H., Canale, J., & Massey, N.G. (2001). Effects of choice-making opportunities on the behavior of students with emotional and behavioral disorders. *Behavioral Disorders, 26*(2), 131-145.

Kamps, D., Barbetta, P.M., Leonard, B.R., & Delquadri, J. (1994). Classwide peer tutoring: An integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers. *Journal of Applied Behavior Analysis, 27*, 49-61.

Kehle T.J., Bray, M.A., Theodore, L.A., Zhou, Z., & McCoach, D.B (2004). Emotional disturbance/social maladjustment: Why is the incidence increasing? *Psychology in the School, 41*(8), 861-865.

Kunsch, C.A., Jitendra, A.K., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research & Practice, 22*(1), 1-12.

Landrum, T.J., Tankersley, M., & Kauffman, J.M. (2003). What is special about special education for students with emotional or behavioral disorders? *The Journal of Special Education, 37*(3), 148-156.

- Maheady, L. (2001). Peer-mediated instruction and interventions and students with mild disabilities. *Remedial & Special Education, 22* (1), 4-14.
- Maheady, L., Sacca, M.K., & Harper, G.F. (1987). Classwide student tutoring teams: The effects of peer-mediated instruction on the academic performance of secondary mainstreamed students. *The Journal of Special Education, 21*(3), 108-121.
- Metzker, B. (2003). Time and learning. ERIC Digest, 1-7.
- Mooney, P., Denny, R.K., & Gunter, P.L. (2004). The impact of NCLB and the reauthorization of IDEA on academic instruction of students with emotional or behavioral disorders. *Behavioral Disorders, 29*(3), 237-246.
- Niesyn, M.E. (2009). Strategies for success: Evidence-based instructional practices for students with emotional and behavioral disorders. *Preventing School Failure, 53*(4), 227-233.
- Okilwa, N., & Shelby, L. (2010). The effects of peer tutoring on the academic performance of students with disabilities in grades 6 through 12: A synthesis of the literature. *Remedial and Special Education, 31* (6), 450-463.
- Pierce, C.D., Reid, R., & Epstein, M.H. (2004). Teacher-mediated interventions for children with EBD and their academic outcomes. *Remedial and Special Education, 25*(3), 175-188.
- Riggs, E. G., & Gholer, C. R. (2009). *Strategies that promote student engagement: Unleashing the desire to learn (2nd ed.)*. Thousand Oaks, CA: Corwin Press.
- Ryan, J.B., Reid, R., & Epstein, M.H. (2004). Peer-mediated intervention studies on academic achievement for students with EBD. *Remedial and Special Education, 25* (6), 330-341.

- Scruggs, T.E., & Osguthorpe, R. (1985). Tutoring interventions within special education settings: A comparison of cross-age and peer tutoring. *Presented at annual convention of The Council for Exceptional Children, Anaheim, California, April 15-19, 1985.*
- Spencer, V.G. (2006). Peer tutoring and students with emotional or behavioral disorders: A review of the literature. *Behavioral Disorders, 31* (2), 204-222.
- Spencer, V.G., & Scruggs, T.E. (2003). Content area learning in middle school social studies classrooms and students with emotional or behavioral disorders: A comparison of strategies. *Behavioral Disorders, 28*(2), 77-93.
- Spencer, V.G., Simpson, C.G., & Oatis, T.L. (2009). An update on the use of peer tutoring and students with emotional and behavioural disorders. *Exceptionality Education International, 19* (1), 2-13.
- Stewart, S. C., & Evans, W. H. (1997). Setting the stage for success: Assessing the instructional environment. *Preventing School Failure, 41*(2), 53-56.
- Sutherland, K.S., Alder, N., & Gunter, P.L. (2003). The effect of varying rates of opportunities to respond to academic requests on the classroom behavior of students with EBD. *Journal of Emotional and Behavioral Disorders, 11*(4), 239-248.
- Sutherland, K. S., & Snyder, A. (2007). Effects of reciprocal peer tutoring and self-graphing on reading fluency and classroom behavior of middle school students with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders, 15* (2), 103-118.
- Sutherland, K.S., Lewis-Palmer, T., Stichter, J., & Morgan, P.L. (2008). Examining the influence of teacher behavior and classroom context on the behavioral and

- academic outcomes for students with emotional or behavioral disorders. *The Journal of Special Education*, 41 (4), 223-233.
- Tournaki, N., & Criscitiello, E (2003). Using peer tutoring as a part of successful behavior management. *TEACHING Exceptional Children*, 36 (2), 22-29.
- Utley, C. A., & Mortweet, S. L. (1997). Peer-mediated instruction and interventions. *Focus on Exceptional Children*, 29 (5), 1- 23.
- Vannest, K.J., Temple-Harvey, K.K., & Mason, B.A. (2009). Adequate yearly progress for students with emotional and behavioral disorders through research-based practices. *Preventing School Failure* 53(2), 73-83.
- Vannest, K. J., Soares, D. A., Harrison, J. R., Brown, L., & Parker, R. I. (2010). Changing teacher time *Preventing School Failure*, 54 (2), 86-98.
- Wagner, M., Kutash, K., Duchnowski, A.J., Epstein, M.H., & Sumi, W.C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. *Journal of Emotional and Behavioral Disorders*, 13 (2), 79-96.
- Wehby, J.H, Lane, K.L., & Falk, K.B. (2003). Academic instruction for students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 11(4), 194-197
- Wehby, J.H., Tally, B.B., & Falk, K.B. (2004). Identifying the relation between the function of student problem behavior and teacher instructional behavior. *Assessment for Effective Intervention*, 30(1), 41-51.

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Research Paper Title:

The Use of Peer-Mediated Interventions as an Academic Intervention for Students with Emotional Disorders

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