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# Peer-Mediated Interventions and Strategies for Facilitating Inclusion of Students with Emotional or Behavioral Disorders into the General Education Classroom

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**Peer-Mediated Interventions and Strategies for Facilitating Inclusion of Students with  
Emotional or Behavioral Disorders into the General Education Classroom**

by

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## Table of Contents

	Page
List of Tables .....	3
Chapter	
1. Introduction.....	4
Research Question .....	5
Focus of the Paper.....	5
Importance of the Topic.....	6
Historical Background .....	6
Definition of Terms.....	7
2. Review of Literature .....	9
3. Conclusions and Recommendations .....	24
Conclusions.....	24
Recommendations for Future Research .....	26
Implications for Practice .....	27
Summary .....	28
References.....	29

**List of Tables**

Table	Page
1. Summary of Chapter 2 Findings .....	21

## **Chapter 1: Introduction**

Students identified with an emotional or behavioral disorder (EBD) often exhibit taxing behaviors. These behaviors are presenting a significant challenge in carrying out the increasing shift toward full inclusion of students with disabilities into the mainstream classroom.

Underneath the Individuals with Disabilities Education Act (IDEA), schools are required to educate the child with disabilities in the general education classroom, whenever appropriate. Due to the challenging behaviors (e.g., acting out behaviors, physical aggression, or property destruction) of students with EBD, these students are often placed in more restrictive environments. Currently, in the public education system, the school has to find positive supports and strategies to help facilitate the inclusion of these students.

To help with the facilitation of inclusion of students with EBD into the general education classroom research has indicated that by using peer-mediated interventions/strategies, students will have a higher rate of success in being mainstreamed. Peer-mediated interventions/strategies involve one or more peers providing assistance to their classmates. By using peer-mediated interventions/strategies in the general education classroom, not only will students with EBD be included into the mainstream setting, they will also potentially benefit from increases in academic achievement, increases in on-task behavior, and improved social skills.

The purpose of this paper was to review the literature that examines peer-mediated interventions and strategies for educators to support facilitation of inclusion of students with EBD into the general education classroom. I chose this topic because I am a special education teacher who works with students with EBD, and I was curious to investigate what different peer-

mediated intervention/strategies are available to help me be more successful in facilitating the inclusion of students with such challenging behaviors.

### **Research Question**

One research question guided this review of the literature:

1. How do peer-mediated interventions and strategies facilitate the inclusion of students with Emotional or Behavioral Disorders?

### **Focus of Paper**

The review of literature in Chapter 2 includes studies conducted with students who have been identified or who are at risk of being identified with an emotional or behavioral disorder. The main focus of this paper was to identify specific peer-mediated interventions and strategies which educators can use to assist in supporting facilitation of inclusion of students with emotional or behavioral disorders.

I started by looking at the research literature on the topic of inclusion to get some background on it. Then I narrowed it down and specifically wanted to focus on what peer-mediated strategies/interventions are available for educators to utilize to help facilitate the inclusion of students with EBD in the general education classroom. Key words that I used in my search included: *Emotional or Behavioral Disorders (EBD), behavioral disorders, special education, inclusion, full inclusion, mainstreaming, strategies, general education classroom, mainstream classroom, regular education classroom, peer-mediated strategies, peer-mediated interventions, and PEER-EBD.*

### **Importance of the Topic**

Arguably, students with EBD tend to struggle more in school than any other group of students. In fact, EBD students are the least successful of all students (Ryan, Pierce, & Mooney, 2008). This is most likely a result of their disability having an adverse effect on not only their education but their development of positive relationships with both peers and adults. It is vital for these students to be included in the general education classroom so they can benefit from the social modeling of their nondisabled peers, have access to the general education curriculum, and not be isolated by others.

### **Historical Background**

Before the 1970s, it was not a legal requirement for public schools to serve all children with disabilities (Martin, Martin, & Terman, 1996). It was advocates who got initial support from the government for special education efforts, and then the advocates shifted their emphasis on educational rights, which was influenced by the civil rights movement. This is when the federal statute of the Individuals with Disabilities Education Act (IDEA), formerly known as Public Law 94-142, came into effect in 1975. This federal law and two other federal laws, Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA), ensure the educational rights of students with disabilities. IDEA specifically has a clause in it about the least restrictive environment. This means that whenever it is deemed appropriate, the student with disabilities must be educated in their general education classroom with their nondisabled peers. The statute requires schools to consider modifications in the general education classroom first before moving the child with disabilities into a more restrictive environment.

In regard to the inclusion of special education students in the general education classroom, it is said that students with EBD are among the most difficult to include (MacMillan, Gresham, & Forness, 1996).

### **Definition of Terms**

**Emotional or Behavioral Disorders** (State of Minnesota Definition): Students who need specialized services for emotional or behavioral supports for a wide range of complex and challenging emotional or behavioral conditions. Medical, biological, and psychological conditions, as well as genetic dispositions, can affect these students' ability to learn and function in school (Emotional or Behavioral Disorders, 2012).

**General Education Classroom:** a mainstream classroom is a general education classroom (General Education Classroom, 2019).

**Inclusion:** a term which expresses the commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. The placement of a student with disabilities into ongoing activities of general education classrooms so that the child receives education with nondisabled peers (Inclusion, 2001).

**Least Restrictive Environment (LRE):** the requirement in federal law that students with disabilities receive their education, to the maximum extent appropriate, with nondisabled peers and that special education students are not removed from general education classes unless, even with supplemental aids and services, education in general education classes cannot be achieved satisfactorily (Least Restrictive Environment, n.d.).

**Mainstreaming:** refers to the placement of a student with disabilities into ongoing activities of general education classrooms so that the child receives education with nondisabled



peers—even if special education staff must provide supplementary resource services (Mainstreaming, 2019).

**Peer-Mediated Interventions (PMI):** Peer-mediated support strategies involve one or more peers providing academic or behavior assistance to their classmates. (Peer-Mediated Interventions, n.d.).

## Chapter 2: Review of Literature

The purpose of this literature review was to examine the efficacy of specific strategies for which educators can use to assist them in supporting facilitation of inclusion with students with emotional or behavioral disorders.

The study by Mathur and Rutherford (1991) was conducted to evaluate the success of peer-mediated interventions in promoting the social skills of children and adolescents with behavioral disorders. Twenty-one articles that used peer-mediated procedures to improve social skills of children and youth with EBD between the years of 1984 and 1989 were reviewed in this study.

Peer-mediated interventions circumscribe a variety of strategies and approaches. Approaches utilizing direct peer mediation include proximity, reinforcement/prompt, and initiation. The articles reviewed in this study were critically analyzed on their experimental, procedural, and generalization components. Selected items met the following criteria: (a) participants were students from age 3 to 20 years exhibiting social behavior problems; (b) a peer-mediated intervention was utilized either alone or with other approaches; (c) a valid single-subject design or between groups design; and (d) direct measures of overt behavior were used.

Due to differences in approaches between the articles, different peer-mediated interventions demonstrated different treatment outcomes. Most of the studies reviewed resulted in immediate and significant positive treatment outcomes. The results of the review also indicate: (a) peer-mediated approaches have demonstrated success in producing immediate positive treatment outcomes; (b) typologies of peer-mediated treatments have been identified; and (c) peer-mediated approaches, in general, have contributed to the effectiveness of

generalization technology; however, systematic programming is required to produce lasting results. Lastly, the analysis revealed that teacher prompts played an essential role in effective peer-mediated interventions. Even though the interventions were labeled as peer-mediated, the teachers were still in control of most of the interventions.

The limitations of this meta-analysis include that there is not a lot of research on peer-mediated strategies available to teachers. Further analysis of peer-mediated interventions is needed to better support the findings that have been concluded about peer-mediated and students with EBD.

In short, by having students with EBD participate in peer-mediated interventions in their general education classroom, they are not only in their least restrictive environment but are also increasing their social skills. This will also help with promoting positive peer relationships between students with EBD and their nondisabled peers. Finally, it is crucial for teachers to implement the fading of teacher prompts in a way that has minimal impact on the interaction level and social skills of both peers and target children.

The meta-analysis completed by Ryan, Reid, and Epstein (2004) examined the effectiveness of peer-mediated interventions on the academic functioning of students with EBD. Fourteen studies using cross-age, same-age, class-wide peer tutoring, or cooperative learning met the criteria for this review. Initially, the authors obtained 564 studies, but after applying inclusion criteria, they narrowed to 14 studies from nine different special education journals. The participants were 63% boys and 16% girls. Three studies (totaling 21%) failed to provide information regarding gender. Five of the studies included participants between the ages of 6 and 11 and the remaining nine studies included adolescents over 12 years of age.

Coding was performed by one of four graduate students who recorded the characteristics of each article. This included participant characteristics, settings, experimental designs and measures, treatment implementer, duration, ecological validity, intervention agents, settings, training, consumer satisfaction, reliability, and data analysis.

The findings of this meta-analysis were consistent with prior research that has shown peer-mediated interventions consistently produce effective academic and interpersonal benefits for students with high-incidence disabilities, such as EBD. Therefore, by using peer-mediated strategies in the general education classroom with students with EBD will not only increase their inclusion into the mainstream setting, but they will also benefit from academic and interpersonal improvements.

The most significant limitation of this meta-analysis was the conservative qualifying criteria used for inclusion. Findings from such a small number of studies make it difficult to generalize to the population of students with EBD.

The meta-analysis done by Spencer (2006) looks at 38 peer-tutoring studies from 1972 to 2002 that were identified as having students with EBD who volunteered as tutors and/or tutees to teach their peers a variety of academic and social skills. Seventeen of the studies included elementary students, 16 studies included high school students, and five studies included middle school students.

Spencer used computer-assisted searches for relevant literature using Educational Resources Information Center (ERIC), PsycINFO, and Dissertation Abstracts International with the following descriptors: peer tutoring, reading comprehension, reading strategies, emotional

disorders, and behavioral disorders. Previous peer-tutoring reviews were acquired and examined, along with the reference lists of all obtained articles.

A synthesis of the 38 research studies indicated that peer tutoring had been demonstrated to be an effective instructional strategy for students with EBD at the elementary, middle, and high school levels. Evidence suggests that social and interpersonal benefits may result from the use of peer tutoring, as well as, an increase in the frequencies of positive social interactions. By having students use peer-tutoring strategies, they were able to be involved in the general education classroom more. The peer-tutoring strategies are inclusive of all students, including students with EBD, in the general education classroom.

One limitation of this study was that only five of the studies reviewed were conducted at the middle school level. Thus, it is hard to generalize that peer-tutoring is effective at the middle school level across the country.

The meta-analysis conducted by Ryan et al. (2008) explored evidence-based teaching strategies for students with EBD. This analysis had two purposes: one was to highlight the findings of literature reviews covering over 30 years of research that was conducted on students with EBD, and the other was to provide teachers a compressed summary of teaching strategies that have demonstrated efficacy in educating students with EBD. This analysis included 14 studies from nine different special education journals that involved peer-mediated interventions orchestrated with students with EBD.

Each author in this article took on the role of a lead researcher/author for one of three different academic literature reviews that assessed the effectiveness of three different types of educational interventions. The academic literature reviews looked at the following evidence-

based interventions for students with EBD: peer-mediated, self-mediated, and teacher-mediated. To be included in this analysis articles needed: (a) to be published in a peer-reviewed journal within the past 40 years, (b) to contain an original report of quasi-experimental or experimental research, (c) to include manipulation of an independent variable, and; (d) to include at least one academic measure as a dependent variable. Participants for the study were required to meet one of the following criteria:

1. a verified emotional, behavioral, or conduct disorders, disability, or disturbance either through the Individuals with Disabilities Education Act (IDEA) or classification systems of the *Diagnostic and Statistical Manual of Mental Disorders IV*, or
2. to be described as having behavioral or emotional problems while being educated in a self-contained classroom for students with EBD.

Overall, the meta-analysis gathered, from the articles reviewed, that peer-mediated interventions demonstrated strong positive findings relative to improving the academic performance of students with EBD. Self-mediated interventions demonstrated their ability to produce substantial academic gains for students with EBD across subject areas. Lastly, there is evidence to support the use of teacher-mediated interventions for improving the academic performance of many students with EBD. The evidence suggests that all three types of interventions discussed in this study have resulted in worthwhile outcomes for students with EBD. By using these evidence-based strategies in the general education classroom, educators cannot only improve students with EBD's academics but also are better able to participate in the push of inclusion of students with disabilities.

There are a few limitations in this analysis that should be discussed. First of all, while the results are encouraging, many of the studies in this meta-analysis did not include a representative sampling of all types of students with EBD. Therefore, it is difficult to generalize these findings to all students with EBD. Secondly, the academic interventions used in these studies were done under rigorous monitoring and supervision to ensure the specific interventions were implemented with fidelity. If there were to be a deviation from the prescribed approaches could impact any intervention's effectiveness. Lastly, researchers have argued over the causal relationship between a child's behavior and their poor academic performance. Educators of students with EBD should realize that the students they are teaching face a disproportionate mixture of academic and social challenges in comparison to their non-disabled peers.

The article written by Durlak, Weissberg, Dymnicki, Taylor, and Schellinger (2011) is a meta-analysis that focused on the impacts of enhancing students' social and emotional learning (SEL). This meta-analysis looked at 213 school-based, universal SEL programs involving 270,034 kindergarten through high school students.

Four different search strategies were used in an attempt to secure a systematic, nonbiased, representative sample of published and unpublished studies. The process for choosing the articles in this meta-analysis is as follows:

1. Essential studies were identified through computer searches of PsycINFO, Medline, and Dissertation Abstracts.
2. The reference lists of each identified study and reviews of psychosocial interventions for youth were examined.

3. Manual searches were conducted in 11 different journals producing relevant studies from January 1, 1970, through December 31, 2007.
4. Searches were made of organization websites promoting youth development and social-emotional learning, and researchers who presented relevant work at national prevention and community conferences were contacted for complete reports.

Compared to controls, SEL participants demonstrated notably enhanced social and emotional skills, attitudes, behaviors, and academic achievement that reflected an 11-percentile-point gain. The findings add to the growing verifiable evidence regarding the positive impact of SEL programs.

Although current results support the impact of implementation on outcomes, 43% of the studies did not monitor implementation in any way. It is essential to monitor implementation so researchers can see what is working and being successful and what is not.

The meta-analysis conducted by Kaya, Blake, and Chan (2015) examined the efficacy of peer-mediated interventions (PMI) for improving behavior and social skills for students with EBD. Twelve studies about PMI published in peer-reviewed journals were analyzed. The participants in the reviewed studies included students from elementary, middle and high school settings who received special education services.

The review includes a review of peer-reviewed papers. The key words, emotional and behavioral, peer mediate, emotional or behavioral, peer review, peer support, social skill intervention, peer intervention, and peer tutoring were searched utilizing the interventions in which procedures and materials directly addressed social skills (e.g., peer-mediated social skills or anger management training).



The studies included in this review suggests that PMI strategies are effective in increasing appropriate behaviors and decreasing disruptive behaviors for students with EBD. Furthermore, PMI interventions are associated with increased incidents of positive peer interactions and fewer negative peer-directed behaviors. In this context, PMI can be considered valuable for improving the overall functioning of schools that serve students with EBD, with benefits extending to teachers and typical students. PMI can also benefit students with EBD by making it, so they are spending more time in their general education classroom, having more success in the general education classroom, and are spending less time in restrictive settings.

A limitation of this meta-analysis is although single-subject designs are most frequently represented in PMI research and facilitate intervention fidelity and minimally complicated observation and data collection protocols, without replication their contributions to conclusions must be interpreted with caution. Another limitation is across studies included in this review, results represented intervention effects for students with EBD, although effects for typical peer mediators were not tested. Similarly, although the efficacy of students with EBD as peer mediators is supported, differential effects between peer mediators with EBD and typically developing peer mediators are not addressed.

The meta-analysis completed by Bowman-Perrot, Burke, Zaini, Zhang, and Vannest (2016) investigated the Good Behavior Game (GBG), which is a classroom management strategy that uses an interdependent group-oriented occurrence to promote prosocial behavior and decrease problematic behavior. This meta-analysis integrated single-case research (SCR) on the GBG across 21 studies, representing 1,580 students in pre-kindergarten through Grade 12.

To be included in this meta-analysis, studies had to: (a) implement the Good Behavior Game (GBG) to reduce problem behavior or increase appropriate action, (b) involve participants in pre-kindergarten through Grade 12, (c) be published in a peer-reviewed journal or conducted as dissertation research or an unpublished article between 1969 and 2013, (d) use an SCR design, (e) provide graphed data of student outcomes, and (f) be reported in English. To identify the maximum number of prospective qualifying studies, the authors used the term *Good Behavior Game*; 272 search results were obtained. A rubric adapted from Maggin, Chafouleas, Goddard, and Johnson (2011) was used to evaluate the included studies across four What Works Clearinghouse SCR design standards.

Overall, the GBG has shown to be an effective, positive behavioral support that can easily be incorporated into elementary and secondary school-based settings. There were several findings worth noting from this meta-analysis. First, the overall effect ( $ES = .82$ ) indicated that a reduction in problematic behaviors and an increase in desirable replacement behaviors might be attributed to the GBG. Second, moderator analyses revealed a statistically remarkable difference for two variables: EBD risk status and target behaviors. That is, students with or at risk for EBD benefited more from the GBG than their peers without EBD. Also, students who displayed disruptive and off-task behaviors benefited most from the game. Third, findings also disclosed that the GBG was more effective in reducing disruptive/off-task behaviors than increasing attention to task/on-task behaviors. These results support the movement of inclusion of students with EBD, by demonstrating how using the GBG game with students can limit disruptive/off-task behaviors and increase attention to task/on-task behaviors, thus making inclusion students with EBD into the general education setting more successful.

A limitation of this study is that several studies combined physically and verbally aggressive behaviors with out-of-seat and talking out behaviors. Also, the academic achievement of students did not differentiate if the students had prior academic difficulties or behavior problems. In future GBG studies, behavioral outcome data should be separated by the type of behaviors and the impact of the GBG on students' academic achievement should be examined in consideration of the relation between academic difficulties and behavior problems.

The study done by Allday et al. (2012) used a professional development intervention to train teachers to use behavior specific praise (BSP) in their classroom. The participants included one teacher-student dyad and three teacher-student triads. Data were collected in two elementary schools in the southwestern United States and one middle school in the midwestern United States.

The study circumscribed a modified multiple baseline design across subjects and settings. Student measures included: (a) actively listening to teacher instructions by being oriented toward the teacher or task, (b) responding verbally or nonverbally to teacher requests, (c) following teacher instructions, (d) being in an appropriate geographical location, or (e) seeking help properly. Off-task behavior was defined as behavior other than on-task behavior. Seven teachers met with the researchers, and of the seven, four teachers agreed to participate in the study. Each teacher then nominated a student who was at risk or already identified with EBD. Student data were collected using 10-second interval momentary time sampling techniques.

Results of the study suggest that providing higher rates of BSP to all students impacted the on-task behavior of students with or at risk for EBD. Correlation analyses suggest a positive relationship between increases in rates of BSP and increases in on-task behavior, with a

moderate to a strong relationship for most students. This supports the intervention of having teachers increase their BSP in the classroom, so students with EBD have a higher chance of being successful and included in the general education classroom with their nondisabled peers.

This study has a few limitations that should be addressed. First of all, it is possible that social facilitation could have influenced the results of this study. This suggests that the research participants' behavior may have been enhanced due to the presence of an observer. Another limitation of the study is that two of the students in the study showed a high amount of overlap between baseline and post-training rates. Lastly, the activities for which the students were observed for during this study were not consistent; therefore, the study cannot be sure the behavior changed because of the intervention or because of the students' preference of the activity.

A case study completed by Walker, Clancy, Tsai, and Cheney (2013) examined ways in which staff implement meaningful program evaluations to serve students with EBD better. The participants for this study were from the Cascadia School District, which is a large, diverse, urban district located in the Pacific Northwest. It included all staff members who were working in their K-12 classrooms for students with EBD, which came out to be 102 staff members from seven elementary schools, three middle schools, and five high schools.

The steps used for completing an evaluation of the current program the district was using, *The Participatory Evaluation and Expert Review for Programs Serving Students with EBD* (PEER-EBD), included: (a) an individual self-assessment, (b) a team self-assessment, (c) an expert review and recommendation, and (d) establishment by the team of goals, activities, and timelines for program improvement. Fifteen classroom-based programs completed their

assessments using individual and group assessments of PEER-EBD. External reviewers completed their review of classrooms using PEER-EBD practices and indicators. To measure the functioning level of each practice, the PEER-EBD uses a 5-point Likert scale for each item, where a response of 1 indicates that the practice is not in place and a response of 5 indicates that it is entirely in place.

The case study concluded that improving programs for students with EBD is possible if a systematic plan of action is put in place over time by a committed school district, involving those who work daily in the process, as part of a collaborative for change and sustainable improvement. By improving programs for students with EBD by using the PEER-EBD method we can get students with EBD into the general education classroom and have them spend less time away from their peers in a more restrictive placement.

The most significant limitation of this case study was that it only involved one district instead of multiple districts. By having numerous districts participate in the study, there would be more data available for other schools to review. If there is more research available on PEER-EBD more districts may be willing to implement it into their schools.

Table 1

*Summary of Chapter 2 Findings*

AUTHOR(S)	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Mathur & Rutherford (1991)	Meta-Analysis	Twenty-one articles that used peer-mediated procedures to promote social skills of children and youth with EBD from between the years of 1984 and 1989 were reviewed in this study.	Approaches utilizing direct peer mediation included proximity, reinforcement/prompt, and initiation.	The results of the review indicate that peer-mediated approaches have demonstrated success in producing immediate positive treatment effects.
Ryan, Reid, & Epstein (2004)	Meta-Analysis	Fourteen studies using cross-age, same-age, class-wide peer tutoring, or cooperative learning met the criteria set forth for this review.	Coding was performed by one of four graduate students who recorded the characteristics of each article.	The findings were consistent with prior research that has shown peer-mediated interventions consistently produce effective academic and interpersonal benefits for students with high-incidence disabilities, such as EBD.
Spencer (2006)	Meta-Analysis	Thirty-eight studies from 1972 to 2002 were identified as having students with EBD who served as tutors and/or tutees to teach their peers a variety of academic and social skills. Seventeen of the peer-tutoring studies included elementary students, 16 studies included high school students, and five studies included middle school students.	Computer-assisted searches for relevant literature were conducted using Educational Resources Information Center (ERIC), PsycINFO, and Dissertation Abstracts International with the following descriptors: peer tutoring, reading comprehension, reading strategies, emotional disorders, and behavioral disorders. Previous peer-tutoring reviews were acquired and examined, along with the reference lists of all obtained articles.	A synthesis of the 38 research studies indicated that peer tutoring had been demonstrated to be an effective instructional strategy for students with EBD at the elementary, middle, and high school levels. Evidence suggests that social and interpersonal benefits may result from the use of peer tutoring, as well as, an increase in the frequencies of positive social interactions.

Table 1 (continued)

AUTHOR(S)	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Ryan, Pierce, & Mooney (2008)	Meta-Analysis	This analysis included 14 studies from nine different special education journals that involved peer-mediated interventions orchestrated with students with EBD.	Each author in this article took on the role of a lead researcher/author for one of three different academic literature reviews that assessed the efficacy of three types of educational interventions.	Overall, the meta-analysis gathered that peer-mediated interventions demonstrated strong positive findings relative to improving the academic performance of students with EBD.
Durlak, Weosberg, Dymnicki, Taylor, & Schellinger (2011)	Meta-Analysis	213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergarten through high school students.	Four search strategies were used in an attempt to secure a systematic, nonbiased, representative sample of published and unpublished studies.	Compared to controls, SEL participants demonstrated notably enhanced social and emotional skills, attitudes, behavior, and academic achievement that reflected an 11-percentile-point gain.
Kaya, Blake, & Chan (2015)	Meta-Analysis	Twelve studies about peer-mediated interventions (PMI) published in peer-reviewed journals were examined.	The review includes a review of twelve peer-reviewed papers.	The studies included in this review suggests that PMI strategies are effective in increasing appropriate behaviors and decreasing disruptive behaviors for students with EBD.
Bowman-Perrott, Burke, Zaini, Zhang, & Vannest (2016)	Meta-Analysis	This meta-analysis blended single-case research (SCR) on the Good Behavior Game (GBG) across 21 studies, representing 1,580 students in pre-kindergarten through Grade 12.	To identify the maximum number of potentially available studies, the authors used the term <i>Good Behavior Game</i> ; 272 search results were obtained.	Overall, the GBG has shown to be an effective, positive behavioral support that can be easily be incorporated into elementary and secondary-based settings.

Table 1 (continued)

AUTHOR(S)	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Allday, Hinkson-Lee, Hudson, Neilsen-Gatti, Kleinke, & Russel (2012)	Quantitative	The participants included: one teacher-student dyad and three teacher-student triads. Data was collected in two elementary schools in the Southwestern United States and one middle school in the Midwestern United States.	The study circumscribed a modified multiple baseline design across subjects and settings. Student measures include: (a) actively listening to teacher instructions by being oriented toward the teacher or task, (b) responding verbally or nonverbally to teacher requests, (c) following teacher instructions, (d) being inappropriate geographical location, or (e) seeking help properly.	Results of the study suggest that providing higher rates BSP, to all students, impacted the on-task behavior of students with or at risk of for EBD. Correlation analyses suggest a positive relationship between increases in rates of BSP and increases in on-task behavior, with a moderate to a strong relationship for most students.
Walker, Clancy, Tsai, & Cheney (2013)	Case Study	Participants in this study were from the Cascadia School District. It included all staff members working in their K-12 classrooms for students with EBD, which came out to be 102 staff members from seven elementary schools, three middle schools, and five high schools.	Fifteen classroom-based programs completed their assessments using individual and team assessments of PEER-EBD. External reviewers completed their review of classrooms using PEER-EBD practices and indicators.	The case study concluded that improving programs for students with EBD is possible if a systematic plan of action is put in place over time by a committed school district, involving those who work daily in the process, as part of a collaborative for change and sustainable improvement.



### **Chapter 3: Conclusions and Recommendations**

The purpose of this literature review paper was to examine how peer-mediated interventions and strategies can help facilitate the inclusion of students with emotional or behavioral disorders into the general education classroom. In Chapter 1 I provided background information on the topic, and in Chapter 2 I presented a review of the research literature. In this chapter, I discuss conclusions, recommendations for future research, and implications for practice.

#### **Conclusions**

I reviewed nine studies that examined the effects of using peer-mediated strategies with students with emotional behavioral disorders and how this can help with facilitating the inclusion of these students into the general education setting. Seven of the studies were meta-analysis, one study was quantitative, and the last study was a case study.

Of the nine studies, two examined how peer-mediated strategies impacted the academic performance of students with EBD (Ryan et al., 2008; Spencer, 2006). The findings of these studies were consistent with prior research that has shown how peer-mediated interventions consistently produce effective academic benefits for students with high-incidence disabilities, such as EBD. Three studies analyzed how peer-mediated strategies affected the social skills of students with EBD (Durlak et al., 2011; Kaya et al., 2015; Mathur & Rutherford, 1991). The findings of these studies discussed how peer-mediated strategies are effective in improving the behavior and social skills of students with EBD. The article written by Durlak et al. (2011) specifically looked at the impact of enhancing students' social and emotional learning (SEL) by using peer-mediated strategies. The researchers found that by using peer-mediated strategies,

students demonstrated significantly improved social and emotional skills, attitudes, behavior, and academic performance that reflected an 11-percentile point gain in achievement. The meta-analysis conducted by Spencer (2006) investigated how peer-tutoring impacted the academic performance and social skills of students with EBD. What the author found was that peer-tutoring demonstrated to be an effective instructional strategy for students with EBD at the elementary, middle, and high school levels. The evidence also showed social and interpersonal benefits for students with EBD, along with an increase in positive social interactions. Two studies examined how using peer-mediated strategies can promote positive behaviors and decrease problem behaviors (Allday et al., 2012; Bowman-Perrot et al., 2016). Both studies found that peer-mediated strategies are useful at all levels of education in increasing positive behaviors and decreasing problem behaviors of students with EBD. The article by Bowman-Perrot et al. (2016) specifically looked at the Good Behavior Game (GBG) strategy, which is a classroom management strategy, whereas the article by Allday et al. (2012) specifically looked at using the approach of increased behavior specific praise (BSP). Both procedures were shown to be highly effective in improving on-task behaviors and decreasing problem behaviors of students with EBD. Lastly, the case study completed by Walker et al. (2013) analyzed how staff can implement meaningful program evaluations to serve students with EBD better. The results of this study concluded that, by improving programs for students with EBD by using the PEER-EBD method, we could get students with EBD into the general education classroom and have them spend less time away from their peers in a more restrictive placement.

By utilizing the peer-mediated strategies and interventions discussed in Chapter 2, facilitating inclusion of students with EBD into the general education classroom will not only

benefit the student by improving their academic performance, social skills, and behaviors, but it will increase the chances of students with EBD being successful in an inclusive classroom.

### **Recommendations for Future Research**

Each study used in this review had limitations. The most common restriction across studies was that there is not a lot of research available to teachers on peer-mediated interventions or strategies. With so little research it makes it hard to generalize the findings of these studies to the population of students with EBD. Therefore, further research should be conducted on peer-mediated interventions/strategies and their impact on the inclusion of students with EBD into the general education classroom.

An additional limitation that the research had in common was that most of the studies did not take into account the causal relationship between the behaviors of students with EBD and their poor academic performance. It is important to remember that for students to qualify for special education services in Minnesota under the category of Emotional or Behavioral Disorders, their behaviors must have an adverse impact on their educational performance. Therefore, educators who have students with EBD in their classrooms should take into consideration that the students they are teaching face a disproportionate mixture of academic and social challenges in comparison to their non-disabled peers. It is important for future research to investigate this issue further.

One last recommendation for future research is that additional research needs to be conducted and implemented at various levels of education. Data from multiple levels will better support the generalization and implementation of peer-mediated interventions/strategies with

students identified as having EBD. This will better support current findings, as well as, provide new data on peer-mediated interventions/strategies.

### **Implications for Practice**

Knowing the beneficial impacts that peer-mediated interventions or strategies can have on students with EBD, I am better able to incorporate these interventions or strategies into my practices. As a special education teacher who has students with EBD on my caseload, I am now more knowledgeable of what types of interventions and strategies I can use with my students to help them increase their time in the general education setting.

Currently, as part of my professional duty, I am on my school's Student Assistance Team (SAT) and a Special Education Professional Learning Committee (PLC). Our SAT committee is responsible for assisting general education teachers with problem-solving academic and/or behavior challenges with specific students, providing information on and helping with the implementation of interventions, and deciding if a student should get assessed for special education services. Now that I am well informed about peer-mediated interventions and strategies I can share this information with my colleagues and use it to help assist our SAT committee in making decisions about interventions with students who are at risk of becoming diagnosed with an Emotional or Behavioral Disorders. I can communicate this information with my PLC and be mindful of it when we are making decisions on interventions we would like to try with students and general education teachers in hopes to increase the amount of time our students with EBD spend in their regular education classrooms.

Lastly, I can start to explore different types of peer-mediated interventions and strategies I could be using with my students. Now that I know the positive impacts it can have with

students with EBD, I need to do further research to see what specific peer-mediated interventions and strategies are out there that I could be implementing into my practices. This will allow me to make decisions that will help ensure that I am doing everything I can to help my students have a successful school life.

### **Summary**

The findings of these studies conclude that by using peer-mediated interventions or strategies it will not only help teachers with the facilitation of inclusion of students with EBD into the general education classroom more, but it will also benefit the students in many other ways. Other positive impacts of using peer-mediated interventions or strategies with students with EBD include increased academic achievement, social skills, behavior skills, and a decrease in problematic behavior. There is a lack of research that has been done on peer-mediated interventions or strategies, but I am hopeful more research will be conducted and available within the next few years. Finally, I hope that more and more students with EBD will be able to successfully increase their time in their general education setting by using these interventions and strategies and spend less time in a more restrictive environment.

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