

Boosting Classroom Management Strategies through a Consultation-Based Intervention

By

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A Thesis Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Education Specialist
School Psychology

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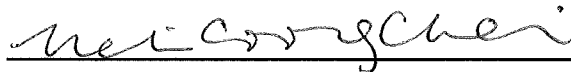
The University of Wisconsin – Eau Claire

August, 2017

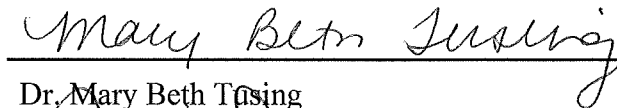
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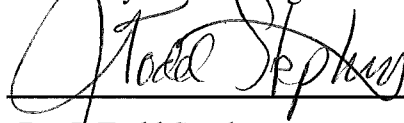
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CLASSROOM MANAGEMENT

Boosting Classroom Management Strategies through a Consultation-Based Intervention

By


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The University of Wisconsin-Eau Claire, 2017
Under the Supervision of Dr. Melissa Coolong-Chaffin

The purpose of the study is to examine the relationship between a consultation-based classroom management intervention and teachers' use of classroom management skills and student behavior. A review of the literature indicates core attributes of effective classroom management, the benefits of effective classroom management, as well as the lack of training that teachers receive in this area. The literature suggests teachers have a lack of knowledge and skills in classroom management strategies and report low self-efficacy within this domain. This can result in consequences for both the teacher and student alike. Using a multiple baseline across teachers design, the impact of a consultation-based classroom management intervention on several teacher and student behaviors was examined. Specifically, teacher behaviors included: opportunities to respond, discipline using explanation, positive interactions with students, teaching moments, precorrections, effective commands, ineffective commands, general praise, specific praise, negative warnings, reprimands, and harsh reprimands. Student behaviors

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included: student disruptions, student aggression, and student noncompliance. The results were graphed and interpreted visually and indicate that the intervention resulted in changed for 6 out of 11 strategies of classroom management for one teacher and 7 out of 11 strategies for a second teacher. Results indicate that students' behaviors either did not change or decreased slightly.


Thesis Advisor (Signature)

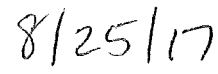

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Boosting Classroom Management Strategies through a Consultation-Based Intervention

Introduction

Classroom management can be defined as a system of proactive and reactive strategies that are implemented to foster an environment where learning can occur (Christofferson & Sullivan, 2015). The purpose of this introduction is to provide a review of the literature regarding classroom management; including benefits of effective classroom management, consequences of ineffective classroom management, training teachers receive, the relationship between self-efficacy and classroom management skills, classroom management training methods, consultation, performance feedback, and measures and models related to classroom management.

Effective Classroom Management

Effective classroom management involves organizing an appropriate physical layout of the classroom, teaching rules and expectations, instructing students in an engaging and fast-paced manner, routinizing transitions and procedures, and applying behavioral interventions and positive behavior supports (Brophy, 2006; Doyle, 1986). Effective classroom management is further conceptualized as a series of actions taken by the teachers to promote student engagement. Strategies emphasize facilitating rules, transitions, monitoring student performance and communicating awareness of student behavior (Gettinger & Kohler, 2006; Christofferson & Sullivan, 2015). Five critical evidence-based features of classroom management have been noted, including maximizing structure, establishing and teaching positively-stated expectations, actively engaging students in instruction, implementing a continuum of strategies to increase appropriate behavior, and implementing strategies to decrease inappropriate behavior

(Simonsen, MacSuga-Gage, Briere, Freeman, Myers, Scott, & Sugai, 2014). In addition, research has identified that fair but firm rules using positive and simple language, reinforcement of appropriate behavior, response to undesired behavior, positive staff-student relationships and interactions, and clear and high expectations of students assist in effective classroom management (Hart, 2010). Consistent expectations are also effective, as well as a nurturing disposition from the teacher (Wentzel, 2002). Teachers' management techniques often stem from other teachers, the school administration, parents, school board policies, state-level standards, and broader societal views about children (Motoca, Farmer, Hamm, Byun, Lee, Brooks, Rucker, & Moohr, 2014).

Benefits of Effective Classroom Management

Effective classroom management has multiple benefits for both students and teachers. Effective classroom management can contribute to an orderly learning environment and can help ensure student compliance (Doyle, 1985). Previous studies reveal positive correlations between well-managed classrooms and student engagement in academic tasks, higher levels of academic achievement, and a more rapid pace of progression through academic material (Brophy, 1983; Gettinger, 1986, Good, 1979). High rates of student engagement in academic tasks have repeatedly been identified as a component of effective instruction (Anderson, 1984; Fischer & Berliner, 1985, Good, 1983; Karweit, 1983, 1985).

Teachers who use effective classroom management practices are more likely to have high achieving students, are less likely to suffer burnout, and are more likely to stay in the teaching profession long-term (Stronge, Ward, & Grant, 2011; Brouwers & Tomic, 2000; Ingersoll & Smith, 2003). Additionally, it has been reported that teachers' group

management skills are an important factor in achieving good standards of classroom behavior (Hart, 2010). Effective classroom management is associated with positive effects on student behavior, including: increasing students' opportunities to respond during instruction, establishing rules for behavior and learning, and providing positive attention for appropriate behavior (Haydon, Conroy, Sindelar, Scott, Barber, & Orlando, 2010; Sutherland, Alder, & Gunter, 2003; Brophy, 2006, Malone & Tietjens, 2000; Rusby, Crowley, Sprague, & Biglan, 2011). This is important considering research has demonstrated that creating more frequent opportunities for students to respond to instruction increases student on-task behavior and decreases student disruptions (Sutherland & Wehby, 2001). The teachers who do demonstrate well-developed skills in classroom management maximize their students' engagement and increase the probability of their students' academic success (Simonsen et al., 2014). Brophy and Good (1986) indicate that the amount of time that teachers are engaged in instruction and active supervision is associated with student success.

There is evidence to suggest that teacher use of praise can positively affect high-risk children (Ferguson & Houghton, 1992; Walker, 1996). For example, research indicates that punitive practices in schools can further perpetuate student aggression (Ingersoll & LeBoeuf, 1997). Additionally, high-risk students are often likely to receive less praise than other students (Ferguson & Houghton, 1992). Classroom management interventions that focus on improving teachers use of contingent, specific praise and positive interactions with students can positively improve the behavior of high-risk children (Ferguson & Houghton, 1992). Furthermore, in the Seattle Social Development Project, Hawkins and his colleagues (1999) found that teacher training that emphasizes

proactive classroom management, interactive teaching, and cooperative learning was correlated with lower levels of violent delinquency, cheating, and sexual behavior, as well as higher levels of school bonding and academic achievement.

Consequences of Ineffective Classroom Management

A lack of classroom management skills also significantly affects students. Ladd and Burgess (1999) found that students engaging in disruptive behaviors are more likely to develop coercive relationships with their teachers. A coercive relationship can be described as a relationship in which power differences, manipulation, negative emotions, and coercion exist between individuals. When these coercive relationships are established early in students' schooling they are put at further risk for emotional, behavioral, and academic problems (Hamre & Pianta, 2001). Unfortunately, research indicates that students identified as demonstrating disruptive behaviors receive less instruction, less teacher praise, and fewer opportunities to respond during instruction or activities (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008; Sutherland & Oswald, 2005). The ongoing reprimands result in an increase in frequency of negative teacher interactions with these students (Carr, Taylor, & Robinson, 1991; Kauffman & Brigham, 2009). Achievement is highly related to time engaged with instruction, so behaviors that disrupt teaching can not only result in coercive relationships, but can have a debilitating effect on academic outcomes for the student as well (Simonsen et al., 2014). Managing inappropriate student behavior is a time-consuming task. Managing these behaviors reduces the amount of time that teachers are able to spend on teaching, as well as the amount of time students are able to spend on academic tasks (Matheson & Shriver, 2005).

Teacher behavior and classroom environment has also been empirically linked with student aggression (Gorman-Smith, Beidel, Brown, Lochman, & Haaga, 2003). Among these teacher behaviors are behavioral and instructional management techniques (Gunter, Denny, Jack, Shores, & Nelson, 1993). Research suggests that punitive practices in schools may contribute to increased levels of aggressive behavior in students (Ingersoll & LeBoeuf, 1997; Mayer 1995; Wehby, Symons, & Shores, 1995).

Pre-Service Training

Despite the importance of effective classroom management and the benefits associated with it, research suggests that classroom management training is often overlooked in teacher education (Christofferson & Sullivan, 2015). Many teachers do not receive information or training on evidence-based classroom management practices. They enter the field with minimal pre-service training and continue to have challenges with managing their classroom and balancing instruction throughout their careers (Begeny & Martens, 2006).

In small-scale studies, many teachers report that their training in classroom management was inadequate and ineffective (Evertson & Weinstein, 2006, Jones, 2006; Stough, 2006). In fact, results from a study conducted by Wesley and Vocke (1992) revealed that only 37% of teacher education programs offered a course in classroom management. In addition, a more recent study on teacher education programs found that less than half of the programs required a course in classroom management (Hammerness, 2011). Brophy (1998) and Evertson and Weinstein (2006) state that classroom management is simply a “bag of tricks” for many teachers, instead of a true concept or field. Furthermore, Romano (2008) found that teachers said an additional training in

classroom management would have helped them with struggles in their teaching practice. Teachers are often unaware of evidence-based practices that may increase positive outcomes for their students and themselves, and decrease disruptive behaviors (Stormont, Reinke, & Herman, 2011).

Teacher Self-Efficacy and Classroom Management Skills

As a result of minimal to no training, many teachers report feeling unprepared to perform classroom management techniques (Jones, 2006; Oliver & Reschly, 2007). Classroom management is an area in which teachers often feel less efficacious and request additional supports (Reinke, Stormont, Herman, Puri, & Goel, 2011). The lack of knowledge on how to effectively manage a classroom is considered to be associated with a lack of training, support, or sufficient experience (Reinke et al., 2011). Many teachers express that they continue to struggle with managing behaviors in the classroom and report classroom management to be the most challenging aspect of their job and the area in which they receive the least amount of training (Barrett & Davis, 1993; Ingersoll, 2002; Reinke et al., 2011). This lack of confidence in skills results in low teacher self-efficacy, rising stress levels, and is linked to teacher burnout and teacher attrition (Cooley-Nichols, 2004; Maag & Katsiyannis, 1999).

The lack of teacher training in classroom management results not only in low teacher self-efficacy within this domain, but it also results in a lack of classroom management skills in teachers (Motoca, et al., 2014). Teachers continue to use daily behavior management strategies that have not been empirically assessed or experimentally validated (Maggin, Robertson, Oliver, Hollo, & Partim, 2010; Stormont, Reinke, & Herman, 2011). Bridging this research-to-practice gap is a central issue in

special education (Lewis, Jones, Horner, & Sugai, 2010). This research-to-practice gap is often due to the experimental limitations of control groups. Real world, ever-changing, applied classroom settings are much more difficult to control than experiments conducted within a research setting. This makes the generalizability more challenge, hence a problematic research-to-practice gap (Motoca et al., 2014).

Professional Development

The benefits of effective classroom management for students and teachers alike are great and as such teachers have identified this as an important area for their own professional development. In fact, for decades, first-year teachers have reported that classroom management training is their greatest professional development need (Rollin, Subotnik, Bassford, & Smulson, 2008). Therefore, there is a need for interventions that focus on building teachers' knowledge and skills in the use of effective and developmentally appropriate classroom management strategies (Reinke, Stormont, Herman, Wang, Newcomer, & King, 2014).

This training can be beneficial for teachers. Formal classroom management training is correlated with greater teacher confidence and competence in management practices (Christofferson & Sullivan, 2015). O'Niell and Stephenson (2012) found a significant correlation between the number of classroom management courses teachers completed and their sense of confidence and preparedness in applying classroom management strategies. Currently, supervision and mentoring are the most common methods of classroom management training that teachers receive (Hammerness, 2011; Wesley & Vocke, 1992).

There are multiple models of classroom management training. Universal training and consultation have been designed to increase the adoption of effective classroom management practices (Reinke et al., 2011). It has been suggested that universal professional development models may be used to bridge teachers' perceived needs and ongoing practices with evidence-based strategies (Motoca et al., 2014). The focus of many trainings is on the overall climate and moment-to-moment activities in the classroom, as opposed to specific approaches that involve a prescribed scope and sequence on specific content with scripted instruction (Motoca et al., 2014).

Christofferson & Sullivan (2015) assert that the quantity of training opportunities is important, but the quality of the training is even more so. The informative and sequential nature of some training models do not allow for flexible content and may impede teacher engagement, leading to lower rates of implementation following the training (Reinke, Stormont, Herman, Wachsmuth, & Newcomer, 2015). Thus, professional development needs to be adaptive and interactive in nature. Reinke et al. (2015) also stated that training needs to be diverse and varying in backgrounds to meet each individual classroom's needs. Training needs to include a hands-on approach that presents the procedural knowledge of knowing how to implement processes or routines as well as the conditional classroom knowledge of knowing how to manage the classroom within context-specific situations (Christofferson & Sullivan, 2015). The training can be received from a variety of sources and teacher educators need to be aware of the high desire for hands-on classroom management training opportunities (Christofferson & Sullivan, 2015).

An example of such a program includes the Incredible Years Teacher Classroom Management (IY TCM), which is an evidence-based program that incorporates adaptation within its design (Webster-Stratton, Reinke, Herman, & Newcomer, 2011). IY TCM includes experiences of teachers and cultural contexts of the classrooms into the workshop content (Reinke et al., 2015). The IY-TCM incorporates coaching into the model which is considered one of its most important components (Reinke et al., 2015). This program trains teachers in small group settings facilitated by IY TCM workshop leaders. Each teacher also meets with a coach to support the implementation of content to their specific classroom. The workshop content includes classroom management strategies that are effective in increasing positive behavior and decreasing undesired behaviors. During the workshop teachers view video clips, role-play, and receive feedback from the leaders. The IY TCM is flexible in nature, adapting to experiences, settings, and skill levels of each teacher. The ongoing coach has been listed as a strong, effective component of this program. Coaching within programs has been associated with an increase in implementation of strategies in teachers, which results in improved student behaviors (Reinke et al., 2015).

Consultation. Another element of professional development is the use of consultation. Positive effects are found when training is supplemented with continual self-management, coaching, consultation, performance feedback, or a combination of these elements (Simonsen et al., 2014). In general, consultation involves a specialist who provides knowledge and guidance in a service delivery model to a consultee who intervenes directly with the client (Kratochwill & Pittman, 2002; Lewis & Newcomer, 2002). Within this domain, “collaborative consultation” involves a voluntary,

nonhierarchical relationship between the consultant and the consultee (Motoca et. al, 2014). The consultant and consultee share in planning and evaluation of an intervention (Motoca et. al, 2014). Behavioral consultation involves observing classrooms and using the data to guide intervention adaptation and implementation (Lewis & Nocomer, 2002). It provides a means for teachers to learn strategies on how to deal with present behavioral challenges in the classroom (Coffee & Kratochwill, 2013).

Directed consultation is a specific method that was created as a professional development framework to train teachers in contextual interventions (Motoca et al., 2014). Directed consultation works to support teachers in the implementation of interventions that are evidence-based and context-specific. According to Motoca et al. (2014), there are four components to directed consultation: pre-intervention observations and interviews with school professionals, professional development workshops, online training modules, and team and individual-level implementation meetings. Directed consultation was originated on the belief that to facilitate the adoption of evidence-based practices it is necessary to: use intervention delivery systems and professional development opportunities that are context-specific, engage in interactive discussion between the professional development trainers and practitioners to connect the evidence-based practices to the strengths and beliefs of teachers, consider the insights of key stakeholders, and focus on the whole child by incorporating academic, behavioral, and social strategies in a blended approach (Cappella, Frazier, Atkins, Schoenwald & Glisson, 2008; Farmer, Reinke, & Brooks, 2014).

Even with general consultation, some teachers still may need individual coaching for specific challenging behaviors they are experiencing in their classroom. Specific

coaches can be utilized to support teachers in both implementing universal strategies and in developing and implementing behavior support plans for specific students (Reinke et al., 2015). Training teachers through consultation is relatively cost-free and can benefit an entire class of students without intruding on the classroom environment (Matheson & Shriver, 2005). Training teachers through consultation holds a greater acceptability and treatment integrity over interventions that require more effort, time, or money (Matheson & Shriver, 2005).

The consultation needs to involve delivering the training in a responsive manner, considering the immediate needs and issues the teachers are experiencing (Motoca et al., 2014). Examples of such responsiveness would include giving the teachers opportunities to take ownership, contribute to the training schedule, and state specific areas of concern (Motoca et al., 2014). The intervention components and consultation should adapt to build on the strengths of the teachers and school resources, reflect the values of school community, align with school policies, and be perceived as meaningful in the promotion of students' productive engagement (Motoca et al., 2014). When teachers generalize the skills they learn in consultation to all students, consultation can be conceptualized as a form of prevention. The teacher will develop a set of skills that will equip them to prevent the occurrence of classroom problems in other students and future classes (Coffee & Kratochwill, 2013).

Consultation is focused on problem solving in general; it is not simply focused on a specific problem or a specific client (Motoca et al., 2014). The intentions of directed consultation include: identifying how teachers can incorporate evidence-based intervention into their daily practices, building on observations of existing strategies,

incorporating teachers' strengths and competencies, providing new relevant information and skills training, reframing teachers' perspectives to encourage productive views of classroom management tasks, and promoting change at a school and teacher level to incorporate classroom management strategies into daily strategies, techniques, and activities (Motoca et al., 2014). Often, pre-intervention observations and interviews are conducted to identify the needs and strengths of each teacher and classroom (Motoca et al., 2014). Levels of teacher collaboration and cooperation are also assessed prior to the consultation, as well as assessing teachers' current perceptions of the classroom management and the needs of individual classrooms (Motoca et al., 2014).

Directed consultation can also occur in the form of a workshop. The workshop involves professional development to explain the program aims, provide core-intervention content training, and build productive relationships among the teachers and administration or training staff (Motoca et al., 2014). Activities in the workshop are tailored to the specific needs and strengths of particular schools or teachers (Motoca et al., 2014). Active discussion is created in these workshops, as all individuals should have the opportunity to provide insight on specific implementation approaches and processes (Motoca et al., 2014). Although, the ultimate collaborative decision will be made by the school personnel that has the lead voice in the process, teachers are given a platform to share and discuss their perspectives (Motoca et al., 2014).

Performance Feedback. One element of effective training is performance feedback. Research regarding the use of performance feedback to increase intervention integrity aligns with the idea of teacher training and feedback-based consultation (DiGennaro, Martens, & McIntyre, 2005). Performance feedback has been researched

extensively and is used as a means of sustaining behavioral changes in adults (Alvero, Bucklin, & Austin, 2001; Balcazar, Hopkins, & Suarez, 1985). It includes monitoring a targeted behavior and providing feedback to the individual regarding the behavior of concern (Noelle, Witt, Slider, Connell, Gatti, Williams, Koenig, & Resetar, 2005). Additionally, performance contingencies, goal setting, and graphic displays of performance have enhanced the efficacy of performance feedback (Alvero et al., 2001; Balcazar et al., 1985). The use of performance feedback over the last decade has yielded support for efficacy and maintaining integrity in interventions (McKenney et al., 2013). The degree of integrity with which teachers implement strategies is essential to the success of the classroom management (Witt, Gresham, & Noell, 1996). Noell et al. (2005) found that the provision of performance feedback (i.e., through brief weekly interviews) resulted in an increase of treatment integrity and positive child behavior. Teachers who received performance feedback during an intervention implementation had students who showed the greatest gains (Noell et al., 2005).

School psychologists can play a specific role in helping schools address issues involving student behavior through these consultation strategies (Hart, 2010). They are often called upon to consult and advise teachers on effective ways to handle difficult behaviors as well as train staff in behavior management training and support (Hart, 2010). School psychologists can also be responsible for offering teachers feedback on how they are implementing management strategies.

Models and Measures

The Classroom Check up (CCU) Consultation Model was used as a framework for the present study's classroom management intervention. The CCU consultation model

emphasizes class-wide change and motivational enhancement strategies that are supported by extensive social psychological literature (Reinke et al., 2008). This model is grounded in motivational interviewing as well as the empirically supported theory of behavior change (Miller & Rollnick, 2002). The CCU model includes: giving personal feedback to the teachers on classroom behaviors, encouraging the responsibility for decision making, developing a menu of options for interventions, while supporting teacher self-efficacy by addressing teachers' strengths and moments when teachers have been successful in this area in the past (Miller & Rollnick, 2002). The four steps of CCU are: assess the classroom, provide feedback, provide a menu of options, choose interventions, assist in teacher self-monitoring of treatment integrity (Reinke et al., 2008).

There is empirical support for the CCU model. Reinke (2008) conducted a study that provided evidence to suggest the CCU model was effective in increasing implementation of classroom management strategies, although there was variability among teachers' level of increase and the specific strategies that increased. Additionally, the CCU model paired with visual performance feedback was effective in decreasing disruptive behavior in students for two out of four classrooms and increased rates of praise for all four teachers. In the 2008 study, Reinke and her colleagues also administered a questionnaire measuring the social validity of the CCU model. Social validity refers to the social significance of the goals within an intervention and the social acceptability of the process and procedure to obtain those goals (Gresham & Lopez, 1996). The social validity questionnaire revealed that, upon completion of the study, teachers increased their pre-rating of consultation and support from "fairly important" to a post-rating of "very important". All teachers increased in the level they felt the

intervention to be effective as well. Additionally, before the intervention, all four teachers thought the intervention would be somewhat intrusive. After completion of the intervention, two teachers reported that the intervention was not intrusive and two reported that it was somewhat intrusive. Lastly, upon completion of the study, all but one teacher reported an increase in their feeling of confidence in their ability to implement classroom management strategies (Reinke et al., 2008).

The Brief Classroom Interaction Observation-Revised (BCIO-R) was used as the base of the observation system of the present study. The BCIO-R is an example of an observation system that can be used to measure classroom management behaviors of teachers (Reinke et al., 2015). The BCIO-R measures teacher use of precorrective statements and both general, nonspecific praise, and behavior-specific praise (Reinke et al., 2015). Precorrection is defined as clearly stating social behavioral expectations (Stormont & Reinke, 2009). Behavior-specific praise is a positive statement that is clear in indicating that the student performed the desired behavior (Simonsen et al., 2008). Research indicates that behavior-specific praise is associated with improved time on-task for students and fewer disruptions (Apter, Arnold, & Swinson, 2010). Both of the previously stated strategies, precorrection and behavior-specific praise, have been shown to reduce student problem behavior and increase appropriate behavior (Reinke, Lewis-Palmer, & Martin, 2007; Reinke, Lewis-Palmer & Merrell 2008). The BCIO-R measures the practices of teachers across three classroom management domains: instructional management, promoting and responding to appropriate behavior, and discouraging and responding to inappropriate behavior (Reinke et al., 2015). The BCIO-R also measures

the amount of time a teacher spends on instruction and the provision of opportunities the teacher gives the students to respond (Reinke et al., 2015).

Conclusion

Classroom management is important to both students and teachers. The way a teacher manages his or her classroom critically influences a child's experience in that class (Hart, 2010). Effective classroom management is associated with a multitude of positive outcomes for students and teachers. Teachers have indicated that they struggle in the area of classroom management and do not feel confident about their skills in this domain (Jones, 2006; Oliver & Reschly, 2007). Research also suggests that teachers are not using evidence-based management strategies and are lacking in classroom management skills (Motoca et al., 2014). This lack of skills may be attributed to the fact that teachers receive minimal to no training in this area (Christofferson & Sullivan, 2015). There is a need for classroom management training for teachers; whether it is in the form of professional development, consultation, or coaching. Effective teacher training methods include professional development opportunities, interventions, consultation, and performance feedback. Through proper training teachers will be supported, equipped, and empowered to manage their classrooms effectively and optimize the amount of instruction, learning time, and positive outcomes for students.

Method

Participants

The participants of the current study were two elementary education teachers at a summer program at a mid-sized university in a small urban community in the Midwest. The teachers volunteered to participate in the study and received no compensation for participation. The participants were both female and both Caucasian. Teacher 1 had a Bachelor's degree and 1 year of experience working as a teacher for the program. Teacher 2 had a Bachelor's degree and this was her first teaching experience. The participants were both in the 20-30 year-old age range.

Setting

The study took place in a summer program at a mid-sized university in a small urban community in the Midwest. The program was part of a childcare facility of a local university. It serves children ranging from ages 6 weeks to 12 years of age. The childcare facility is accredited by the National Academy of Early Childhood Programs.

Both participants taught elementary-aged students. One teacher taught a kindergarten classroom. The second teacher taught in an elementary-aged classroom with students ranging from second to fifth grades. The teachers classrooms were across the hallway from each other. Both classes served approximately 15 students. Classes were eight hours long, starting at 8:00 am and concluding at 4:00 pm. The classes were structured by subjects including morning meeting, reading, science lessons, group instruction, outdoor activities, free time, and art projects. Each day was consistent in schedule, however, activities within subjects varied each day and week.

Procedures

The present study used a multiple baseline across teachers single-case design. The researcher observed the teachers four to five times a week using a checklist adapted from the Brief Classroom Interaction Observation-Revised (BCIO-R). See Appendix A for the checklist. Baseline observational data were collected for each of the participating teachers prior to the intervention. Each teacher received the intervention during a different week. For example, Teacher 1 was observed for baseline data and then received the intervention during Week 2 and was observed for progress monitoring data Week 3-Week 5. Teacher 2 was observed for baseline data during Week 1 and 2, received the intervention Week 3, and was observed for progress monitoring data Week 4 – Week 5.

The researcher observed each classroom for approximately 25 minutes each day. The researcher would enter the classroom and sit near the back of the classroom as to not be a distraction to the students. After the first week of baseline data collection, the students in both classes became familiar with the researcher and did not appear distracted by her. The researcher would communicate with the teachers beforehand on when would be the most valuable time for the researcher to observe (e.g., reading time, a science project, a lesson, etc.). This assured that the researcher observed during similarly structured sessions each day (e.g. instruction) and did not observe during times with minimal teacher/student interaction (e.g. outside play time or silent reading time). This communication also allowed the teaching activity to be relatively similar each day the researcher observed. If observation sessions differed drastically in structure from what was typical and consistent with the other observation sessions, the researcher did not include that data in the study. There were multiple instances when the session differed

greatly from what was typical and those data were not included in the study. The researcher also made sure that the students were the same in every session. At times, a teacher would be instructing a class different from their typical class. Data was not collected on those days and was only collected when the teacher's classroom was their typical group of students. This assured that the students were the same throughout the duration of the study.

The researcher would observe the teacher at the designated time and track the frequency of certain teacher and student behaviors on a checklist. The observed teacher behaviors included: opportunities to respond, discipline using explanation, positive interactions with students, teaching moments, precorrections, general praise, specific praise, effective commands, ineffective commands, negative warnings, reprimands, and harsh reprimands. The observed student behaviors included: student disruptions, student aggression, and student noncompliance. These strategies and behaviors were operationally defined prior to data collection. The operational definitions of these strategies and behaviors are included in Appendix A.

The number of instances of a strategy during an observation session was then converted into a frequency measure of strategy use per minute to interpret the results. The researcher calculated the average of every session length and used that average length (25 minutes) to find the frequency of strategy per minute. Observation sessions varied slightly in length, so this average was used to create a consistent interpretation of strategy use across all sessions.

Intervention

The teachers participated in a classroom management intervention based on the Classroom Check Up (CCU) consultation model (Reinke, et al., 2008). First, the researcher assessed the classroom through classroom observations. After baseline data were collected, the intervention took place. During the intervention, the researcher consulted with the teacher. The researcher provided performance feedback information to the teacher including strategies currently in use and strategies that the teacher could improve on. The researcher reported the number of times behaviors were observed to the teacher to provide a clear representation of the frequency of use of the strategies. The researcher and teacher collaborated on which classroom management strategies that they would like the teacher to focus on from a menu of strategies presented by the researcher. The teacher explicitly identified which strategy they would like to improve on most. Both teachers expressed interest in increasing use of all strategies, but each chose one as a top priority. Both teachers chose praise as the strategy that they would like to improve upon most. The researcher provided examples of what the strategy was and how it could be used. They discussed how the teacher might work on the strategy or incorporate it into her classroom management practice. The researcher then consulted with the teacher about the chosen strategies throughout the week they received their intervention and had continued brief conversations on common behaviors experienced in the classroom and how to best manage them intermittently throughout the following days and weeks. The researcher and teacher continued to discuss the use of the strategies throughout the following weeks of observation. This typically consisted of the teachers asking questions to the researcher or the researcher checking in with the teachers. Observational data were

collected during the week of the consultation and during the following weeks to monitor progress. The observational data collected during the week of the intervention and the following weeks revealed if the teacher's use of classroom management strategies improved. See Appendix A for the intervention observation checklist.

Measures

The observational checklist was based off of the Brief Classroom Interaction Observation - Revised (BCIO-R). See Appendix A for the intervention observation checklist. The checklist was used to observe and record teacher classroom management behavior. It was developed to gather information on teachers' use of effective classroom management behaviors, monitor their practices, and evaluate the effects of these practices on student outcomes (Reinke et al., 2015). The researcher adapted the BCIO-R by adding additional behaviors to measure, as they were helpful specific to the setting in which the research was conducted. The observed teacher behaviors included: opportunities to respond, discipline using explanation, positive interactions with students, teaching moments, precorrections, general praise, specific praise, negative warnings, reprimands, and harsh reprimands. The observed student behaviors included: student disruptions, student aggression, and student noncompliance. See Appendix B for a table that operationally defines each of these behaviors. The researcher marked the frequency of each of the classroom management behaviors during each observational period.

There is evidence to support the reliability and validity of the BCIO-R measure. The mean percent agreement on the BCIO-R was 90% for 20-minute long observations. The Kappa value for this measure was .80, which is above the .60 mark of what is considered acceptable (Reinke et al., 2008).

Results

Teacher 1

Teacher behaviors for Teacher 1 are depicted graphically in *Figure 1* and *Figure 2* and student behaviors from Teacher 1's classroom are depicted graphically in *Figure 3*. Results of a visual analysis indicate that changes were made in Teacher 1's use of 6 out of 11 classroom management strategies. Teacher 1 improved her classroom management strategies demonstrated by an increase in level and/or upward trend in the following strategies: opportunities to respond, effective commands, positive interaction, praise, and the decreased use of reprimands and harsh reprimands. There was no change in level or trend for Teacher 1's use of precorrections, teaching moments, discipline using explanation, and negative warnings. Results from visual analysis in *Figure 3* suggest that students' behavior either did not change (i.e., student noncompliance, student aggression) or disruptive behaviors decreased slightly (i.e., student disruptions). Mean level of behavior for each teacher in baseline and intervention phases are depicted in Table 1 and Table 2.

Figure 1. Teacher Behaviors Hypothesized to Increase

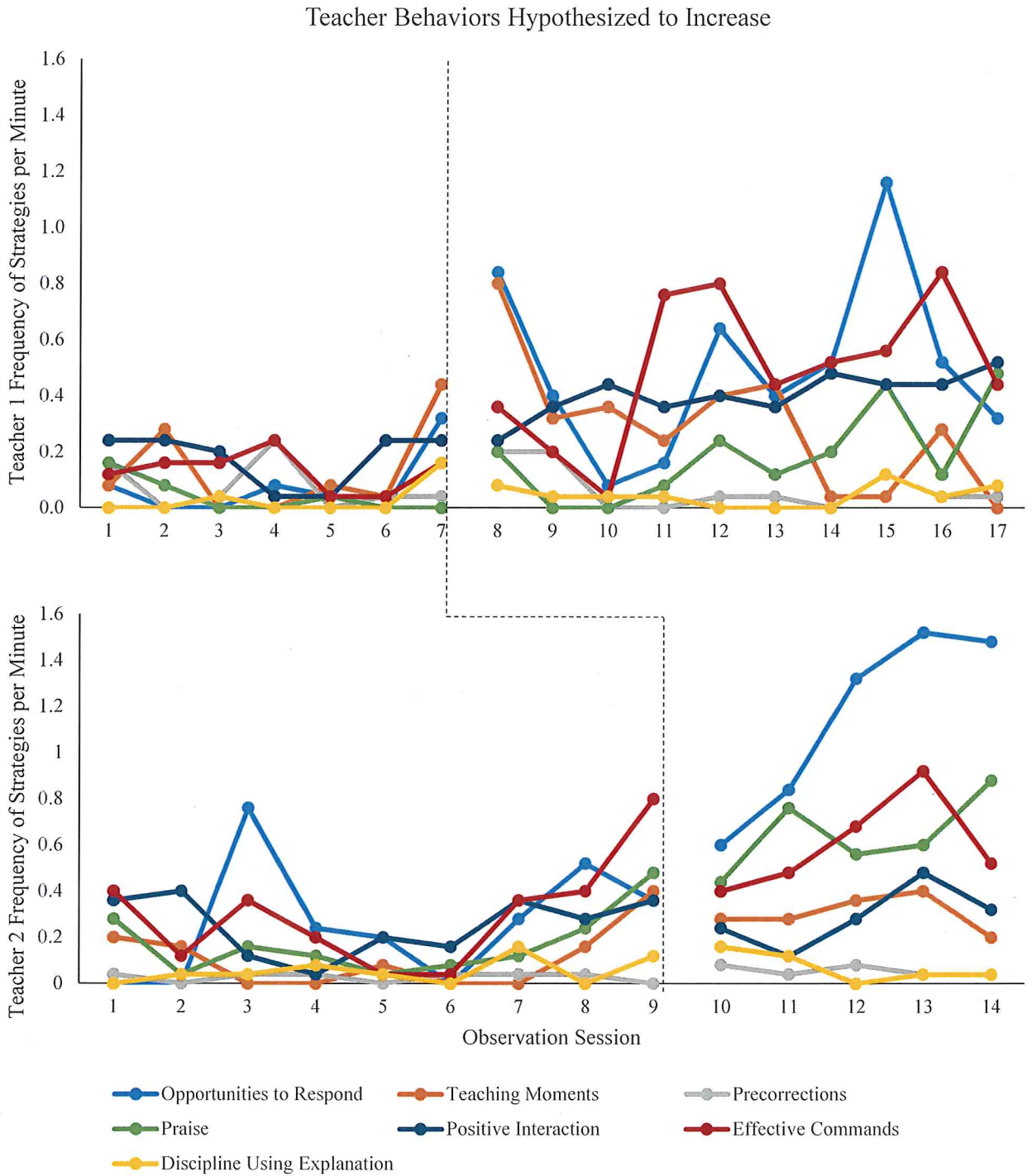


Figure 2. Teacher Behaviors Hypothesized to Decrease

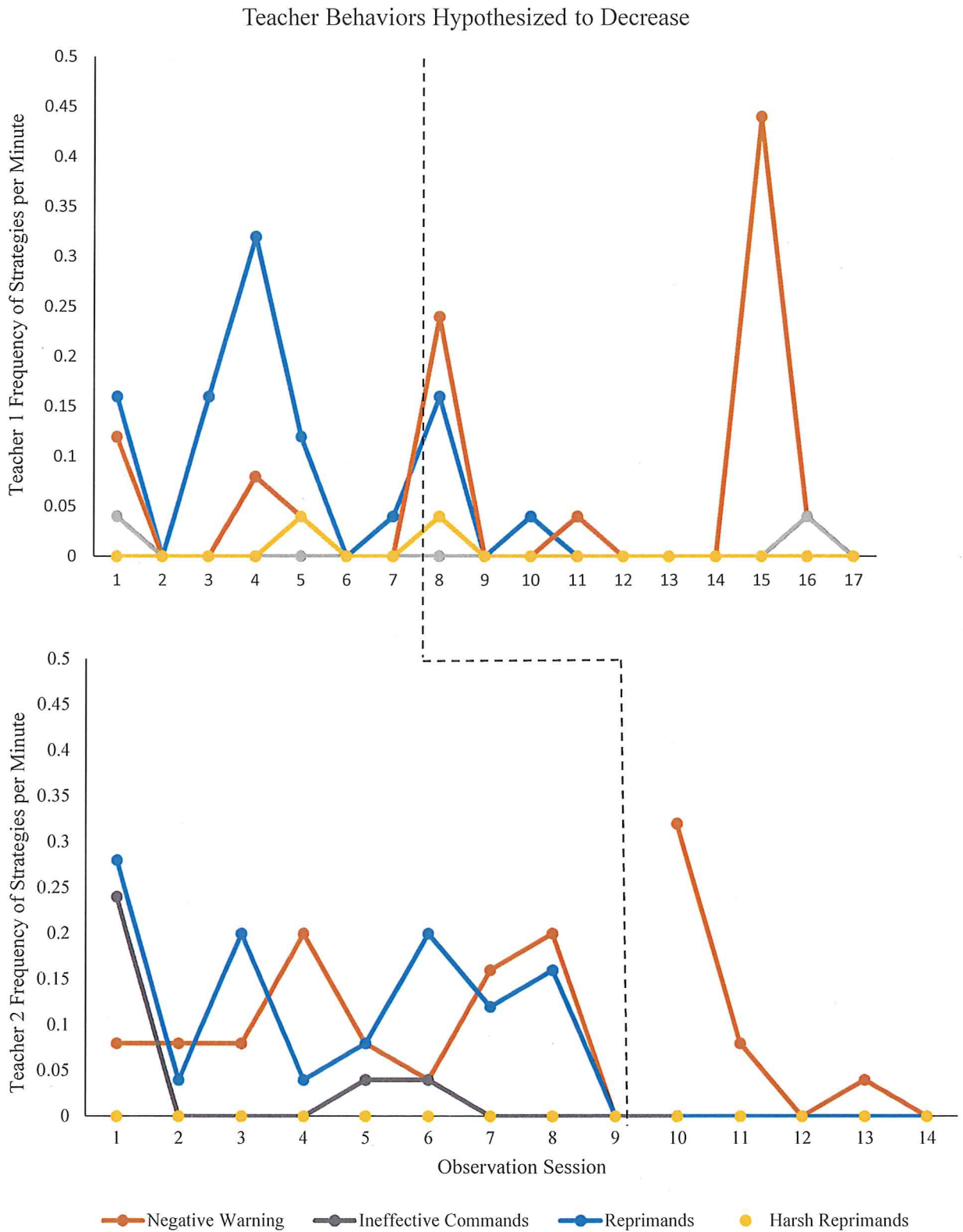


Figure 3. Student Behaviors

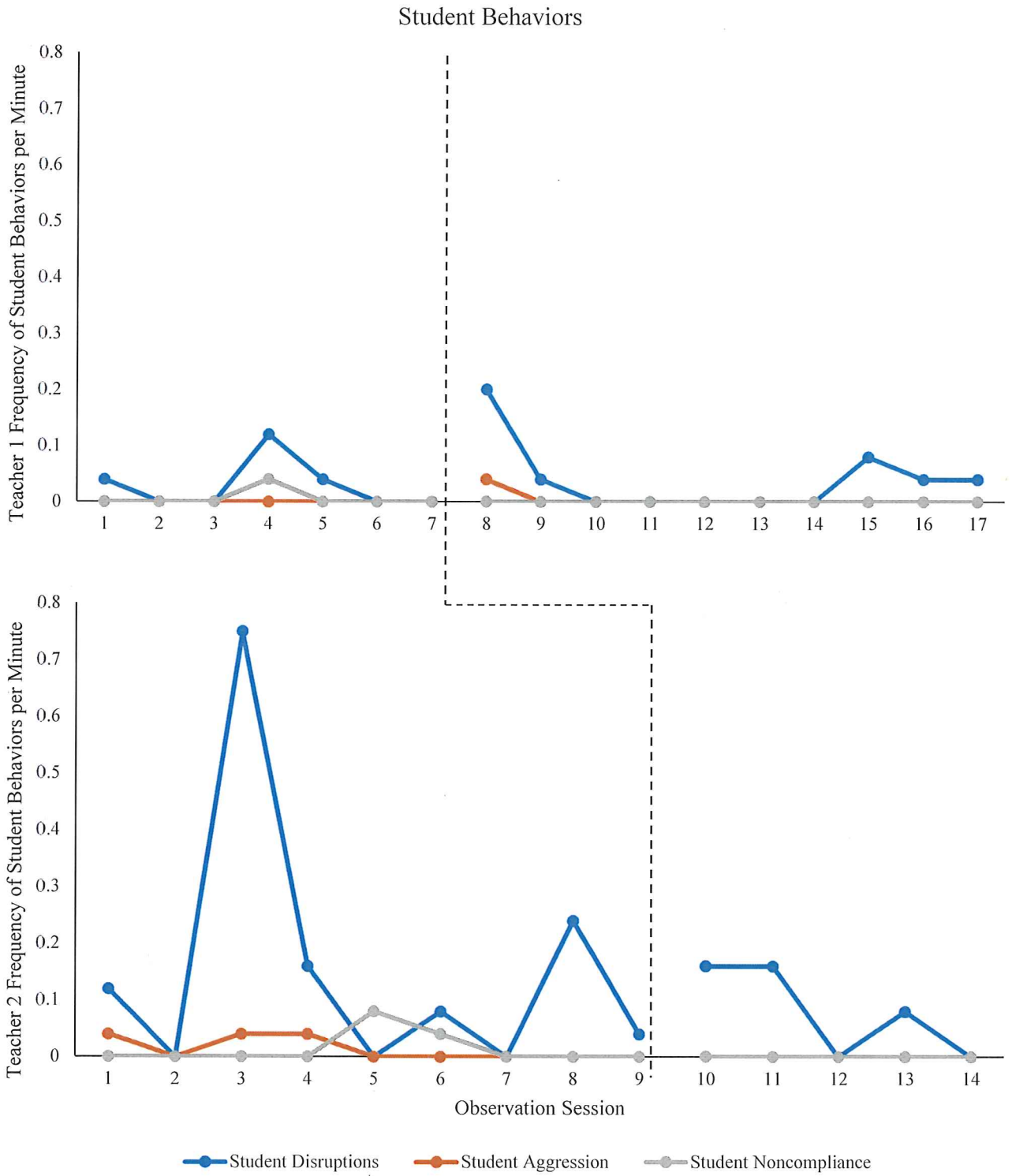


Table 1. Mean Frequency of Teacher 1 Behaviors Baseline and Intervention

<i>Classroom Management Strategy</i>	<i>Mean Baseline (Range)</i>	<i>Mean Intervention (Range)</i>
Opportunities to Respond	.03 (.00-.08)	.49 (.16-1.16)
Discipline	.01 (.00-.04)	.06 (.00-.16)
Positive Interaction	.16 (.04-.24)	.39 (.24-.52)
Teaching Moments	.08 (.00-.08)	.31 (.00-.80)
Precorrections	.08 (.00-.16)	.07 (.00-.20)
Praise	.05 (.00-.16)	.17 (.00-.48)
Effective Command	.13 (.04-.24)	.47 (.04-.84)
Ineffective Command	.01 (.00-.04)	.001 (.00-.04)
Negative Warning	.04 (.00-.12)	.07 (.00-.44)
Reprimand	.13 (.00-.32)	.02 (.00-.16)
Harsh Reprimands	.01 (.00-.04)	.001 (.00-.04)

Table 2. Mean Frequency of Teacher 2 Behaviors Baseline and Intervention

<i>Classroom Management Strategy</i>	<i>Mean Baseline (Range)</i>	<i>Mean Intervention (Range)</i>
Opportunities to Respond	.25 (.00-.76)	1.02 (.36-1.52)
Discipline	.05 (.00-.16)	.08 (.00-.16)
Positive Interaction	.24 (.04-.36)	.30 (.12-.48)
Teaching Moments	.08 (.00-.20)	.32 (.20-.40)
Precorrections	.03 (.00-.04)	.05 (.00-.08)
Praise	.14 (.04-.28)	.62 (.44-.88)
Effective Command	.24 (.04-.40)	.64 (.40-.92)
Ineffective Command	.04 (.00-.24)	0.0 (.00-.00)
Negative Warning	.12 (.04-.20)	.07 (.00-.32)
Reprimand	.14 (.04-.28)	0.0 (.00-.00)
Harsh Reprimands	0.0 (.00-.00)	0.0 (.00-.00)

Teacher 2

Results for Teacher 2 are depicted graphically in *Figure 1* and *Figure 2* and results for students from Teacher 2's classroom are depicted graphically in *Figure 3*. Results of a visual analysis indicate that progress was made for Teacher 2 in 7 out of 11 areas of classroom management strategies. Teacher 2 demonstrated a change in level and/or an upward trend in the use of the following strategies: opportunities to respond,

praise, effective commands, teaching moments, positive interaction and the decreased use of reprimands and ineffective commands. There was no change in Teacher 2's use of: negative warnings, harsh reprimands, precorrections, discipline using explanations. Results from a visual analysis in *Figure 3* suggest that problematic students' behaviors decreased for all three domains: student disruptions, student aggression, and student noncompliance.

Percentage of Non-Overlapping Data

Another method of calculating the effectiveness of intervention in single-case design research is by looking at the percentage of non-overlapping data (PND). Though visual analysis can be informative in analyzing data, it can also be relatively subjective. The PND results were included in this study to provide numerical, objective results of the effectiveness of the intervention. The visual analysis indicates if there were differences due to the intervention and the PND results provide information on how meaningful or effective the differences were. To compute the percentage of non-overlapping data the researcher must (1) identify the highest baseline point, (2) count the number of intervention points that exceed the highest baseline point (non-overlapping), (3) calculate the proportion of non-overlapping points to total number of intervention points. This can be done by utilizing the graphic displays of the data and analyzing the data points. Interpretations of non-overlapping data indicate that 90%+ of non-overlapping data indicates a highly effective intervention, 70%-90% suggests a moderately effective intervention, 50-70% suggests a minimally effective intervention, and less than 50% suggests an ineffective intervention ("Systemic Reviews for Single Subject Designs",

2011). The percentages of non-overlapping data for Teacher 1 are displayed in *Table 1* and the percentages of non-overlapping data for Teacher 2 are displayed in *Table 2*.

Table 3. Percentage of Non-Overlapping Data for Teacher 1

<i>Classroom Management Strategy</i>	<i>Amount of Non-Overlapping Data</i>	<i>Percentage</i>	<i>Interpreted Effectiveness</i>
Opportunities to Respond	10/11	91%	Highly Effective
Discipline	8/11	72%	Moderately Effective
Positive Interaction	9/11	82%	Moderately Effective
Teaching Moments	8/11	72%	Moderately Effective
Precorrections	0/11	0%	Ineffective
General Praise	4/11	36%	Ineffective
Specific Praise	7/11	64%	Minimally Effective
Negative Phrase/Warning	0/11	0%	Ineffective
Reprimand	0/11	0%	Ineffective
Harsh Reprimands	0/11	0%	Ineffective

Table 4. Percentage of Non-Overlapping Data for Teacher 2

<i>Classroom Management Strategy</i>	<i>Amount of Non-Overlapping Data</i>	<i>Percentage</i>	<i>Interpreted Effectiveness</i>
Opportunities to Respond	4/5	80%	Moderately Effective
Discipline	0/5	0%	Ineffective
Positive Interaction	1/5	20%	Ineffective
Teaching Moments	5/5	100%	Highly Effective
Precorrections	2/5	40%	Ineffective
General Praise	1/5	20%	Ineffective
Specific Praise	5/5	100%	Highly Effective
Negative Phrase/Warning	1/5	20%	Ineffective
Reprimand	5/5	100%	Highly Effective
Harsh Reprimands	0/5	0%	Ineffective

Discussion

The results of this study suggest that a consultation-based classroom management intervention can be successful in improving the frequency of effective classroom management strategies in teachers and reducing the number of problematic behaviors in students. For Teacher 1, the intervention resulted in an increase in 6 out of 11 classroom management strategies. Teacher 1 increased her use of effective classroom management strategies including: opportunities to respond, effective commands, positive interaction, and praise. Teacher 1 decreased her use of ineffective strategies including: reprimands and harsh reprimands. There was no change in Teacher 1's use of precorrections, teaching moments, discipline using explanation, and negative warnings.

For Teacher 2, the intervention resulted in an increase in the effective strategies of: opportunities to respond, praise, effective commands, teaching moments, and positive interaction. Teacher 2 also demonstrated a decrease in the use of the ineffective strategies of: reprimands and ineffective commands. There was no change in Teacher 2's use of: negative warnings, harsh reprimands, precorrections, discipline using explanations. Results of the student behaviors revealed that problematic student behaviors decreased in one of the three domains for Teacher 1 and decreased in all three domains for Teacher 2.

Results indicate that both teachers improved on their use of praise, which was the strategy both had chosen as their strategy to focus on improving during the intervention. Furthermore, it is important to note that both teachers not only improved on the strategy they had chosen, but they improved upon other classroom management strategies as well.

A key component to consider when interpreting the results is the low base rates of problematic teacher and student behaviors. While these behaviors decreased, they were

not necessarily a large problem to begin with. Additionally, when the behaviors did not change, that was likely due to the low base of problematic behavior in the first place. This low level of problematic behavior in the baseline phase should be considered when interpreting the results of the intervention.

These results are consistent with the findings of a study conducted by Gorman-Smith and her colleagues in 2003. The findings of Gorman-Smith's (2003) study support the notion that consultation and teacher training can change classroom experiences. This study found that the effects of a classroom enhancement intervention on teacher behavior was associated with desirable change in student aggression. Teachers in the intervention condition also provided more academic feedback to students, created more individualized seat work, and used less large group lectures. Overall, the intervention group became more likely than the control group to give feedback to students. The findings also suggest that the intervention increased the likelihood of praise for positive behavior given to aggressive students. Overall, the findings of Gorman-Smith's (2003) study suggest that teacher intervention is an effective strategy for reducing problematic behaviors in students and for enhancing achievement.

The present study is also consistent with the findings of a study conducted by Matheson and Shriver (2005). The study investigated whether students' rate of compliance would increase with the increased use of effective commands from teachers. A multiple baseline design was used and the researcher observed the following behaviors: the type of teacher command, the number of repetitions of the command, student compliance, student noncompliance, student negative behavior, or teacher verbal praise. Teachers were given two training sessions to learn how to effectively deliver commands

and how to combine effective commands with verbal praise. Effective commands were described as: elicit a distinct outcome, precise and isolated, specific and direct, and given one at a time followed by a 5 second waiting period. The teacher was also informed that an effective command is characterized by a quiet tone of voice, direct, stated positively, and descriptive. The results of the Matheson and Shriver (2005) study indicate that all three teachers increased their use of effective commands when the intervention began. The frequency of verbal praise increased following the intervention as well. Lastly, each student demonstrated a downward trend in compliance in the baseline phase, but had an immediate increase in compliance once the training was implemented. The results reveal that improvement in rates of compliance occur when teachers increase their use of effective commands. These findings are consistent with the results from the present study.

Previous literature also investigated the effect an increased rate of opportunities to actively respond would have on the classroom behavior of students (Sutherland, Alder, Gunter, 2003). In sum, results of this study indicated that increases in opportunities to respond were associated with an increased amount of correct responses and task engagement and decreased disruptive behavior in this sample of students. Results indicated that increased effective teaching practices can lead to more appropriate classroom behavior of students. Increasing OTR may give students more chances to actively participate, improve both academic achievement and classroom behavior, prevent coercive teacher-student relationships, and may combat the learned helplessness that may occur for students with problematic behaviors. This study added to the literature on the positive effects of increasing OTR on the academic and behavioral outcomes of

students. The current study found similar results to Sutherland, Alder, and Gunter (2003) in that an increase in the opportunities to respond may have been a contributing factor in the decrease of problematic behaviors in students.

These results have positive implications for practice as classroom management interventions are often needed within the school setting. The current lack of classroom management training poses a significant problem for teachers and students. Teachers are left without the necessary skills to manage their classroom and often resort to practices that are not empirically assessed or experimentally validated. The result of such a dilemma includes teacher burnout, coercive relationships with students, student aggression, and overall less time for instruction and learning. The present study was created to provide a solution to this problem. The intervention was cost-effective and relatively simple in nature. This intervention could be easily replicated in a practical setting.

The study appeared to have evidence of external validity, in the sense that it improved the teachers' use of classroom management strategies across multiple domains. The results of this study suggest that a consultation-based classroom management intervention can be successful in improving the frequency of effective classroom management strategies in teachers.

While social acceptability was not formally assessed as part of this study, anecdotal evidence seems to support the intervention was acceptable to the teachers. The teachers frequently voiced their appreciation for the intervention. The teachers often pulled the researcher aside to ask more questions on classroom management strategies and desired to continue to learn about effective strategies. At the completion of the

intervention, both teachers stated that they enjoyed the intervention and would participate in a something similar in the future if the opportunity presented itself. Teacher 1 specifically stated that her confidence in teaching increased after the intervention. Future research should include a formal assessment of social validity.

Limitations and Directions for Future Research

While results from this study are promising, they should be interpreted in the context of their limitations. One limitation of this study is that there were only two participants. Due to the low number of participants, there is limited generalizability. Limited generalizability is consistent with the methodology of single-case design research in general. Though this is a limitation, the study was created to explore the effectiveness of a one-on-one intervention. The intent of the study was to create a simple consultation-based model that school professionals could administer individually with teachers in a school setting. The study was created in a manner that would allow it to be easily replicable by school professionals with teachers in their respective settings.

Also consistent with limitations of single-case design research is the limitations of visual analysis of results. Visual analysis of single-case design research can be subjective and open to interpretation. Results of this study were interpreted visually using graphs. The limitations of this type of data analysis should be considered when interpreting the results of this study.

A third limitation was the low level of negative teacher and student behaviors to begin with. Both teachers did not frequently engage in ineffective classroom management strategies in the baseline phase. Additionally, students within the classroom did not demonstrate large amounts of problematic behavior prior to the intervention. Due

to the low base rate of problematic student and teacher behaviors, it is difficult to claim that significant changes were made.

A fourth limitation of this study is that only one researcher was collecting the observational data. There was no second researcher available to collect a second set of data to measure interrater reliability. To minimize this limitation, the researcher operationally defined each classroom management strategy prior to the intervention. Additionally, the researcher utilized the intervention observation checklist to remain consistent and reliable in observations. It is strongly recommended that future studies ensure interrater reliability during observation sessions through the use of two observers.

Lastly, the research took place in a summer school setting. The summer school setting limits the generalizability of the study to academic settings across the typical school year. Though there are differences between a typical school year and summer school setting, it is important to note that the general structure of the day and teacher needs remained consistent to that of a typical school year.

There are many different components of this study that could be expanded upon in future research studies. Future researchers could conduct the study in a typical school year setting and analyze the differences (if any) between a summer school setting and a traditional school setting. Additionally, future research could involve replications of the current classroom management intervention that continue to utilize the component of teacher choice in deciding strategies to improve on. The component of teacher choice could be integrated into professional development sessions or into consultation-based approaches.

It is also recommended that future replications include a teacher questionnaire prior to the study to gain more information on the teachers. This could be helpful in analyzing how the teachers' backgrounds, training programs, interests, and years of teaching could have an impact on their use of classroom management strategies and openness to change their practices.

Additionally, future research could examine the differences in effectiveness of the CCU model with teachers of varying years of experience. For example, teachers could be categorized into groups based on their years of teaching experience (e.g. 1-5 years, 5-10 years, 10-15 years, 15+ years). The researcher could then examine the effectiveness of the intervention with teachers based on their years of experience and determine when the opportune time is to implement this type of intervention or if at a certain point the intervention is no longer effective.

Another direction for future research could include having teachers self-record their classroom management strategies prior to an intervention. This type of study would allow the researcher to collect baseline data, teacher self-recording data, intervention week data, and progress monitoring data. This study would inform the researcher if an awareness of their classroom management behaviors would influence a change in teachers use of management strategies or if the intervention itself is needed to fully impact classroom management strategies.

Future research could also include measuring more student behaviors. Positive student behaviors could be measured to assess if there are increases in desirable student behaviors as a result of a teacher classroom management intervention. Examples of desirable student behaviors include: participation, on task-behavior, work completion,

etc. Furthermore, using a more sensitive measure to track changes in student behavior, relative to the teachers' intervention, could be useful as well.

Lastly, future researchers could assess if the intervention would change in effectiveness if teachers participated in small groups, rather than individually. This would aid in an understanding of the most efficient way to administer the intervention. For example, if the intervention is just as effective in small groups as it is individually, then a consultant could work with multiple teachers to make a larger impact, just as efficiently.

Conclusion

In conclusion, findings from the classroom management intervention indicate that the intervention was moderately effective in increasing the use of classroom management strategies in two teachers. Findings also reveal that the intervention was successful in decreasing problematic behaviors in students. This study is easily replicable and can be conducted in a practical, school setting. Though this study is not without limitations, the practical implications are encouraging. The results suggest that a consultation-based classroom management intervention can result in meaningful change in both teacher and student behavior.

References

- Alexander, P. A., Schallert, D. L., & Hare, V. C. (1991). Coming to terms: How researchers in learning and literacy talk about knowledge. *Review of Educational Research, 61*(3), 315-343.
- Alvero. A. M., Bucklin. B. R., & Austin. J. (2001). An objective review of the effectiveness and essential characteristics of performance feedback in organizational settings. *Journal of Organizational Behavior Management, 21*. 3-29.
- Anderson, L. W. (1984). Instruction and time-on-task: A review. In L. W. Anderson (Ed.), *Time and school learning* (pp. 143-163). New York: St. Martin's Press.
- Apter, B., Arnold, C., & Swinson, J. (2010). A mass observation study of student and teacher behaviour in British primary classrooms. *Educational Psychology in Practice, 26*, 151-171.
- Barrett, E. R., & Davis, S. (1993). Perceptions of beginning teachers' needs in classroom management. *Teacher Education & Practice, 11*, 22-27.
- Balcazar. R. Hopkins, B. L., & Suarez. Y. (1985). A critical objective review of performance feedback. *Journal of Organizational Behavior Management, 7*, 65-89
- Begeny, J. C., & Martens, B. K. (2006). Assessing pre-service teachers' training in empirically-validated behavioral instruction practices. *School Psychology Quarterly, 21*, 262-285.
- Brophy, J. E. (1983). Classroom organization and management. *The Elementary School*

Journal, 83, 265- 285.

Brophy, J. (1988). Educating teachers about managing classrooms and students. *Teaching and Teacher Education*, 4, 1–18.

Brophy, J. (2006). History of research on classroom management. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 17–43). Mahwah, NJ: Lawrence Erlbaum.

Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), *Handbook on research on teaching* (3rd ed., pp. 328–375). New York, NY: Macmillan.

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16, 239–253.

Cappella, E., Frazier, S. L., Atkins, M. S., Schoenwald, S. K., & Glisson, C. (2008). Enhancing schools' capacity to support children in poverty: An ecological model of school-based mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 35, 395–409.

Carr, E. G., Taylor, J. C., & Robinson, S. (1991). The effects of severe behavior problems in children on the teaching behavior of adults. *Journal of Applied Behavior Analysis*, 24, 523–535.

Christofferson, M., Sullivan, A. L. (2015). Preservice teachers' classroom management

- training: A survey of self-reported training experiences, content coverage, and preparedness. *Psychology in the Schools*, 52(3).
- Coffee, G., & Kratochwill, T.R. (2013). Examining teacher use of praise taught during behavioral consultation: Implementation and generalization considerations. *Journal of Educational & Psychological Consultation*, 23(1), 1-35.
- Cooley-Nichols, S. M. (2004). Generic special education teacher preparation: Emotional and behavioral disorders. *Emotional and Behavioural Difficulties*, 9(1), 28-40.
- DiGennaro, F. D., Martens, B. K., & McIntyre, L. L. (2005). Increasing treatment integrity through negative reinforcement: Effects on teacher and student behavior. *School Psychology Review*, 34, 220-231.
- Doyle, W. (1985). Recent research on classroom management: Implications for teacher preparation. *Journal of Teacher Education*. 36. 31-35.
- Doyle, W. (1986). Classroom organization and management. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 392–431). New York, NY: MacMillan.
- Evertson, C. M., & Weinstein, C. S. (2006). Classroom management as a field of inquiry. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 97–125). Mahwah, NJ: Lawrence Erlbaum.
- Farmer, T. W., Reinke, W. M., & Brooks, D. S. (2014). Managing classrooms and challenging behavior: Theoretical considerations and critical issues. *Journal of*

Emotional and Behavioral Disorders, 22, 67-73.

Fisher, C. W., & Berliner, D. C. (Eds.). (1985). *Perspectives on instructional time*. New York: Longman.

Ferguson, E., & Houghton, S. (1992). The effects of teacher praise on children's on-task behavior. *Educational Studies, 18, 83-93.*

Gettinger, M. (1986). Issues and trends in academic engaged time of students. *Special Services in the Schools, 2, 1-17.*

Gettinger, M., & Kohler, K. M. (2006). Process-outcome approaches to classroom management and effective teaching. In *classroom management: The classroom check-up*. New York, NY: Guilford Press.

Good, T. L. (1979). Teacher effectiveness in the elementary school. *Journal of Teacher Education, 30, 32-64.*

Good, T. L. (1983). Classroom research: A decade of progress. *Educational Psychologist, 18, 127-144.*

Gorman-Smith, D., Beidel, D., Brown, T. A., Lochman, J., & Haaga, D. F. (2003). Effects of teacher training and consultation on teacher behavior toward students at high risk for aggression. *Behavior Therapy, 34(4), 437-452.*

Gresham, F. & Lopez, M. (1996). Social validation: A unifying concept for school-based consultation research and practice. *School Psychology Quarterly, 11, 204-227.*

Gunter, P., Denny K., Jack, S., Shores, R., & Nelson, C. M. (1993). Aversive stimuli in

academic interactions between students with serious emotional disturbance and their teachers. *Behavioral Disorders*, 18,265-273.

Hammerness, K. (2011). Classroom management in the United States: A view from New York City. *Teaching Education*, 22, 151–167.

Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children’s school outcomes through eighth grade. *Child Development*, 72, 625–638. doi:10.1111/1467-8624.00301

Hart, R. (2010). Classroom behaviour management: Educational psychologists’ views on effective practice. *Emotional & Behavioural Difficulties*, 15(4), 353-371.

Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics & Adolescent Medicine*, 153, 226-234.

Haydon, T., Conroy, M., Sindelar, P., Scott, T. M., Barber, S. B., & Orlando, A. M. (2010). Comparison of three types of opportunities to respond on student academic and social behaviors. *Journal of Emotional and Behavioral Disorders*, 18, 27–40.

Ingersoll, R. M. (2002, August 15). High turnover plagues schools. *USA Today*, p. 13A.

Ingersoll, S., & LeBoeuf, K. (1997). Reaching out to youth out of the education mainstream. *Juvenile Justice Bulletin*, 1-11.

Ingersoll, R., & Smith, T. (2003). The wrong solution to the teacher shortage.

Educational Leadership, 60(8), 30–33.

- Jones, V. (2006). How do teachers learn to be effective classroom managers? In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 887–907). Mahwah, NJ: Lawrence
- Karweit, N. L. (1983). Time on task: A research review (Report No. 332). Baltimore, MD: *Center for Social Organization of Schools*. Johns Hopkins University.
- Karweit, N. (1985). Should we lengthen the school term?. *Educational Researcher*, 14(6), 9-15.
- Kauffman, J. M., & Brigham, F. J. (2009). *Working with troubled children*. Verona, WI: Full Court Press.
- Kratochwill, T. R., & Pittman, P. H. (2002). Expanding problem-solving consultation training: Prospects and frameworks. *Journal of Educational and Psychological Consultation*, 13, 69–95.
- Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70, 910–929.
- Lewis, T. J., Jones, S. E. L., Horner, R. H., & Sugai, G. (2010). School-wide positive behavior support and students with emotional/behavioral disorders: Implications for prevention, identification, and intervention. *Exceptionality*, 18, 82–93.

- Lewis, T. J., & Newcomer, L. L. (2002). Examining the efficacy of school-based consultation: Recommendations for improving outcomes. *Child & Family Behavior Therapy, 24*, 165–181. doi:10.1300/J019v24n01_11
- Maag, J. W., & Katsiyannis, A. (1999). Teacher preparation in E/BD: A national survey. *Behavioral Disorders, 189-196*.
- Maggin, D. M., Robertson, R., Oliver, R. M., Hollo, A., & Partin, T. C. M. (2010). Integrating research, policy, and practice to bring science to the classroom: New leaders' perspectives on the field of emotional and behavioral disorders. *Behavioral Disorders, 35*, 308–324.
- Malone, B. G., & Tietjens, C. L. (2000). Re-examination of classroom rules: The need for clarity and specified behavior. *Special Services in the Schools, 16*, 159–170.
- Matheson, A., & Shriver, M D. (2005). Training teacher to give effective commands: Effects on student compliance and academic behaviors. *School Psychology Review, 34(2)*, 202-219.
- Mayer, G.R.(1995). Preventing antisocial behavior in the schools. *Journal of Applied Behavior Analysis, 28*, 467-478.
- McKenney, E. L., Waldron, N., & Conroy, M. (2013). The effects of training and performance feedback during behavioral consultation on general education middle school teachers' integrity to functional analysis procedures. *Journal of Educational and Psychological Consultation, 23*, 63-85.
- Miller, W. R., & Rollnick, S. (2002). Motivational interviewing: Preparing people for

change. Guilford. *New York*.

Motoca, L. M., Farmer, T. W., Hamm, J. V., Byun, S., Lee, D. L., Brooks, D. S., Rucker, N., & Moohr, M. M. (2014) Directed consultation, the SEALS model, and teachers' classroom management. *Journal of Emotional and Behavioral Disorders, 22*(2) 119-129.

Noell, G. H., Witt, J. C, Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K.L., Koenig, J. L., Resetar, J. L. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. *School Psychology Review, 34*, 87-106.

Oliver, R. M., & Reschly, D. J. (2007). Effective classroom management: Teacher preparation and professional development. Washington, DC: *National Comprehensive Center for Teacher Quality*.

O'Niell, S., & Stephenson, J. (2012). Does classroom management coursework influence preservice teachers' perceived preparedness or confidence? *Teaching and Teacher Education, 28*, 1131–1143.

Reinke, W. M., Lewis-Palmer, T., & Martin, E. (2007). The effect of visual performance feedback on teacher behavior-specific praise. *Behavior Modification, 31*, 247–263.

Reinke, W. M., Lewis-Palmer, T., & Merrell, K. (2008). The classroom check-up: A classwide consultation model for increasing praise and decreasing disruptive behavior. *School Psychology Review, 37*, 315–332.

- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly, 26*, 1–13.
- Reinke, W. M., Stormont, M., Herman, K. C., Wachsmuth, S., & Newcomer, L. (2015). The brief classroom interaction observation-revised: An observation system to inform and increase teacher use of universal classroom management practices. *Journal of Positive Behavior Interventions, 17*(3), 159-169.
- Reinke, W. M., Stormont, M., Herman, K. C., Wang, Z., Newcomer, L., & King, K. (2014). Use of coaching and behavior support planning for students with disruptive behavior within a universal classroom management program. *Journal of Emotional and Behavior Disorders, 22*(2), 74-82.
- Rollin, S. A., Subotnik, R. F., Bassford, M., & Smulson, J. (2008). Bringing psychological science to the forefront of educational policy. *Psychology in the Schools, 45*, 194–205.
- Romano, M. (2008). Successes and struggles of the beginning teacher: Widening the sample. *The Educational Forum, 72*, 63–78.
- Rusby, J. C., Crowley, R., Sprague, J., & Biglan, A. (2011). Observations of the middle school environment: The context for student behavior beyond the classroom. *Psychology in the Schools, 48*, 400–415.
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice.

Education & Treatment of Children, 31, 351–380. doi:10.1353/etc.0.0007.

Simonsen, B., MacSuga-Gage, A. S., Briere, D. I., Freeman, J., Myers, D., Scott, T. M., & Sugai, G. (2014). Multitiered support framework for teachers' classroom-management practices. Overview and case study of building the triangle for teachers. *Journal of Positive Behavior Interventions*, 16(3), 179-190.

Stormont, M., & Reinke, W. M. (2009). The importance of precorrection and behavior specific praise strategies. *Beyond Behavior*, 18, 26–32.

Stormont, M., Reinke, W. M., & Herman, K. C. (2011). Teachers' importance ratings for evidence-based behavioral interventions. *Behavioral Disorders*, 37, 19–29.

Stough, L. (2006). The place of classroom management and standards in teacher education. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 97–125). Mahwah, NJ: Lawrence Erlbaum.

Stronge, J. H., Ward, T. J., & Grant, L. W. (2011). What makes good teachers good? A cross-case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education*, 62, 339–355.

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, 239–248.

- 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. *Journal of Special Education, 41*, 223–233.
- Sutherland, K. S., & Oswald, D. P. (2005). The relationship between teacher and student behavior in classrooms for students with emotional and behavioral disorders: Transactional processes. *Journal of Child and Family Studies, 14*, 1–14.
- Sutherland, K. S., & Wehby, J. H. (2001). The effect of self-evaluation on teaching behavior in classrooms for students with emotional and behavioral disorders. *The Journal of Special Education, 35*, 161–171.
- “Systemic Reviews for Single Subject Designs”. (2011). In *National center for the dissemination of disability research*. Retrieved from www.ncddr.org/pd/workshops/07_12_05sr2/10.0_SSD_120507.ppt
- Walker, H. (1996). *The acting-out child: Coping with classroom disruption* (2rid ed.). Longmont, CO: Sopris.
- Webster-Stratton, C., Reinke, W. M., Herman, K. C., & Newcomer, L. (2011). The Incredible Years Teacher Classroom Management Training: The methods and principles that support fidelity of training delivery. *School Psychology Review, 40*, 509–529.
- Wehby, J. H., Symons, F. J., & Shores, R. E. (1995). A descriptive analysis of aggressive behavior in classrooms for children with emotional and behavioral disorders.

Behavioral Disorders, 20, 87-105.

Wentzel, K.R. 2002 Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development* 73, no. 1: 287–301.

Wesley, D. A., & Vocke, D. E. (1992, February). Classroom discipline and teacher education. Paper presented at the Association of Teacher Educators annual meeting, Orlando, FL.

Witt, J. C, Gresham, E. M., & Noell, G. H. (1996). What's behavioral about behavioral consultation? *Journal of Educational and Psychological Consultation*, 7, 327-344.

Wood, B. K., Umbreit, J., Liaupsin, C. J., & Gresham, E. M. (2007). A treatment integrity analysis of function-based intervention. *Education and Treatment of Children*, 30, 105-120.

Appendix A

Researcher Observation Checklist Adapted from the Brief Classroom Interaction
Observation - Revised

Thesis Observations
Teacher 1 or Teacher 2 (circle)

Date: _____

Time Observed: _____ - _____

Subject Observed: _____

Strategy	Frequency
Opportunities to Respond	
Teaching Moments	
Precorrection	
Specific Praise	
General Praise	
Reprimands	
Harsh Reprimands	
Positive Interaction	
Negative Warning	
Effective Commands	
Ineffective Commands	
Discipline Using Explanation	
Student Disruptions	
Student Aggression	
Student Noncompliance	

Notes & Observations:

Appendix B

Operational Definitions of Classroom Management Strategies and Student Behaviors.

Discipline Using Explanation	Disciplining a child's inappropriate behavior using a calm tone and explanation of why they shouldn't engage in the inappropriate behavior followed by an explanation of the desired, appropriate behavior.
Praise	Praise for appropriate behavior, without mention to a specific behavior. Ex: "Good job!" OR Praise for specific, appropriate behavior. Ex: "You did a great job raising your hand quietly while waiting for your turn to speak."
Harsh Reprimand	Raising one's voice while harshly scolding a child.
Negative Warning	Warning a child in an aggressive, harsh tone. Ex: "Don't touch that bug!!"
Ineffective Commands	Instructing the students on what they are NOT to do in a negative manner or yelling, scolding voice. Ex: "Now we are not going to take a long time and we are not going to be loud in the hallway!" (As opposed to, "Move quickly and walk quietly!")
Opportunities to Respond	The amount of times the teacher poses a question and the students are presented with the opportunity to respond to instruction.
Positive Interaction	Building positive relationships with the students. For example, responding to a child's question in a positive manner, responding to a child's story in an engaging manner, asking a question to get to know a student. Primarily individualized relationship building interactions between a student and the teacher.
Effective Commands	Instructing the students on what they are TO do in a positive manner. Ex: "Now we are going to move quickly and walk quietly to go do something fun!"
Precorrection	Proactive strategy designed to prevent or interrupt predictable behavior from occurring, or increase the likelihood of expected behavior to take place. Anticipating the problem behavior based on previous patterns or knowledge of students' behaviors.
Reprimand	Scolding a child in a negative manner.
Student Aggression	A student engaging in physically and/or verbally aggressive behavior. This may

	include kicking, hitting, screaming, pushing, shoving, yelling.
Student Disruption	Student interruption during the teacher's instruction.
Student Noncompliance	Student not engaging in the task the teacher asked. A student not following directions.
Teaching Moments	Teacher teaching a lesson or fact to the students. This was used to replace Time Teaching on the original BCIO-R measure. Ex: "Every bee has it's own job in the hive."