AN EVALUATION OF BEHAVIOR MANAGEMENT

TRAINING: TRAINING TEACHERS TO IMPROVE

CLASSROOM MANAGEMENT SKILLS

By

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Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY May, 2023

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ACKNOWLEDGEMENTS

I would like to thank those that came across my path and ignited a fiery desire to make positive change in this world. I would like to thank my family that has instilled in me the purpose to serve others and complete my doctoral education. I would like to thank my parents, Zahid and Tehmina Cheema, for valuing my education, graciously providing for me, and encouraging me. I would like to thank my four siblings, Isra, Saleh, Yahya, and Yunus, for making space for laughter and comfort. Finally, I would like to thank my husband, Mohamed Abo-Basha, for being an absolute best friend, making me laugh until it hurts, and finding me in my 2nd year of grad school. Mohamed supported my successes with endless reinforcements and understood me on discouraging days. He held me accountable, pushed me forward, and insisted I was resilient. Mohamed voices every day that I am capable of more than I can operationally define, and for that, I am a better woman and vastly grateful.

I would like to thank my dear advisor, Dr. Gary Duhon, who shaped me into an analytical and intentional practitioner. Dr. Duhon mentored my educational journey and guided insightful discussion and research. I would like to thank my graduate faculty for evidence-based training and for preparing me to be an adequate clinician. I would like to thank my clinical supervisors, Dr. Gilbert, Dr. Shepherd, Dr. Campbell, and Dr. Parker, for teaching me to be charismatic, well-rounded, and empathetic with clients. I would like to thank my undergraduate mentors for believing in me, supporting my academic endeavors, and providing me with unlimited resources and opportunities.

Without my network of beloved friends, I would not be where I am today. Thank you to Aisha Hasanjee for being available for any spontaneous adventure. Thank you to Hannuja Vijayan for always providing a safe space for me. Thank you to Emily Loethen and Kelli Freeman for your genuine hearts and copious amounts of life advice. Thank you to my classmates for making my graduate school experience filled with fun.

To my research team, I am forever grateful for your work ethic, dependability, and teamwork. Thank you for driving up to an hour to reach school sites for observations. You are what research relies on.

Lastly, I would like to give my utter appreciation to God for taking care of me and blessing me with goodness in every aspect of my life.

Name: HIBA M. CHEEMA

Date of Degree: MAY, 2023

Title of Study: AN EVALUATION OF BEHAVIOR MANAGEMENT TRAINING:

TRAINING TEACHERS TO IMPROVE CLASSROOM

MANAGEMENT SKILLS

Major Field: SCHOOL PSYCHOLOGY

Abstract: The purpose of this study is to evaluate the efficacy of two virtual prerecorded trainings. Training 1 is a three-hour training titled *Basics of Classroom Behavior Management*. Training 2 is a 10-hour training titled *Behavior Reduction*. Evidence of implementation was confirmed by direct observations of teacher and student behavior in the classroom at baseline, after the 3-hour training, and after the 10-hour training. The study hypothesizes that a) Training 2 will improve teachers' classroom management by increasing on-task behavior, b) Training 1 will improve teachers' classroom management by increasing student on-task behavior, and c) Teachers' will have an increased positive evaluation of the trainings. Results indicate that Training 1 is a successful intervention to increase average teacher positive behaviors and decrease average teacher reprimands delivered. Results also indicate that Training 2 is an effective tool to increase student engagement, and decrease student off-task behaviors (e.g., talking out, out of seat, object play, and passive behavior. Study implications include the effective use of virtual behavioral management trainings to increase teachers' classroom management skills as a more cost-effective and flexible delivery of training.

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CHAPTER I

INTRODUCTION

Classroom Management

Classroom management is effective in enhancing student outcomes; it uses proactive strategies to facilitate effective teaching and learning. Classroom management is an instrumental factor in contributing to student learning (Smart & Brent 2010; Stronge, Ward, Tucker, & Hindman, 2007; Wang, Haertel & Walberg, 1993) as it includes time management and communicating with parents. Behavior management expedites a classroom environment where effective learning can take place by shaping student behavior (Smart & Brent, 2010).

A lack of knowledge and belief in efficacy can increase frequently used reactive strategies. It is unclear if the use of reactive strategies effectively changes student behavior (Korporshoek et al., 2016). Teachers frequently use reactive strategies in the classroom such as punishing students. Perceived low control of the classroom was associated with authoritarian strategies such as reprimands and restraints. Teachers' strategy preferences and association with perceived control were validated through the observation of teacher behavior in some classrooms (Rydell & Henricsson 2004).

The first-year elementary teachers were interviewed on their use of behavioral strategies for

reducing misbehaviors. When reporting on behavior management strategies to confront minor misbehavior, teachers reported their strategies to be effective, and the use to be effective. When the teachers reported severe misbehaviors in their classroom, they perceived the behavior management strategies as dominantly ineffective and reported an inconsistent implementation. The lack of knowledge in behavior management is an educational issue, as it links to teacher attrition and has implications for rising rates (Brent & Smart, 2010). Thirty to fifty percent of teachers leave the field within the first five years of teaching, whereas in urban settings the percentage of teachers leaving is above fifty. Of teachers citing leaving the profession, thirty percent cited behavioral management issues as the primary reason for leaving (Berry, Hopkins-Thompson, & Hoke, 2002). Others cite that thirty percent of teachers leave within three years of teaching (Plash & Piotrowski, 2006). Additionally, a key reason behind teacher burnout is a reported frustration with behavior management issues (Smart & Brent, 2010).

Without an appropriate understanding of classroom management and how to address disorderly behavior effectively, it can be quite challenging to aim at the needs and demands of students who have problem behavior. It is important to note the current level of training teachers receive and to further address the disparity between training and its translation into the classroom.

Teacher Training

One of the four universal categories addressing skills and knowledge that elementary education teachers need to be successfully prepared when they enter the classroom is having a sufficient knowledge foundation of effective classroom management strategies to support academic engagement and appropriate behavior in combination with decreasing

inappropriate behavior such as disruptions in the classroom (Allday, Neilsen-Gatti & Hudson, 2013).

Research suggests that teacher education programs lack traditional training and adequate college coursework in behavior management. (Brent & Smart, 2010; Moore et al., 2017). In a survey of 111 universities, thirty percent of teacher education programs offered a course in the theoretical and applicability of behavior management strategies, and only twenty-seven percent included languages such as discipline, control, behavior, and management (Brent & Smart, 2010). Only forty-one percent of teacher preparatory programs required a 3-credit course on classroom behavior management. Three percent of universities offered more than 3 credit hours of coursework on classroom behavior management. Within the same sample, forty percent of universities offered no coursework on behavior management in teacher preparation training. (Allday, Neilsen-Gatti & Hudson, 2013). On a more narrow lens, Oliver and Reschly (2010) assessed special education teacher preparation programs for classroom management coursework. They found that only more than 25% of programs included a 3-credit course allocated for solely classroom management.

Teachers are not prepared to manage behavior effectively after finishing a teacher preparation program because of the lack of exposure to classroom management coursework (Freeman, 2014). There is also a report of low confidence in their abilities to effectively manage student behavior, and thus is rooted in stress for novice teachers (Liu & Meyer, 2005; Manning & Bucher, 2013; Cooper & Yan, 2015; Allday, Neilsen-Gatti & Hudson, 2013); it can result in emotional and physical symptoms (Brent & Smart, 2010).

As novice teachers enter their fields, they learn to acquire skills as they perform in the classroom. Initially, it is common to see these teachers report difficulties with classroom

management as they select classroom management strategies, monitor class-wide, and individual progress, and deliver instruction. Additionally, the teachers' only source identifiable of the use of behavior management was dependent on their field experiences (Smart & Brent 2010) and requested help related to behavior management specifically (Allday, Neilsen-Gatti & Hudson, 2013). 10% of teacher preparation programs provide their students in training explicit feedback as they implement behavior management strategies in an applied setting or classroom environment (Moore, et al., 2017). They primarily relied on the mentorship and advice of veteran teachers' use of behavior management strategies (Smart & Brent 2010).

Teacher preparation programs teach characteristics of disabilities, their role in assisting students who have a disability, and maintaining a positive attitude when working with families of students with disabilities. Nonetheless, the feeling of unpreparedness from teachers also stems from the lack of training regarding the inclusion of students with disabilities such as EBD because they account for several behavioral difficulties in the classroom (Allday, Neilsen-Gatti & Hudson, 2013). Twenty-five percent to thirty-three percent of teachers surveyed said they have sufficient and successful training in the inclusion of students from special education in the general education classroom (Mastropieri, 1996). Lastly, teachers' understanding of multi-tiered systems of support incorporates their understanding and management of students' behavior at differing levels of need. With an effective and inclusive teacher preparation program that includes comprehending behavior management, classroom expectations, and addressing student behavior, they will be able to manage and decrease classroom disruptions (Allday, Neilsen-Gatti & Hudson, 2013).

Classroom management is defined as "actions teachers take to create a supportive environment for the academic and social-emotional learning of students (Evertson and Weinstein, 2006, p. 644; Simonsen et al., 2008; Brophy, 2006; Korporshoek et al., 2016). Defining behavior management and what it appropriately entails is an issue among the contradictory theories in managing student behavior. This contributes to the process, or lack thereof, of creating a unified curriculum to address effective behavior management strategies. (Woolfolk & Shaughnessy, 2004). For example, some philosophies support the use of punishment in the classroom, whereas others advise the use of punishment ignores teaching or replacing misbehavior with appropriate behavior (Brinker, Goldstein, & Tisak; Maag, 2001). Overall, the variance in researcher opinion does not assist teacher education programs to design an effective blueprint for preservice curriculum in behavior management. Additionally, general education teachers need to be aware of evidenced-based behavior management strategies to differentiate suitable strategies for managing various behavioral needs. It is probable teachers are unprepared to manage a plethora of behavioral needs, as the coursework for special education is limited as well (Brent & Smart, 2010; Baker, 2005). Additionally, survey-level data informs us that instructors of teacher preparation programs teach broad material regarding behavior management, and the inclusion of this material is sometimes reliant on their level of comfort with the information (Stewart-Wells, 2000). More than half of the behavior management courses reviewed covered strategies related to preventing inappropriate behavior such as teaching rules and expectations in the classroom. However, they lacked coverage in evidenced based strategies such as providing praise, using consistent consequences for inappropriate behavior, and increasing student level of engagement (Moulding, Stewart, Duneyer, 2014),

There is a model that classifies classroom management strategies into three categories: interventionist, non-interventionist, and interactionist. Interventionists believe students learn appropriate behavior by reinforcement of appropriate behavior, and non-interventionists believe they should be less involved in adjusting student behavior because they need to express their inner drive. Lastly, an interactionalist believes students and teachers should share possibilities within the classroom (Ritter and Hancock, 2007). The interventionist category of classroom management leans towards a more evidence-based approach. The different approaches and beliefs are another facet of the overall misunderstanding teachers have of practices to manage classroom behavior.

Improving Classroom Management

The employment of behavior management research in classroom settings are preliminary effort and requires further conclusive evidence to promote behavior management in classrooms. Research practices can carry into real settings by utilizing guidelines for a smooth translation, and distinguishing evidence-based practice as well. These behavior management practices can be categorized into five groups: arrangement of a physical classroom, structure of the environment, instructional management, and procedures to increase appropriate behavior and decrease inappropriate behavior. Stringent criteria define these five groups of practices as they are supported, validated, and replicated by sound design and research, are sustainable, and are implemented through clear procedures. Twenty empirically validated studies were identified to meet critical features of effective classroom management which include maximizing structure, clearly teaching, reviewing, monitoring, and reinforcing expectations, direct observation of students engaging in the management,

continuous and adjacent use of strategies to respond to appropriate or on-task behavior and inappropriate or off-task behavior (Simonsen et al., 2008).

Continuing the extension of the research and its implementation in the classroom, Moore et al., (2017) directly investigated teachers' knowledge and implementation of evidenced-based behavior management strategies in the classroom. Teachers reported being somewhat knowledgeable of the ten surveyed research-based strategies presented. However, they expressed a lack of knowledge more so in individualized behavior interventions.

Regarding the implementation of tier 3 interventions, teachers reported not implementing at all, or to a small extent.

The direction of research to better prepare teachers to manage classroom behavior could have critical implications for addressing teacher retention (Ritter & Hancock, 2007; Stoughton, 2007). Upon finishing a teacher education program, teachers exhibit little control over managing classroom behaviors, and this includes after they have had experience in the school setting. Educators for these programs may need to increase field experiences and may consider the effective training alternative certifications provided over traditional education programs; specifically, regarding a teacher developing knowledge and skills in classroom management (Ritter and Hancock, 2007).

Behavior Management Training

A possible course of action for teachers is to consistently take continuing education or training once they are in the field of education. There is a surplus of resources available for teachers, however, they may need direction toward evidenced based training in behavior management. Dr. Mary Ann Shepherd PhD., a school psychologist, health service provider, BCBA-D, and Behavior Department Supervisor at the Oklahoma Pediatric Therapy Center

(OPTC), created various trainings specifically for teachers to gain knowledge and skill about behavior management in the classroom. Although teachers across the state have participated in her training, they have not been empirically validated by evaluating implementation in the classroom post-training. The purpose of this study is to evaluate the efficacy of two of Dr. Shepherd's virtual prerecorded trainings a) a three-part training with three one-hour videos titled, Basics of Classroom Behavior Management. This training focuses on strategies for the classroom that can be used every day to decrease the chance of difficult behavior from occurring. It is an introductory course for general education and special education teachers for students starting from Preschool until twelfth grade; it details expectations, practicing appropriate behavior, using clear instructions, increasing the quality of praise, reinforcement, how to make rules and reinforcement fun, punishment, collecting data, and covers homeschool communication b) the second training is a 10-hour training titled *Behavior Reduction*, explicating the essential components of a written behavior reduction plan, it describes the functions of behavior, antecedent interventions, interventions based on modifications of antecedents (e.g., motivating operations (MO) and discriminative stimuli), differential reinforcement, extinction procedures, punishment, and it covers crisis emergency procedures. The difference between the two trainings is the length where Basics of Classroom Behavior Management is 7 hours shorter and covers everyday strategies teachers can use. Behavior Reduction training is lengthy, identifies specific individual interventions for reducing inappropriate behaviors, and has 10 quizzes associated with the trainings to assess accurate retention of knowledge.

An important aspect this study will focus on is the implementation of learned knowledge and skill into the classroom. To what extent will teachers take the application

components of *Basics of Classroom Behavior Management* and *Behavior Reduction* and carry them into their classrooms? Evidence of implementation will be confirmed by direct observations of teacher behavior in the classroom before the first training, after the 3-hour training, and after the 10-hour training. Additionally, student behavioral outcomes based on the level and intensity of their teachers' training in classroom management are important to identify because they would develop guidelines and a need for how much training teachers require to result in effective classroom management. Finally, the study would hopefully confirm the validity of effective behavior management training for teachers post-traditional teacher training. This leads the researcher to ask: a) What level of training changes teacher behavior? b) Does a change in teacher behavior result in a change in student outcome? c) How do teachers feel about the training's utility, and does it relate to changes in their behavior?

CHAPTER II

REVIEW OF LITERATURE

Tier 1 Behavior Management

Applied Behavior Analysis

Applied Behavior Analysis (ABA) is a branch of the discipline behavior analysis, and anchors on solving problems that are socially and functionally paramount. This area of psychology is distinguishable because of its emphasis on behavior as a source of data rather than qualitative phenomena or self-report, observable behavior rather than thoughts and feelings, and environmental reasoning for behavior (Fisher, Piazza, & Roane, 2011). Operationally speaking, behavior can be defined as anything a person does when they interact with a tangible environment. Behavior analysis strives to explain overt behavior and private events, such as thoughts and dreams. However, observers of the aforementioned behaviors may differ. In general, behavior analysis focuses on the behavior of individuals to label principles of behavior that are consistent across species and environments. Behavior can be classified as structural or functional; more often than not, behavior has a structural classification to easily identify stimuli response occurrences. Functional classification of behavior is often paired with children with autism as behavior analysis indicates operant contingencies that are maintaining the behavior. Early on, Watson defined behavior as physical or descriptive features of behavior (Fisher, Piazza, and Roane, 2011). Skinner introduced a general definition of behavior and developed the three-term contingency: antecedent, behavior, and consequence. This definition included the

functional facets of behavior. Once basic principles and concepts of behaviors developed, the idea of behavior management ensued. Descriptive analysis of occurrences in the environment is also referred to as antecedent-behavior, consequence (ABC) recording. These events are typically recorded with a specific behavior selected before observation. The structure of observations developed across the collection of narrative and ABC data and caused observers to provide descriptions and illustrations of behavior about an antecedent or consequence, such as the implementation of behavior management training (Fisher, Piazza, and Roane, 2011). "A principal dimension is ABA's focus on direct observation, objective measurement, quantification, prediction, and control of behavior" (Fisher, Piazza, and Roane, 2011, p.12). Self-reports and interviews aren't the sole reliable source of data for behavior analysts. The analytical aspect of ABA treats behavior and can be demonstrated with functional control (Fisher, Piazza, and Roane, 2011).

After implementation, behavioral interventions either decrease or increase the specific targeted behavior. Interventions should be conceptually and operationally systematic, meaning they are founded in the experimental analysis of behavior; components can appear as extinction or schedules of reinforcement for example. The effectiveness of intervention can be evaluated by visual data and analysis (Fisher, Piazza, and Roane, 2011) if generalization occurs (Stokes & Baer, 1977).

Evidenced-Based Classroom Management Practices

The employment of behavior management research in classroom settings are preliminary effort and requires further conclusive evidence to promote behavior management in classrooms. Research practices can carry into real settings by utilizing guidelines for a smooth translation, and distinguishing evidence-based practice as well. These behavior management practices can be

categorized into five groups: arrangement of a physical classroom, structure of the environment, instructional management, and procedures to increase appropriate behavior and decrease inappropriate behavior. Stringent criteria define these five groups of practices as they are supported, validated, and replicated by sound design and research, are sustainable, and are implemented through clear procedures. Twenty empirically validated studies were identified to meet critical features of effective classroom management which include maximizing structure, clearly teaching, reviewing, monitoring, and reinforcing expectations, direct observation of students engaging in the management, continuous and adjacent use of strategies to respond to appropriate or on-task behavior and inappropriate or off-task behavior (Simonsen, Fairbanks, Briesch, Myers, and Sugai, 2008).

Structure

The structure of the classroom distinctly means the direct activity between teacher and student interaction. It also includes descriptive routines and the spatial layout of the classroom. High-structure classrooms minimize distractions and crowding for students and their environment. With highly structured classrooms, students increase task participation and are less distracted by noise. It is important to note that the distance of student placement increases interaction with peers and teachers (Simonsen et al., 2008).

Expectations

Establishing expectations can be operationally defined as identifying positive statements or rules that encompass appropriate behavior in a general manner. These statements should be taught to students, reviewed frequently, and tied to active supervision to ensure reinforcement for an expectation of consistent behavior. When active supervision is implemented in a general education setting, it decreases minor behavior incidents on a class-wide level (Simonsen et al.,

2008). The degree of supervision children receive is a high variant in their problem behavior outside of a classroom setting, such as a transition period. (Colvin et al., 1997). In addition to reinforcement, if expectations are not met, then corrective feedback, and reteaching are demonstrated. Providing feedback has a negative correlation with off-task and disruptive behavior, and is positively correlated with academic engagement, leadership, and resolving conflicts (Simonsen et al., 2008).

Direct Observation of Student Engagement

A student actively engaged in the classroom is defined as participating in instruction. Students engaged in instruction are less likely to engage in discordant behaviors or off-task behaviors. Teachers can facilitate and increase active engagement from students through opportunities to respond, direct instruction, class-wide peer tutoring (CWPT), computer-assisted instruction (CAI), and guided notes (Simonsen et al., 2008). Engagement can overtly look like writing, reading aloud, academic discussion, and answering and asking questions on the relevant subject matter. Student achievement is affected by engagement; as student engagement increased with direct intervention, results indicated an increase in student achievement on curriculum-based measures. Thus, engagement is the best mediating variable between instruction and academic achievement (Greenwood, Terry, Marquis, and Walker, 1994).

Opportunities to Respond. Opportunities to respond is a prompt generated by a teacher verbally to call for a response from a student. Teachers can solicit responses either through choral responses or through response cards. Students can chorally respond by answering synchronously and have the opportunity to respond with response cards by writing on personal dry erasable boards and raising them for the teacher to directly see. (Simonsen et al., 2008).

Overall, increasing the rate of responses from students in a classroom is correlated to student

achievement and behavior with a typical increase in on-task behavior and correct responses, and a typical decrease in disruptive behavior. (Carnine, 1976; Sutherland, Alder, Gunter, 2003; West and Sloane, 1986).

Direct Instruction. Direct Instruction is defined as a characteristic of classroom teaching where students are signaled to have a clear presentation of content. Skills are sequentially presented with instruction and feedback where the teacher initially models, leads through content and then assesses students (Simonsen et al., 2008). In a federal study, *Project Follow Through*, nine instructional approaches were evaluated. Direct instruction benefited students significantly in basic skills, self-esteem, and cognitive reasoning. In comparison to students who received traditional instruction, students who received direct instruction had acquired higher rates of academic achievement and engaged in more rates of on-task behavior (Simonsen et al., 2008, Becker & Gersten, 1982). A comparative analysis compared the effects of direct instruction, cooperative learning, and independent learning on student behavior in a classroom, specifically with those that have behavior disorders. The direct instruction procedures were in a four-phase instructional sequence: arranging the lesson, presenting new information, leading guided practice, and independent practice. Results showed no difference between the effects of cooperative learning and independent learning, however, instructional sequences beyond direct instruction reduced the inappropriate behavior of students (Nelson, Johnson & Marchand-Martella, 1996). Classwidee Peer tTutoring(CWPT). In peer tutoring, students are paired together and assigned as the tutor and the tutee. In this activity, students can provide each other with instruction, and also provide feedback or immediate error correction. This typically takes place with reading practice as the assigned instructional task. This allows the teacher to directly

observe students while simultaneously walking around the room to assist the pairs who require help (Simonsen et al., 2008; Greenwood, Delquadri & Hall, 1989).

Guided Notes. Guided notes are another way students can be observed engaging in the classroom. They are outlines or handouts given out by the teacher that include the main ideas of the lesson, in addition to spaces where students fill in the blank. Students learn more when they make pertinent and appropriate responses, thus guided notes as a practice are supported in the classroom because filling in the blanks count as a relevant response (Austin, Lee, Thibeault, Carr & Bailey, 2002; Simonsen et al., 2008). Guided notes prompt students to write key points during the lesson, provide opportunities to respond, and have positive effects on academic achievement. Research shows they improve achievement across settings and populations. During whole-group instruction, performance levels of juvenile delinquents increased with the use of guided notes (Hamilton, Wertheim, Gardner, & Talbert-Johnson, 2000) and for high school students with learning disabilities (Lazarus, 1993). For high school students at risk in academics, guided notes improved quiz notes and specificity and skill in note taking. (Sweeney, Ehrhardt, Gardner, Jones, Greenfield, and Fribley, 1999). Guided notes can improve poor notetaking, as college students have been shown to record less than 50% of important and key information during lectures (Baker & Lombardi, 1985).

Acknowledging Appropriate Behavior

Recognizing students engaging in appropriate classroom behavior lies on a spectrum of simple to more complex strategies. Providing behavior-specific praise is a simpler strategy for recognizing appropriate behavior in comparison to class-wide contingencies (Simonsen et al., 2008).

Behavior-Specific Praise. BSP is a statement made by the teacher that highlights positive behavior to let students understand the specific appropriate behavior they engaged in. The use of praise is strongly empirically validated in reinforcement research (Simonsen et al., 2008), and is an effective strategy for managing classrooms Behavior specific praise, or when a teacher specifically identifies a behavior to reinforce, is more effective than non-behavior specific praise (Sutherland, Wehby, & Copeland, 2000). Providing praise contingent on appropriate academic behavior increased accurate responses, performance productivity levels, and on-task behavior (Sutherland & Wehby, 2001; Wolford, Heward, & Alber, 2001). Undoubtedly, when praise is specified, it increases its effects of it (Simonsen et al., 2008). For nine students with emotional and behavioral disorder (EBD) in a special education classroom, student on-task behavior increased when teacher behavior-specific praise increased However, teacher use of praise for students with EBD is limited, and that limit does not account for the behavior-specific praise delivered to sunsets with EBD (Sutherland, Wehby, & Copeland, 2000).

Contingent vs. Noncontingent Reinforcement. When a response changes the probability of some event, we say that the change is contingent on the response." (Fisher, Piazza, & Roanne, 2011, p. 34). The term noncontingent reinforcement (NCR) was initially describing fixed and variable time schedules. (Fisher, Piazza, & Roanne, 2011,). Contingent reinforcement of behavior is effective when the objective is to increase the rate of responses for one specific (Ney, 1973). Typically, behavior-specific praise is contingent on if the appropriate behavior occurs (Simonsen et al., 2008).

Class-wide group contingencies. Group contingencies in the classroom are used when there is one common expectation students must follow through with to receive a group outcome or reward (Simonsen et al., 2008). They are universal interventions that indicate a systematic

way to teach behavioral expectations on a class-wide level (Lohrmann, Talerico, & Dunlap, 2004). There are three types of group contingencies: dependent, interdependent, and independent. Dependent group contingencies require a common expectation for behavior from a subset of students for the entire group to receive a common outcome/reward. Interdependent contingencies require all students to engage in the common expectation or behavior for the entire group to receive a common outcome/reward. Lastly, independent contingencies require each individual to meet the expectation/behavior to receive their outcome/reward. Group contingencies are effective when used alongside other classroom management strategies such as active teacher supervision, or monitoring (Simonsen et al., 2008). An example of group contingency that was provided to 5th-grade students is Anchor the Boat. Anchor the Boat defines teachers' expectations for student behavior, directly teaches the expectations to the students with role-playing, and reinforces them when they follow the criteria for expected behavior. Lohrmann, Talerico, & Dunlap (2004) evaluated the program on its effects on three specific behaviors: talking out, out of seat, and incomplete assignments. After the group contingency class-wide intervention, a decrease in the level and rate of students talking out was observed (Lohrmann, Talerico, & Dunlap, 2004).

Behavioral Contracts. A behavioral contract is another type of strategy to acknowledge appropriate behavior. It is a written document detailing the expected behavior and outcome for engaging in appropriate and inappropriate behavior. Behavioral contracts have been shown to increase on-task behavior, and completion of schoolwork, and affect academics positively overall (Simonsen et al., 2008).

Token Economies. Token economies are similar to point systems, where a student can earn a "token" contingent on if they engaged in appropriate behavior. The tokens can also be

collected to receive a desired item or reinforcer (Simonsen et al., 2008). Dependent and Interdependent group contingencies can also use in combination with token economies, and some evidential studies have shown that both decrease inappropriate interactions between peers, increase appropriate interactions, and it decreased the length of time during transitional periods (Yarborough, Skinner, & Lignugaris, 2004).

Responding to Inappropriate Behavior

There is a spectrum of strategies teachers can use to respond to students engaging in inappropriate behavior in the classroom. These strategies can reduce the chance of inappropriate behaviors occurring in the future. They can range from simple strategies such as error correction to more complex strategies such as differential reinforcement.

Error Correction/ Corrective Feedback. Error correction is a statement, also called explicit reprimand, provided by the teacher when a student engages in inappropriate behavior. The statement should include what the observed behavior was, and what the student is to do in a future situation (detailing an appropriate behavioral response). Corrective feedback on the student's performance is similar to error correction, however in this strategy in responding to inappropriate behavior, teachers have a goal or criterion set for the student specifying a target behavior (102 DCPM, less than two office referrals). Additionally, teachers can reward students if they meet their goals. Academically, error correction was effective in increasing rates of success when the correction was given directly, immediately, and thereafter, students were able to correctly respond. Interestingly, error corrections given in a louder tone were not as effective as those given in a quiet tone (Simonsen et al., 2008).

Differential Reinforcement. Another strategy used to respond to inappropriate behavior is differential reinforcement. This type of reinforcement is contingent on if a student is engaged

infrequently in an undesired behavior, any alternative behavior that can replace the undesired behavior, and any behavior that is incapable of existing with the undesired behavior. Planned ignoring is another strategy where teachers do not give their attention to a student who is engaging in an undesired behavior (Simonsen et al., 2008).

Response Cost. The response costs procedure removes a token from a student contingent upon them engaging in inappropriate or undesired behavior. Response costs are effective if the token being retracted is effective in reinforcing the student. Therefore, the removal of reinforcement can increase the rate of engagement in appropriate behavior, especially when response cost-effectiveness is related to the schedule a student can earn a token (Simonsen et al., 2008).

Time Out from Reinforcement. Time out from reinforcement is a procedure used when students are removed from an environment that is reinforcing such as the classroom mat, or centers when they engage in undesired behavior. Teachers place them in environments or areas that are less reinforcing (e.g., an area without peer interaction) (Simonsen et al., 2008)

Teacher Training

Requirements

Empirically speaking, teacher education programs lack traditional training and adequate college coursework in behavior management (Brent & Smart, 2010; Moore et al., 2017). The shortage and inadequate instruction are consistent across many programs. Only forty-one percent of teacher preparatory programs required a 3-credit course on classroom behavior management. Three percent of universities offered more than 3 credit hours of coursework on classroom behavior management. Within the same sample, forty percent of universities offered no coursework on behavior management in teacher preparation training. (Allday, Neilsen-Gatti & Hudson, 2013). Approximately a third of teacher preparatory programs (36.9.) have classroom

management courses embedded in their curriculum. Of individual certification programs for teacher preparation, only 16% have classroom management courses (Wesley & Vocke, 1992). Ideologically, these programs also focus on different areas of classroom management, some of which are not highly effective, such as reactive strategies such as punishment (Oliver & Reschly, 2010). Freeman, Simonsen, Briere, and Macsuga-Gage systematically reviewed state policy documents to understand the requirements for teacher certification regarding classroom management. They also looked at how the teacher programs fulfill the requirements across states. However, a review of teacher implementation and skill level was not examined. These results indicated many pre-service teachers may not be prepared to manage student behavior in a classroom setting post teacher preparation program because of a lack of exposure to crucial content (2014).

Classroom management in the classroom can be understood by some teachers as a teacher student interaction, especially those with a lack of research-based knowledge in classroom management. However, some mechanisms may reflect concepts of applied behavior analysis (ABA). These interactions can be understood as classroom management practices along a dimension or spectrum of strategies. Affection, behavioral control, and psychological control are three practices teachers may use once they are in the classroom. Affection and behavioral control provide supportive relationships, clear instruction and expectations, and fewer behavioral problems leading to better student outcomes. Psychological control is a technique that utilizes students' guilt and pressures them inappropriately. This leads to worse student outcomes and more behavioral problems (Aus, Jogi, Poom-Valickis, Eisenschmidt, and Kikas, 2017).

Efficiency and Effectiveness of Training

Most teachers may not identify the difference between strategies that are consequent in different student outcomes because of their lack of training. How much training is sufficient for teachers to implement evidence-based classroom management practices? Unfortunately, there is no answer, and more research is needed to understand the most effective method and dose for teaching classroom management skills to preservice teachers (Freeman, Simonsen, Briere, and Macsuga-Gage, 2014).

The types of training pre-service teachers receive vary across training sources, however, a common thread between all obtained knowledge and skills teachers gain is how little is known about the types of training. In an exploratory study, 157 preservice teachers were surveyed about where they received their training in classroom management and reported the most detailed training they received was in a stand-alone course. Teachers most frequently reported mentoring and working in the field with hands-on training. Hands-on training in combination with didactic coursework was related to feelings of high preparedness (Christofferson & Sullivan, 2015).

For effective classroom management, pre-service teacher training needs to be intensified. Teacher preparation programs should provide instruction to pre-service teachers that are researched, and evidence-based. State-level accreditation will need to increase the quality of the program requirements to improve teacher success, decrease attrition rates, and contribute to student achievement and display of appropriate behavior. The lack of comprehensive and detailed policy directing teacher discipline is very likely related to teachers' lack of preparation once they enter the field. (Freeman, Simonsen, Briere, and Macsuga-Gage, 2014). Fortunately, the training presented in the current study will provide teachers with comprehensive, evidenced-based instruction on how to manage a classroom effectively. Ideally, it would be beneficial for

teachers to have access to training and professional development like so, and similar instruction in their training programs.

There is evidence supporting three research-based strategies to influence student behavior in the classroom. These include praise, effective commands, and appropriate responses, and they can be directly observed in the classroom. Owens, Holdaway, Smith, Evans, and Himawan (2018) examined student (with ADHD) and teacher behaviors, the relationship between both of their behaviors, and looked at thresholds of teacher behavior in most relation to low rates of challenging student behavior. However, research indicating how to collect the frequency of these strategies is scarce. Results indicated challenging student behavior (rule violations), and teacher praise differed with grade levels, consistent with the finding that praises from teachers decreases as grade levels increase. Also, across grade levels, rates of effective commands were stable. Teachers' appropriate response to student violations was the teacher behavior most related to student violations. When looking at this from a functional level, it is clear that teacher attention will increase behavior, whether it is negative or positive, if the function is attentionseeking. The findings of this study indicate teacher training, consultation, or professional development should include enhancing the skill of appropriate response to challenging behavior such as breaking rules. It is also suggested for student on-task behavior to be considered when teachers directly work on praise and reducing student challenging behavior (Owens et al., 2018).

Applied Studies of Teacher Training

Research-Based Professional Developments

Research supports the continued development of teachers as it contributes to improving the comprehensive quality of schools, and it mediates teaching practice and student achievement.

Professional development can be defined as "the process of learning and keeping up to date in

one's area of expertise for personal development and career advancement." (Vu, Cao, Vu, & Cepero, (2014, p. 121). Initially, PD was focused on verifying and documenting teacher satisfaction rather than its outcome. Arguably, there is a conceptual framework that can push for increased qualitative professional development and teacher learning opportunities. Desimone (2009) discusses this framework by addressing issues related to increasing the quality of PDs. There is a wide net for defining PD as it can be described as workshops, conferences, online courses, etc., or it can be allocated under the involvement or development of an improvement process such as choosing curricula or reading a professional journal. However, to translate PD as a measure regardless of its type or nature, there should be five common core features across PDs. These features are vital to increasing teacher knowledge and skill: content-focus, active learning, coherence, duration, and collective participation (Desimone, 2009; Jeanpierre, Oberhauser, & Freeman, 2005; C. Johnson, Kahle, & Fargo, 2007; Penuel et al., 2007). Content focused PDs focused on the subject matter are abundantly supported by research and are seen to increase teacher knowledge, skill, and student achievement (Carpenter, Fennema, Peterson, Chiang, & Loef, 1989; Desimone, 2009). Two components tied to the conceptual framework for studying teacher PD include identifying critical features that define PD, and the development of a theory explaining how PD can affect student and teacher results. Desimone (2009) defines four theory of action steps for PD or a core conceptual framework for studying the effects of PD on teachers and students: "1) Teachers experience effective PD 2) The PD increases teachers' knowledge and skills and/or changes their attitudes and beliefs 3) Teachers use their new knowledge and skills, attitudes, and beliefs to improve the content of their instruction 4) The instructional change foster increase student learning." (Desimone, 2009, p. 184). It is important

to note this framework does not recognize the interactions, biases, and dynamics of research, and how to measure the quality of a PD (Desimone, 2009).

Online Teacher Professional Development

Teacher PD typically refers to continuous learning opportunities available to teachers and school and educational personnel. Teacher PD was initiated in the early 1960s and has evolved into a needed teacher education with the various issues and challenges schools face such as an increasingly diversified population, the need for students to meet standards, and lastly integrating technology into classrooms. Online professional development (OPD) offers students to listen in and participate via video conferencing, allows participants to complete course requirements while regarding their schedule, and allows participants to work at their own pace. OPD has become popular because of the advantages it offers; reportedly principals' support of PD through a form of social networking increased from 8% in 2008 to 25% in 2014 (Vu, Cao, Vu, & Cepero, 2014).

Video viewing has become a significant aspect of not only teacher education but also professional development for primary and secondary teachers for three primary reasons: a) it provides in-service and preservice teachers greater access to classroom events that link theoretical education and classroom practice b) the technical progress of digitizing contributes to the structure of professional practice c) it expedites institutional reforms (e.g. demonstrates alternating between sequences of coursework and classroom practice) (Gaudin & Chalies, 2015). As teachers view videos of live or recorded classrooms, they need to interpret events happening in the classroom and use their judgment to make decisions based on their understanding. Two components featuring teacher engagement are selective attention and knowledge-based reasoning. Selective attention is associated with teachers' ability to identify events in the

classroom. Knowledge-based reasoning is associated with interpreting what is identified and then making a judgment. Interestingly, Gaudin & Chalies found that differences in social-cultural context when teachers viewed videos emphasized the videos as cultural tools (Gaudin & Chalies, 2015).

After analyzing 82 studies regarding video use to support in-service teacher professional development, Major & Watson found that video viewing is an effective PD tool for teachers (2018). A key component in schools is increasing student outcomes, and professional learning is a supplement that provides teachers with opportunities to maximize the quality of their teaching. Major and Watson (2018) developed an accessible format and outline for available research covering video use in the context of supporting in-service teachers and professional development and providing resources. More than half of the studies had a qualitative analysis, and results supported video viewing with accompanying high-quality support as a prerequisite (Major & Watson, 2018).

What contributes to the success of online PD learners, and not solely teachers? In the past, online education literature focused on teacher experience rather than an analysis of students' behaviors, performance, and attitudes toward the PD they attended (Vu, Cao, Vu, & Cepero, 2014). Characteristics of successful online learning include individuals seeking more education, having self-discipline, having the ability to work with a limited structure, and recognizing their worth in online peer-to-peer interaction. Essentially, four factors contribute to online student success: a) technical factors such as a student's access to appropriate technology b) environmental factors or support in a student's specific learning environment such as time management and support from significant others c) personal factors, or traits or characteristics students should have such as self-motivation autonomy, discipline, and integrity and d) various

learning characteristics, or traits successful students typically display such as an independent learning style (Palloff & Pratt, 2001; Boyd, 2004). In a 58-item survey intending to identify critical items to learner success in e-learning, the 318 participants indicated that success is reliant on self-determination more than anything else, and stems from the learner (Beaudoin, Kuts & Eden, 2009; Sun, 2014). What differentiates a successful online learner from an unsuccessful one? The amount of time spent on the OPD offered to teachers differentiated successful learners from unsuccessful ones. Successful participants spent an average of 4 hours and 59 minutes viewing PD video conferences, however, unsuccessful participants spent 2 hours and 18 minutes video viewing. It is recommended OPD participants have preexisting skills and characteristics to set themselves up for success for OPD's, such as self-discipline and familiarity with technology (Vu, Cao, Vu, & Cepero, 2014).

Behavior Management Teacher Professional Development

As mentioned before, general education teachers' dearth of behavior management training has been attributed to teachers' reliance on punitive and exclusionary practices which contributes to their ability to fully support students' path to success. Research has pushed an impetus for training teachers on behavioral support strategies, and researchers have addressed tier-one issues in the classroom by promoting strategies such as behavior-specific praise (BSP). Samudra, LeJeune, Ascetta, and Dollinger (2021) systematically reviewed general educator behavior management training. This review is important in informing PD on various strategies general education teachers can use, in comparison to individualized and specific strategies. They identified in addition to training teachers on low-intensity strategies such as BSPs and classroom management systems (e.g., CW-FIT), implementing individualized behavioral interventions practices is necessary for teachers (Samudre, LeJeune, Ascetta, & Dollinger, H., 2021).

Behavior management implementation in a classroom is mostly based on reported knowledge and implementation. Direct observation of teacher behavior is difficult to come by in behavior management research yet is needed. In a survey-level study, teacher knowledge and implementation of evidence-based classroom management strategies were explored. 160 teachers were surveyed from two districts on their classroom management practice, and results indicated teachers report having some knowledge and using the ten strategies indicated in the survey.

Teachers were more knowledgeable in preventative strategies and less knowledgeable in behavioral interventions they could use for individual students. Interestingly, there was a significant difference between the two districts, indicating a major discrepancy in consistent behavior management training at a pre-service training level (Moore et al., 2017).

Online Behavior Management Teacher Professional Development

As discussed, online learning platforms have been explored as replacements for in-person training. More specifically, online training is receiving more equivalence empirically for behavior-based interventions (Dimeff, et al., 2009; Becker, Bohnenkamp, Domitrovich, Keperling, & Ialongo, 2014; Beidas, Edmunds, Marcus, & Kendall, 2012). PD in classroom management typically occurs in the context of school-wide full day training, however, the practicality of videos is more cost-effective and can be delivered over time. Teachers who lack motivation and engagement to attend scheduled training may opt for online training (Marquez, VinCent, Marquez, Pennefather, Smolkowski, & Sprague, 2016; Mixon, Owens, Hustus, Serrano, & Holdaway, 2019).). In a study investigating the perceived and reported practicality of implementation of online training instructing teachers two tier one preventative interventions: Promoting Alternative Tinking Strategies (PATHS) and the PAX Good Behavior Game (GBG).

alongside in-person coaching, their implementation was tracked across 31 weeks during the school year. There was a comparison benchmark for sixty-five teachers that completed the training in person and also received in-person coaching. In general, after the training, the teachers who received the online training achieved a high level of implementation not significantly different than the implementation level of the teachers who received the in-person training. Additionally, the frequency of the delivery of the intervention was not significantly different between participants. What this suggests is that online trainings are encouraging in training evidence-based preventative interventions via online training sequences.

Another strategy to improve the implementation of teacher practice is coaching with embedded video analysis, which integrates consulting with teachers and recording teaching sessions, analyzing the recordings, and identifying a specific area teachers can improve on. This strategy is particularly important for the maintenance of evidenced-based classroom interventions as teachers adjust to the increase of students with challenging behavior in general education classrooms. Two teachers previously trained in culturally responsive Positive Behavior Support (CR-PBIS), coached six teachers alongside video analysis. This strategy improved and increased teachers' implementation of an evidence-based classroom management practice and supports the equivalency of utilizing coaching and videos to support the sustainability of implementation for teachers (Lane, Neely, Castro-Villarreal, & Villarreal 2020).

A recently developed PD program titled, *Classroom Management in Action (CMA)*, integrated online technology video modeling, evidenced-based practice in positive behavior support, and tools to measure fidelity and outcome of behavior. CMA has three modules that present classroom management practices through videos, an interactive planning tool, and additional summaries of strategies. For example, the first module has three sections that overlap

classroom management practices: planning and organization, prevention of problem behavior, and responding to problem behavior. After evaluating CMA for procedural integrity, it was found that teacher knowledge of classroom management strategies improved, in addition to an identifiable positive trend for student behavior. Reportedly, teachers' social validity ratings of CMA indicated the teachers responded well to the content and found it applicable to their classroom needs (Marquez, VinCent, Marquez, Pennefather, Smolkowski, & Sprague, 2016).

Interestingly, incorporating online PD for teachers can variably be on a continuum of support. The aim of the following study examined adopting online PD for teachers with low-intensity consultation on an as needed basis to generate an implementation of a daily report card intervention and a positive student outcome. Thirty-three- teachers participated in the study, and 51.5% adopted the intervention for at least 8 weeks and revealed acceptable implementation integrity (Mixon, Owens, Hustus, Serrano & Holdaway 2019).

In behavior management literature, it is important to note the effectiveness of the delivery of classroom management, either by in-person or virtual training. Delamarre, Shernoff, Buche, Frazier, Gabbard, and Lisetti (2021) created a virtual reality training that supports behavior management in the classroom. The virtual training included four phases: Practicing making decisions and learning the application of the training, replaying the interactive session as an additional opportunity, reflecting with open-ended questions, and a feedback phase where information was given to the teacher about their effectiveness in response to the scenario. They identified and generated effective guidelines to design training systems for teachers based on successful evaluations. The benefit of training systems that include real-world scenarios in a virtual environment overrides the costly conditions of in-person training. The real-world scenarios deliver instruction to early career teachers who had limited training in behavior

management. The real-world scenarios taught early career teachers' antecedent, behavior, and consequence patterns, identifying a positive classroom climate, monitoring the classroom, and redirecting students effectively (Delamarre, et al., 2021). Similar to Delamarre et al., and their approach to providing real-world scenarios, the online trainings provided to teachers in the current study will offer real-world examples that may occur in a classroom setting. Additionally, teachers will learn the application of behavioral principles through Dr. Shepherd's explanations. Teachers will also be given the option in their evaluation form at the end of the study to partake in a feedback session. However, the current study focuses mainly on the delivery of behavior management training.

Current Study

There is a large volume of research supporting evidence-based strategies in behavior management and their effect on increasing on-task behavior, and decreasing off-task behavior (Allday, Neilsen-Gatti & Hudson, 2013; Owens, et al., 2017). However, as previously mentioned, there is a lack of opportunities for teachers to have access to evidenced-based behavior management training (Brent & Smart, 2010; Moore et al., 2017). However, this is not surprising, given the inconsistency in teacher training and pre-service teacher curriculum, lack of research tied to direct observation of student and teacher behavior in the classroom, and ideological disagreements about what can improve behavior (Brent & Smart, 2010; Korporshoek et al., 2016). By providing teachers with two evidenced-based behavior management trainings (Basics of Behavior Management and Behavior Reduction), teachers use of evidence-based strategies concerning classroom management can improve. Additionally, directly observing teacher behavior after they have undergone a feasibly universal training on behavior

management will contribute to identifying how teachers can improve classroom management once they are in the field. The implications for the current study may inform pre-service teacher programs to adjust and increase criteria for behavior management curriculum in pre-service teacher training. Additionally, if the training is shown to be effective and improves teacher classroom management practices, it can continue to serve as evidence-based training for teachers in behavior management.

CHAPTER III

METHODOLOGY

Introduction

This chapter will describe the methodology for the study. The purpose of this study is to evaluate the efficacy of two of Dr. Shepherd's virtual pre-recorded training on behavior management and to explore if the trainings have a significant effect on improving teacher classroom management skills, and student behavior.

The following are the research hypotheses for this study:

Hypothesis 1: Behavior Reduction Training (10-hour training) will improve teachers' classroom management by increasing on-task behavior

Hypothesis 2: Basics of Classroom Management (3-hour training) will improve teachers' classroom management by increasing on-task behavior

Hypothesis 3: Teachers' will have an increased positive evaluation of the trainings.

Participants

This study involves an evaluation of four teachers' behavior management instructing at an elementary school in the Oklahoma area. Inclusion criteria require four participating teachers to instruct Pre-K through 5th-grade classrooms and display a need for guidance in classroom management. The fourth teacher is a safety net in case one of the participants needs to be dropped from the study and ensures an experimental design (N=3). There is no need for a control group for this study as the participants serve as the control for the study during the baseline phase. To begin the recruitment process, the researcher sought out teachers interested in participating in the current study. The administration was the first point of contact via email at the school level. At the time of recruitment, teacher participants were asked to provide their age, gender, service years, school location, school type, and previous experience and training in behavior management to obtain a small but representative sample of teachers. Teacher participants were three teachers from two schools in a suburban neighborhood. Teacher 1 was a kindergarten teacher with 1-2 years of teaching experience. All teachers held a bachelor's degree and received varying pre-service training in behavior management. Please refer to Table 1 for more information regarding teacher demographics.

Teacher	Grade Level	Years of teaching	Degree	Pre-service courses in
		experience		behavior management
One	Kindergarten	1-2 years	Early Childhood	1 course
			Education	
Two	Prekindergarten	1-2 years	General Studies	N/A
Three	4th Grade	N/A	Elementary	1 course
			Education	

Table 1. Teacher demographic information.

Assent forms with information on the current study will be sent to parents of participating classrooms. Parents who do not want their children to participate in the study may return the signed assent form to the teacher. Thus, the student will be excluded from all student observations. Parents who do not provide assent and assume permission to allow their child to participate in the current study, their child will be included in student observations.

Research Design

For the proposed study, an experimental, multiple baselines with a step-up design with a small N will be utilized to examine the cause-and-effect relationship between both trainings for teacher and student behavior. The study will have a small N, and data will be collected across teachers. The purpose of this study is to evaluate the level of effect the trainings have on teacher classroom management skills, and student behavior. Due to the cause-and-effect nature of the study and the variables used, an experimental, multiple baseline with a step-up design is proposed as the most appropriate research design.

Measures

Materials and procedures used in this study were based on Martin, Yin, and Baldwin (1998), Dr. Shepherd's training videos, and observation material created by the researcher.

Manipulated Variables

Behavior Management Training. Behavior management training instructs teachers on the skills to manage behavior in the classroom setting.

Basics of Behavior Management. Basics of Behavior Management is a three-hour training divided into three one-hour videos. It is a PowerPoint video where Dr. Shepherd explains the concepts of behavior management and provides practical examples for teachers. The content provides teachers with daily strategies that they can easily implement and use. The format is similar to a lecture seminar, but also includes Dr. Shepherds speaking in the videos to keep the viewers engaged. They are housed through PlayPosit and access will be given to participating teachers. In this training series, the researcher provided five questions associated with the content of the videos to ensure teachers are understanding the content and watching the videos.

Behavior Reduction. Behavior Reduction is a ten-hour training that consists of 11 PowerPoints. The content is an extension of behavior management which directly discusses decreasing unwanted behavior in the classroom. These videos are privately owned by Dr. Shepherd and will be disseminated to teachers participating in the study.

Outcome Variables

Teacher Behavior. This variable will be a measure and direct observation of behaviors a teacher is engaging in. Teacher behavior will be collected on a partial interval measure. Direct observation of teacher behavior is tracked by whether the behavior happened at any time during the interval.

Teacher behaviors collected will be defined as praise, behavior-specific praise, modeling appropriate behavior, using clear instructions, and reprimands. (See Appendix C for operational definitions of teacher behavior).

Student On-Task/Off-Task Behavior. This variable will be a measure of student outcomes. Student behavior will be collected on an interval recording measure which

focuses on aspects of behavior as occurring within specific intervals of time. Interval recording is an appropriate measure for students' on-task and off-task behavior because it is useful for observing overt as it is easily identifiable behavior. Student on-task behavior will be collected by whole interval recording or by recording whether the behavior occurs during the entire interval. Student off-task behavior will be collected by partial interval recording by recording whether the behavior occurs at any time during the interval. Each student will be measured in a 15-second interval to receive a classroom average of ontask and off-task behavior. (See Appendix D for an example of an observation form).

Secondary Variables

The Attitudes and Beliefs on Classroom Behavior (ABCC-R) Inventory. The ABCC-R is a self-report measure that measures the attitudes and beliefs of teachers in a 20-item inventory that addresses components of classroom management in two subscales: instructional management and people management (Appendix B). The inventory gives a better understanding of a teacher's construct of classroom management (Martin, Yin, Mayall, 2008). Examples of items on the instructional management items include *During the first weeks of class, I will announce the classroom rules and inform students of the penalties for disregarding the rules; I believe students should choose the learning topics and tasks; When a student bothers other students, I will immediately tell the student to be quiet and stop it.* The scale has a four-category response scale for each item (e.g., "describes me very well" was scored 4, "describes me usually" = 3, "describes me somewhat" = 2, "describes me not at all" = 1). The support of an item suggests the degree of teacher control over her students. Higher subscale scores indicate a teacher prefers "a

more controlling, interventionist attitude" while lower scores reflect that a teacher prefers a less controlling classroom management style (Martin, Yin, Mayall, 2008., p. 16).

This tool will be given to teachers during baseline and after the second training following phase two. This secondary variable is a manipulation check indicating the impact of the trainings from the teacher's perspective. It is not related to the experimental design; however, it is rather a more informative variable. The reliability of the questionnaire items on the ABCC has a Cronbach's alpha exceeding 0.7 which is considered acceptable, yet "the validity of the instrument would be greatly enhanced by including observational data" which this study intends to do. This measure was chosen as a secondary variable because the two subscales pertain to teachers' beliefs on managing classrooms with expectations, rapport building, and preventative strategies. These two components are related to the two trainings the teachers will be actively receiving in the study (Ritter and Hancock, 2006).

Post Training Evaluation Tool. The training evaluation tool consists of five questions that are ranked on a Likert scale from 1 to 5 where teachers will rank their understanding of the training from low to high and provide optional commentary. The training evaluation tool was created after an Oklahoma Tiered Systems of Support (OTISS) tool titled: *Professional Development Evaluation*. The reason why this tool was chosen to be included in this study was to ensure that teacher knowledge changed throughout the study. It has been given to teachers across the state of Oklahoma to measure their understanding of professional development training. This tool will be given to teachers after the trainings following phase two (Oklahoma Tiered Systems of Support, 2018) (See Appendix A).

The difference between the ABCC-R and the training evaluation tool differentiates the impact of the training from the teacher's perspective and their direct implementation into the classroom (ABBC-R), and a record of knowledge of behavior management after the trainings (training evaluation tool).

Procedures

Permission to carry out the study will be approved by the Institutional Review Board at Oklahoma State University and the school(s) in which the participants are located. Recruitment requirements entail teachers with less than five years of teaching experience, identified by their supervisor as needing additional training, and having no higher than a bachelor's degree. The teachers will also be asked to provide the number of courses or trainings they have had in behavior management previously. The researcher will meet with the teachers from the participating classrooms to discuss the details of the study. Also, consent forms will be given to each participating teacher, in addition to consent forms for students' parents to complete (see Appendix G). Once consent is collected, the researcher will schedule a meeting date with the teachers to go over the instructions for the ABCC-R and collect demographic information. Incentives will be used for participation and completion of the study during the training phases. Teachers will be informed they will be rewarded with a preferable reinforcer every two hours they complete the virtual training. Examples of available reinforcers include gift cards, sonic drinks, coffee, cookies, etc.)

Preliminary Procedures

A specific criterion for teacher participation is required to demonstrate a need for guidance in classroom management. This criterion is defined as a low rate of positive

behaviors and a high rate of reprimands directly observed in the classroom. Specifically, teachers should meet an average maximum rate of five positive behaviors during a fifteen-minute interval observation and or/ an average minimum rate of three reprimands during a fifteen-minute interval observation to qualify for participation in the study. If a teacher meets this criterion, the data will serve as their baseline observations before the first training. If teachers do not meet the criteria for the study, an individual meeting will be set up to discuss why they are not a good candidate for the study.

Pre-Training Procedures.

Teachers will be requested to fill out the ABBC-R inventory and demographic information and turn it in within three days. However, the date of submission will not affect the onset of baseline observations in the classroom.

Teacher Observations. Direct observation of teacher behavior tracked by occurrence or non-occurrence of behavior will be collected on a partial interval coding system at baseline twice a week across the duration of the study. At each collection, trained researchers will observe teachers for a 15-minute duration in ten-second intervals per day for 5 school days or until the baseline has stabilized. Observations will be collected during direct teacher instructional time, at the same time during the day, and across the same two days to ensure consistency of data collection. Observations will be conducted every week on whether teachers are actively participating in the training for that week or not. This will systematically be able to provide a causal link between trainings and off days from trainings, and teacher and student behavior. During baseline, the two arbitrary wait periods of observations, and after the two trainings are completed, observers will conduct observations for a minimum of five data points. During the week

teachers are completing the first training and the three weeks the teachers are completing the second training, the observers will conduct direct observations twice a week.

Student Observations. Direct observation of student behavior would consist of observing each student in the class for a ten-second interval. The observer will observe students for fifteen minutes. Once the observer has observed each student for 10 seconds, they will repeat the observation until the duration of fifteen minutes is complete. This will output a classroom average for on-task and off-task behavior for all students as they will be accounted for in equal amounts of time. Once the observer has observed all individual students once, they will continue to the next interval with the first student they began observing and repeat the observation procedures. The observations will be conducted at the same time as the teacher observations during the day to ensure consistency of data collection. It is important for observations to be conducted in a setting where students are not changing seating to prevent inconsistency in the collection of data. Observing students in a setting with assigned seating is most ideal for the study.

Observation Team. Observations will be conducted by a team of three: the researcher and two graduate students. The researcher will observe teacher behavior during the study. One primary graduate student will be collecting student behavior during the study, and a secondary observer will alternate observations to collect inter-observer agreement (IOA) data. This will ensure an IOA of 25% or more. Prior to observation, research assistants are required to memorize the various coding for behaviors and their examples. Additionally, research assistants will be trained to conduct observations with 90-95% accuracy by practicing observations through collecting data from videos of classrooms on YouTube.

Training Procedures. The researcher will schedule individual meetings with teachers to go over the general guidelines for the first training after the baseline period. This will serve as a control activity to ensure consistency of the training. Individual meetings were chosen for instructional purposes because each teacher's onset of training dissemination will vary based on stabilization of baseline. Teachers will be given access to the first training, The Basics of Behavior Management, via email. They will be notified they have one week to complete the three-hour training. After one week, the researcher will check-in and inquire if the training was completed, and if so, the teachers will have one week of continuing their typical routine without any required training videos. This will be an arbitrary wait period. Observers will continue to direct observations twice a week during the wait period. After two days of observations the following week, the teachers will be given access to the second training, Behavior Reduction, in the fourth week via email. Another individual meeting will be scheduled to go over the general guidelines before the onset of the second training to control for extraneous variables. They will be given three weeks to complete the second training. The researcher will check in with the teachers twice a week making sure they are hitting training checkpoints to prevent issues with a timely completion of the training, and to make sure they are completing the associated quizzes. Observers will continue to direct observations twice a week during these three weeks. After three weeks, the researcher will inquire if the training was completed, and if so, the teachers will continue their typical routine without any required training videos. Observers will conduct observations for a minimum of five data points on the eighth week. This second arbitrary wait period is the post training observation. It is important to note, that each additional teacher observed after the first

will have an increased stabilization criteria by two data points. For example, the second teacher will have seven days of observation data, the third will have nine days of observation data, and the fourth will have 11 days of observation data.

Post training Procedures. After the final week of observations, teachers will be asked to fill out the ABBC-R inventory and evaluation via email and turn it in within three days.

Phase Change Criterion. The criterion for minimum baseline data points per teacher is five. The teachers will have access to the first training directly after their independent baseline data has been collected. This means that teacher 1 will receive the first training before teacher 2 and 3. This will ensure there is evidence that the cause of teacher behavior change is due to the training, and not external variables. Once teacher 1 has displayed sufficient data in training 1, then teacher 2 can begin training 1. Again, the same goes for teacher 2 and 3. Also, teacher 1 can begin training 2 once there is sufficient data after receiving training 1. Teachers 2 and 3 can begin training 2 in the same manner. In the case that data is not stable in the phases, intervention will be implemented with subsequent participants contingent on intervention data with stable response or with a period of 8 data points. Teachers' procedural adherence will be monitored through Check in, Tracking sheet, and PlayPosit. Biweekly check ins via email ensures the consistency of training checkpoint completions. PlayPosit is an online tool for learning and teaching where the videos will be housed and will track teachers' effectiveness in completion and understanding. PlayPosit will inform the researcher if teacher responses for questions are correct or incorrect. Teacher integrity sheets will be filled out during the completion of the training, the biweekly check ins will ensure completion is timely, and PlayPosit will

provide data on teachers understanding of content (See Appendix F). To increase the integrity of teachers completing the training, the researcher will consult with principals to have teachers participate in the virtual trainings during in-school hours to serve as professional development. This will allow guaranteed completion of the two trainings for teachers.

Data Analysis

The data will be analyzed by visual analysis. The data will be graphed for visual analysis to evaluate trend level of variables. The graphic visualization will be used to determine impact of treatment. To display positive teacher behavior, an average of praise, behavior specific praise, modeling appropriate behavior, and using clear instructions, will be represented graphically. Total positive behavior will be calculated by averaging the intervals of the four behaviors. Hypothetically, baseline positive behaviors will display low total average, and after training, researchers hope to see total positive behaviors increase. With the periodic observations, trend data may inform which metric is more effective. Conversely, reprimands will be calculated by intervals reprimands present divided by total number of intervals per observation (90). Hypothetically, baseline reprimands will display a high total average, and after training, researchers hope to see total reprimands decrease. To display student behavior, off-task behavior (OT), or intervals students were not engaged, divided by total number of intervals (90), will be represented graphically. To display student off-task behavior, the average of talking out (TO), out of seat (OS), object play (OP), and passive behavior (P) will be represented graphically. Total off-task behavior will be calculated by averaging the intervals of the four behaviors. During baseline, it is expected off-task behavior percentage will be low,

and after training, researchers hope to see total off-task behavior decrease. Survey level data will include the ABCC-R and the post training evaluation form. The core data represented in these qualitative measures will be represented in tables.

Interobserver agreement was calculated as the total number of data points observed by a secondary observer divided by the total number of data points multiplied by 100. Procedural fidelity was calculated as the difference between the number of intervals behavior was observed by the primary observer divided by number of intervals behavior was observed by the secondary observer (e.g., (60/90) - (42/90; 18)). Then, the difference in intervals is subtracted from total amount of intervals observed and is divided by total numbers of intervals observed (e.g., (90-18) / (90); 80%).

CHAPTER IV

RESULTS

Three teachers were trained with two behavioral management trainings delivered through video recordings and were observed through direct behavioral observations. Observers measured average teacher positive behavior and reprimands delivered, and average off-task student behavior. Teacher intervention adherence was scored as a 100% indicating that the three teachers completed 100% of videos from training one and training 2 as reported by Play posit. *Figure 1*. displays percentage of positive teacher behavior, teacher reprimands, and student off-task behavior for each interval observed. Data is displayed across classrooms and phases. *Table 2*. displays phase means for positive teacher behavior. *Table 3*. displays phase means for teacher reprimands. *Table 4*. displays phase means for student off-task behavior. Trending levels are explained for post training periods.

Phase I: Baseline

Teacher Behavior

During Baseline, teacher one (T1) reprimands were low and variable, and about 18% of T1's intervals observed consisted of reprimands (R= 8:36). Positive teacher behavior during intervals observed were low and variable and averaged 18.4% (R= 10:30). Teacher two (T2) reprimands were low and variable, and about 16.8% of T2's intervals observed consisted of reprimands (R= 2:27). Positive teacher behavior during intervals observed were high and variable and averaged 30.9% (R= 13:63). Teacher three (T3) reprimands were low and stable,

and about 5% of T3's interval's intervals observed consisted of reprimands (R: 2:7). Positive teacher behavior during intervals observed was low and stable and averaged 14% (R=9:18).

Student Behavior

During baseline, T1's students' off-task behavior during intervals observed was high and stable, and students exhibited off-task behavior during 51.8%. of intervals observed (R= 44:57). This indicates that T1's students were off-task about every two intervals. T2's students' off-task behavior during intervals observed was high and variable, and students exhibited off-task behavior during 46% of intervals observed (R=23:65). This indicates that T2's students were off-task about every two intervals. T3 students' off-task behavior during intervals observed was relatively high and stable, and students exhibited off-task behavior during 27.3% of intervals observed (R=19:35). This indicates that T3's students were off-task about every three intervals.

Phase II: Training One

Teacher Behavior

During phase II, teacher one (T1) reprimands were low and variable, and about 12.5% of T1's intervals observed consisted of reprimands (R= 7:18). Positive teacher behavior during intervals observed were high and stable and averaged 25% (R= 24:26). Teacher two (T2) reprimands were stable and low and about 9.5% of T2's intervals observed consisted of reprimands (R= 6:13). Positive teacher behavior during intervals observed were high and variable and averaged 24% (R=11:37). Teacher three (T3) reprimands were low and stable, and about 3% of T3's interval's intervals observed consisted of reprimands (R: 1:5). Positive teacher behavior during intervals observed were low and variable and averaged 15.5% (R=5:26).

Student Behavior

During phase II, T1's students' off-task behavior during intervals observed was high and variable, and students exhibited off-task behavior during 36.5% of intervals observed (R=24:49). This indicates that T1's students were off-task about every two intervals. T2's students' off-task behavior during intervals observed was high and stable, and students exhibited off-task behavior during 32% of intervals observed (R=27:37). This indicates that T2's students were off-task about every three intervals. T3 students' off-task behavior during intervals observed was low and stable, and students exhibited off-task behavior during 23% of intervals observed (R=16:30). This indicates that T3's students were off-task about every four intervals.

Phase III: Post-Training One Period

Teacher Behavior

During phase III, teacher one (T1) reprimands were low and stable, and about 9.5% of T1's intervals observed consisted of reprimands (R= 1:18). T1 reprimands were upward trending. Positive teacher behavior during intervals observed was high and variable and averaged 32% (R= 24:57). T1 positive teacher behaviors did not display a trending level. Teacher two (T2) reprimands were low and stable and about 9.9% of T2's intervals observed consisted of reprimands (R= 3:14). T2 reprimands did not display a trending level. Positive teacher behavior during intervals observed was high and variable and averaged 32.9% (R= 21:49). T2 positive teacher behaviors displayed an upward trend. Teacher three (T3) reprimands were low and stable, and about 1.9% of T3's intervals observed consisted of reprimands (R: 1:6). T3 reprimands were downward trending. Positive teacher behavior during intervals observed was high and variable and averaged 24.3% (R=8:51). T3 positive teacher behaviors were upward trending.

Student Behavior

During phase III, T1's students' off-task behavior during intervals observed was high and variable, and students exhibited off-task behavior during 36.8% of intervals observed (R= 29:50). This indicates that T1's students were off-task about every two intervals. T1 students' off-task behaviors were upward trending. T2's students' off-task behavior during intervals observed was high and variable, and students exhibited off-task behavior during 27% of intervals observed (R=11:36). This indicates that T2's students were off-task about every three intervals. T2 student off-task behaviors were downward trending. T3 students' off-task behavior during intervals observed was low and variable, and students exhibited off-task behavior during 13.8% of intervals observed (R=3:19). This indicates that T3's students were off-task about every 7 intervals. T3 student off-task behavior did not display a trending level.

Phase IV: Training Two

Teacher Behavior

During phase IV, teacher one (T1) reprimands were low and stable, and about 15.5% of T1's intervals observed consisted of reprimands (R= 11:20). Positive teacher behavior during intervals observed was low and stable and averaged 19.5% (R= 12:27). Teacher two (T2) reprimands were low and stable and about 6.8% of T2's intervals observed consisted of reprimands (R= 3:14). Positive teacher behavior during intervals observed was high and variable and averaged 38.3% (R= 28:54). Teacher three (T3) reprimands were low, and about 8% of T3's interval's intervals observed consisted of reprimands. Positive teacher behavior during intervals observed was low and averaged 19%. A range of percentages and levels of data are not available for T3 because there is a single datum point for this phase. A single datum is present because T3 completed training 2 in one week.

Student Behavior

During phase IV, T1's students' off-task behavior during intervals observed was low and stable, and students exhibited off-task behavior during 21%. of intervals observed (R= 16:27). This indicates that T1's students were off-task about every 4 intervals. T2's students' off-task behavior during intervals observed was low and variable, and students exhibited off-task behavior during 19.3% of intervals observed (R=10:34). This indicates that T2's students were off-task about every 4 intervals. T3 students' off-task behavior during intervals observed was low, and students exhibited off-task behavior during 11% of intervals observed. This indicates that T'3's students were off-task about every 8 intervals. A range of percentages and levels of data are not available for T3 because there is a single datum point for this phase. A single datum is present because T3 completed training 2 in one week.

Phase V: Post Training Two Period

Teacher Behavior

During phase V, teacher one (T1) reprimands were low and stable, and about 10.5% of T1's intervals observed consisted of reprimands (R= 2:19). T1 reprimands were downward trending. Positive teacher behavior during intervals observed was high and variable and averaged 33.7% (R= 17:56). T1 positive teacher behaviors displayed a downward trend. Teacher two (T2) reprimands were low and stable and about 3.8% of T2's intervals observed consisted of reprimands (R= 0:11). T2 reprimands displayed a downward trend. Positive teacher behavior during intervals observed was high and variable and averaged 26.7% (R= 13:39). T2 positive teacher behaviors were downward trending. Teacher three (T3) reprimands were low and stable, and about 1.8% of T3's intervals observed consisted of reprimands (R: 0:3). T3 reprimands did not display a trending level. Positive teacher behavior during intervals observed was high and

variable and averaged 18% (R=4:30). T3 positive teacher behaviors did not display a trending level.

Student Behavior

During phase V, T1's students' off-task behavior during intervals observed was high and variable, and students exhibited off-task behavior during 27%. of intervals observed (R= 10:44). This indicates that T1's students were off-task about every 3 intervals. T1 students' off-task behaviors were downward trending. T2's students' off-task behavior during intervals observed was low and variable, and students exhibited off-task behavior during 13.6% of intervals observed (R=4:22). This indicates that T2's students were off-task about every 7 intervals. T2 student off-task behaviors were downward trending. T3 students' off-task behavior during intervals observed was low and stable, and students exhibited off-task behavior during 4% of intervals observed (R=1:10). This indicates that T'3's students were off-task about every 23 intervals. T3 student off-task behaviors were downward trending.

Procedural Fidelity

Interobserver agreement (IOA) was assessed by secondary observers for a minimum of 26% of T1 teacher observations. IOA for average teacher reprimands was calculated at 97% procedural fidelity. IOA for average teacher positive behavior was calculated at 88% procedural fidelity. T1's student behavior was assessed by a secondary observer for a minimum of 30% of observations and was calculated at 84% procedural fidelity.

IOA was assessed by secondary observers for a minimum of 31% of T2 teacher observations. IOA for average teacher reprimands was calculated at 96% procedural fidelity. IOA for average teacher positive behavior was calculated at 82.3% procedural fidelity. T2's student

behavior was assessed by a secondary observer for a minimum of 29% of observations and was calculated at 91% procedural fidelity.

IOA was assessed by secondary observers for a minimum of 33% of T3 teacher observations. IOA for average teacher reprimands was calculated at 98% procedural fidelity. IOA for average teacher positive behavior was calculated at 94% procedural fidelity. T3's student behavior was assessed by a secondary observer for a minimum of 27% of observations and was calculated at 96% procedural fidelity.

Video adherence and understanding were monitored with five content questions per video provided in *Basics of Behavior management*. Content questions provided in *Behavior Reduction* were given at random to allow for additional completion time for teachers. During training 1, T1 scored an average of 93.3% in accurate responses. T2 scored an average of 73.3% in accurate responses, and T3 scored an average of 100.0% in accurate responses. During training 2, T1 and T2 scored an average of 93.3% of accurate responses. T3 scored an average of 86.7% in accurate responses.

Secondary Variables

ABCC-R

Teachers completed the 20-question form with a four-category response scale for each item (e.g., "describes me very well" was scored 4, "describes me usually" = 3, "describes me somewhat" = 2, "describes me not at all" = 1). T1 and T3 reported similar scores on the instructional management subscale (T1:24; T3: 24). However, T1 reported a higher score (score: 27) on the people management subscale in comparison to T3 (score: 18). Results indicate that T3 reports having an interventionist and higher controlling attitude when managing students in the classroom in comparison to T1. Measures for T2 and post-training forms for the teachers are not

reported. The ABCC-R measured teacher beliefs and practices on behavior management and was not related to the experimental design. It was an informative variable indicating that the validity of the experiment was not compromised by the removal of the variable.

Post-Training Evaluation Tool

Teachers ranked their understanding of the trainings to provide a record of their knowledge of behavior management after the training. The tool provided a scale of 1 /Low to 5/High) to best describe their opinion on five statements. Teacher 1 reported her scores on the following items: the overall rating of the training (4), methods of delivering information and presentation materials were appropriate and effective (3), knowledge of content prior to participating (4), knowledge of the content of the training at the conclusion (5). T1 indicated that she feels she can use the information presented in her classroom and was able to implement strategies immediately. However, she had reported that receiving feedback after observations would be useful. Teacher 3 reported her scores on the following items: the overall rating of the training (4), methods of delivering information and presentation materials were appropriate and effective (3), my knowledge of content of the training prior to participating (3), my knowledge of the content of the training at the conclusion (4). T3 indicated that she feels she can use the information presented in her classroom. She reported that she believes the training should be provided at the beginning of the school year for more effective implementation. Responses for T2 for the evaluation tool are not reported.

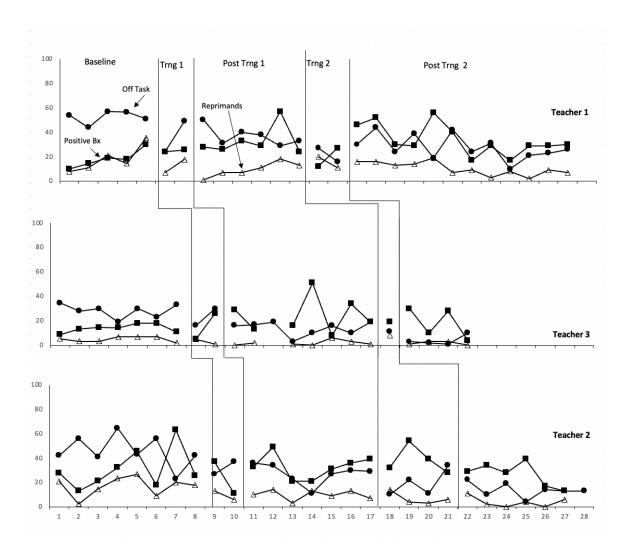


Figure 1. displays the percentage of positive teacher behavior, teacher reprimands, and student off-task behavior for each interval observed. Data is displayed across classrooms and phases.

Table 2Phase Means for Teacher Reprimands

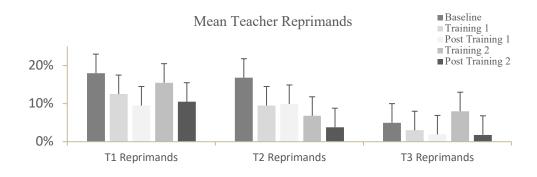
	T1 Reprimands	T2 Reprimands	T3 Reprimands
Baseline	18.0%	16.8%	5.0%
Training 1	12.5%	9.5%	3.0%
Post Training 1	9.5%	9.9%	1.9%
Training 2	15.5%	6.8%	8.0%
Post Training 2	10.5%	3.8%	1.8%

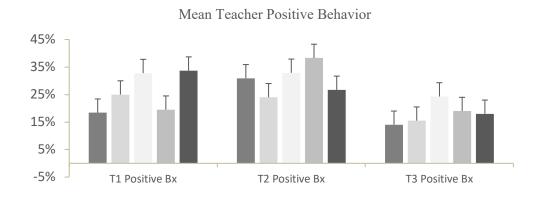
Table 3Phase Means for Teacher Positive Teacher Behavior

	T1 Positive Bx	T2 Positive Bx	T3 Positive Bx
Baseline	18.4%	30.9%	14.0%
Training 1	25.0%	24.0%	15.5%
Post Training 1	32.8%	32.9%	24.3%
Training 2	19.5%	38.3%	19.0%
Post Training 2	33.7%	26.7%	18.0%

Table 4Phase Means for Student Off-task Behavior

	T1 Student Off-task Bx	T2 Student Off-task Bx	T3 Student Off-task Bx
Baseline	51.8%	46.0%	27.3%
Training 1	36.5%	32.0%	23.0%
Post Training 1	36.8%	27.1%	13.8%
Training 2	21.5%	19.3%	11.0%
Post Training 2	27.9%	13.6%	4.0%





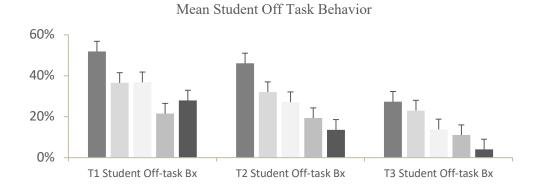


Figure 2. displays mean phase percentages of positive teacher behavior, teacher reprimands, and student off-task behavior. Data is displayed across classrooms and phases.

CHAPTER V

DISCUSSION

Training 1, *Basics of Behavior Management*, increased positive teacher behavior and decreased average reprimands delivered for all three teachers. Training 1 also decreased average off-task behavior for each classroom. These results indicate that Training 1 is a successful intervention to increase average teacher positive behaviors and decrease average teacher reprimands delivered. This suggests that *Basics of Behavior Management*, created by Dr. Mary Ann Shepherd Ph.D., BCBA-D, is an effective tool to increase teachers' behavioral management strategies (e.g., delivering praise, behavior-specific praise, using clear instructions, and modeling appropriate behavior) and increase student engagement. Training 2, *Behavior Reduction*, further increased average positive teacher behavior for one teacher (T1), and decreased average reprimands delivered for one teacher (T2). Training 2 also decreased average off-task behavior in each classroom. These results indicate that Training 2 is an effective tool to increase student engagement, and decrease student off-task behaviors (e.g., talking out, out of seat, object play, (playing with items), and passive behavior (e.g., looking around the classroom, laying head on the desk, inattentive to task by "zoning out").

During the post-training 1 phase, all three teachers increased average positive behaviors and decreased average reprimands delivered. Trend levels across teacher reprimand varied, and levels for positive teacher behavior were upward trending for T2 and T3. This suggests that training 1 was effective in gradually increasing positive teacher behaviors and lead to the teacher's inconsistent use of reprimands. Training 1 also resulted in lower levels of average

student off-task behavior for all three teachers. Trend levels across student off-task behavior were variable after training one suggesting that training one was effective in inconsistently decreasing student off-task behavior.

The intervention of training 2 also resulted in lower levels of average student off-task behavior for all three teachers below that of baseline. Trend levels for student off-task behavior displayed downward trends indicating that training 2 was effective in gradually decreasing offtask behavior across classrooms. Training 2 resulted in lower levels of average reprimands maintained below that of baseline for all three teachers, except during the completion of training 2 (phase IV) for T3. T3 reprimands resulted in no change in performance post trainings. Trend levels for reprimands across T1 and T2 were downward trending suggesting that training 2 was effective in gradually decreasing reprimands across teachers. T1 and T3 average positive behaviors increased after training 2 and maintained above that of baseline. However, T2's average positive behaviors were variable and did not consistently increase and were below that of baseline after training 2. Levels for positive teacher behavior were downward trending for T2 and T3. It is hypothesized that the training videos were not sufficient for a maintained increase in average positive behaviors for T2. With greater support provided, including consultative components, it is hypothesized that providing appropriate and tailored feedback could be identified that would result in higher levels of positive teacher behavior. It is hypothesized that consistent teacher review of trainings could aid in maintaining low levels of reprimands and high levels of positive teacher behavior, in addition to lower levels of student off-task behavior.

Implications for practice indicate that teacher completion of Training 1: *Basics of Behavior Management* can lead to an increase in effective classroom management while requiring no consultant effort. Furthermore, results suggest that teachers who receive behavior

management training that is evidenced based and based on Applied Behavior Analysis principles can improve overall classroom management. In addition, similar training may decrease behavioral challenges presented by students in the classroom across elementary-aged children, once teachers implement and increase behavioral strategies such as behavior-specific, clear instruction, modeling, etc. Furthermore, in-service teachers increased use of evidence-based strategies can improve classroom management.

In practice, the implications of the current study may inform pre-service teacher programs to provide behavior management training in pre-service teacher training. These programs may consider increasing course requirements for behavior management. Additionally, the trainings provided in this study is shown to improve teacher classroom management practices, and it may serve as evidence-based training for teachers in behavior management. The author of the trainings may consider making the trainings, Basics of Behavior Management and Behavior Reduction available to a wider audience. School administrations are encouraged to utilize evidenced based behavioral management trainings as continuing education for in-service teachers instructing elementary-aged children. Reinforcers utilized for teachers attending additional training in behavior management can be low-cost preferred items or interdependent rewards (e.g., jeans day, free lunch, grade-level team competitions). Intervention delivery should be considered as a treatment for teachers experiencing varying levels of challenging behavior present in the classroom and can easily be completed in the field with little to no consultative involvement. Additionally, other implications may include the effective use of virtual behavioral management trainings to increase teachers' classroom management skills. Schools may consider using virtual mediums to provide behavior management trainings to teachers as a more costeffective and flexible delivery of training.

Limitations of the present study include the type of grade levels utilized. The intervention was provided for teachers across one pre-kindergarten, one kindergarten, and one fourth-grade classroom, and as a result, grade level was not a controlled variable suggesting a threat to validity. The present study used the ABCC-R to assess teacher's teachers' beliefs on managing classrooms. The self-report measure was not completed by all teachers; thus, the variable was removed from the results as its data was not available in representing an accurate measure of change in teacher beliefs post-training completion. Additionally, the present study is a non-concurrent multiple baseline study, resulting in a decrease in internal validity.

Future research should investigate if teachers learning about general behavioral management strategies provided in *Basics of Behavior Management* is independently effective in maintaining a decrease in teacher reprimands. In the present study, teachers receiving training in the *Basics of Behavior Management* and *Behavior Reduction* lead to a maintained reduction in teacher reprimands. If true, this finding would provide evidence that time-intensive behavior management training is not required to maintain lower levels of teacher reprimands. Finally, the present study observed teachers in their classrooms with direct observations during and post trainings. However, future studies should investigate the effectiveness of providing immediate feedback to teachers and reinforcing positive teacher behaviors after observation sessions.

Additionally, it should investigate aspects of virtually-delivered behavior management training that are most effective (e.g., duration of the video, content delivery, visual imagery, etc.). It is recommended that future researchers replicate this study to enrich the pool of existing literature on the effectiveness of behavior management training and direct observations of teacher implementation.

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APPENDICES

APPENDIX A

TRAINING EVALUATION TOOL

Training Title: Researcher:						-
Participant's Name:						
Grade: Site:	-					_
						_
For items 1 - 4, please check (\checkmark) the number following each statemen	ıt which	1	2	3	4	5
best describes your opinions concerning this training (1=Low/5=High):						
1. Overall rating of this training						
2. Methods of delivering information & presentation materials were approx	opriate & effective					
3. My knowledge of the content of the training prior to participating						
4. My knowledge of the content of the training at the conclusion						
For item 5, please circle your response (Y=Yes/N=No):		•	•	•	•	
5. I feel I can use the information presented in my classroom					Y	N

Additional Comments (If needed, continue on reverse)

APPENDIX B

ABCC-R

Attitudes and Beliefs on Classroom Control Inventory - Revised

Ple	ase circle the statement that best describes you:	Describes me very well	Describes me usually	Describes me somewhat	Describes me not at all
1.	I believe students will be successful in school if allowed the freedom to pursue their own interests.	4	3	2	1
2.	I believe teachers should give students freedom so they will develop their own ways of interacting with each other.	4	3	2	1
3.	I do not specify a set time for each learning activity because that can only be determined by the students.	4	3	2	1
4.	When moving from one learning activity to another, I will allow students to progress at their own rate.	4	3	2	1
5.	I believe student's emotions and decision-making processes must always be considered fully legitimate and valid.	4	3	2	1
6.	I believe students can manage their own learning behavior during seat work.	4	3	2	1
7.	1 believe students should choose the learning topics and tasks.	44	3	2	1
8.	Students in my classroom are free to use any materials they wish during the learning process.	4	3	2	1
9.	I believe friendliness, courtesy, and respect for fellow students is something that students have to learn first-hand through free interaction.	4	3	2	1
10.	I believe students should create their own daily routines as this fosters the development of responsibility.	4	3	2	1
11.	When a student is repeatedly off-task, I will most likely remove a privilege or require detention.	4	3	2	1
12.	The classroom runs more smoothly when the teacher assigns students to specific seats.	4	3	2	1
13.	During the first week of class, I will announce the classroom rules and inform students of the penalties for disregarding those rules.	4	3	2	1
14.	The teacher knows best how to allocate classroom materials and supplies to optimize learning.	4	3	2	1
15.	student to be quiet and stop it.	4	3	2	1
16.	While teaching a lesson on library skills, a student begins to talk about the research she is doing for her book report. I would remind the student that the class has to finish the lesson before the end of the class period.	4	3	2	
17.	I believe teachers should require student compliance and respect for law and order.	4	3	2	1 1
	I believe students will be successful in school if they listen to the adults who know what's best for them.	4	3	2	1
	I believe class rules are important because they shape the student's behavior and development.	4	3	2	1
20.	If students believe that a classroom rule is unfair, I may explain the reason for the rule but would not change it.	4	3	2	1

APPENDIX C

TEACHER OBSERVATION PROCEDURES AND DATA SHEET

Observation Procedures:

Teacher behavior will be observed in a partial interval recording system by recording whether the behavior occurs at any time during the interval. Observe the teacher's behavior for 15 minutes intervals, and mark if the specified behavior occurred in each 10 second interval. Teacher behavior is coded for six behaviors which are operationally defined in the table below. Please memorize these definitions.

Definitions of Teacher Behaviors

Code	Definition
P - Praise	A teacher issued verbal statement directed at the student or group of students that indicates approval of a behavior or correct response
BSP - Behavior-Specific Praise:	A teacher-issued verbal statement directed at the student or group of students that a) indicates approval of a behavior or correct response and b) specifies the behavior being praised
M - Modeling Appropriate Behavior	A teacher-issued behavior directed at a student or a group of students indicating or showing an appropriate response as an example and a) the behavior can be in addition to a verbal statement
CI - Using Clear Instructions	A teacher issued verbal instructional statement or command directed at the student or group of students that specifies the appropriate behavior expected. The teacher sets clear rules or expectations in directive statements. Examples: Sit in your chair, with all legs on the floor, ask before leaving your desk. Nonexamples: no running, use nice hands, be kind
R - Reprimands	A teacher-issued verbal statement or command directed at the student or group of students that acknowledges an a) incorrect response and b) inappropriate behavior (a reprimand does not provide corrective feedback for alternative or appropriate behavior).

Teacher Observation Form

Observer:		Grade:	Teacher:
Date:	Time:	Setting:	

	0-10s	11-20s	21-30s	31-40s	41-50s	51-60s
1	P BSP	2 P BSP	3 P BSP	4 P BSP	5 P BSP	6 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
7	P BSP	8 P BSP	9 P BSP	10 P BSP	11 P BSP	12 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
13	P BSP	14 P BSP	15 P BSP	16 P BSP	17 P BSP	18 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
19	P BSP	20 P BSP	21 P BSP	22 P BSP	23 P BSP	24 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
25	P BSP	26 P BSP	27 P BSP	28 P BSP	29 P BSP	30 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
31	P BSP	32 P BSP	33 P BSP	34 P BSP	35 P BSP	36 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
37	P BSP	38 P BSP	39 P BSP	40 P BSP	41 P BSP	42 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
43	P BSP	44 P BSP	45 P BSP	46 P BSP	47 P BSP	48 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
49	_	50 P BSP	51 P BSP	52 P BSP	53 P BSP	54 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
55		56 P BSP	57 P BSP	58 P BSP	59 P BSP	60 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
61	P BSP	62 P BSP	63 P BSP	64 P BSP	65 P BSP	66 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
67		68 P BSP	69 P BSP	70 P BSP	71 P BSP	72 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
73	P BSP	74 P BSP	75 P BSP	76 P BSP	77 P BSP	78 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
79	P BSP	80 P BSP	81 P BSP	82 P BSP	83 P BSP	84 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R
85	P BSP	86 P BSP	87 P BSP	88 P BSP	89 P BSP	90 P BSP
	M CI R	M CI R	M CI R	M CI R	M CI R	M CI R

APPENDIX D

STUDENT OBSERVATION PROCEDURES AND DATA SHEET

Observation Procedures:

Student behavior will be observed in a whole interval recording system by recording whether the behavior occurs or does not occur during the interval. Observe each individual student for 10-second intervals and observe for a total of 15 minutes. Mark if the behavior occurred or did not occur in each 10-second interval. Once you have observed each student, begin again until the total 15 minutes are completed. Student Behavior is coded for two behaviors: (ON) and off-task (OFF) behaviors which are operationally defined in the table below. Please memorize these behaviors as well as their examples.

Definitions of Student Behavior

Code	Definition
ON - On-task	The student is oriented to the task at hand, compliant with instruction, or is working with appropriate materials. (Example: Teacher assigns the class to complete a worksheet, and student is using the writing utensil to complete the worksheet while also staying seated.).
OFF - Off-task	The student is engaged in any task other than the assigned task at hand, talking out (TO), out of seat (OS), object play (OP) (playing with items), Passive (P) (e.g. looking around the classroom, laying head on desk, inattentive to task by "zoning out").

Student Observation Form

Name:		Grade:	Teacher:
Date:	Time:	Setting/subject:	

0-10s	11-20s	21-30s	31-40s	41-50s	51-60s (Control)
1 TO OS OP	2 TO OS OP	3 TO OS OP	4 TO OS OP	5 TO OS OP	6 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
7 TO OS OP	8 TO OS OP	9 TO OS OP	10 TO OS OP	11 TO OS OP	12 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
13 TO OS OP	14 TO OS OP	15 TO OS OP	16 TO OS OP	17 TO OS OP	18 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
19 TO OS OP	20 TO OS OP	21 TO OS OP	22 TO OS OP	23 TO OS OP	24 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
25 TO OS OP	26 TO OS OP	27 TO OS OP	28 TO OS OP	29 TO OS OP	30 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
1 Engagea	1 21184864	1 21184864	1 21184864	1 21184864	1 21184864
31 TO OS OP	32 TO OS OP	33 TO OS OP	34 TO OS OP	35 TO OS OP	36 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
0.0	0.0	0.0	0.0	0.0	0.0.
37 TO OS OP	38 TO OS OP	39 TO OS OP	40 TO OS OP	41 TO OS OP	42 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
43 TO OS OP	44 TO OS OP	45 TO OS OP	46 TO OS OP	47 TO OS OP	48 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
49 TO OS OP	50 TO OS OP	51 TO OS OP	52 TO OS OP	53 TO OS OP	54 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
55 TO OS OP	56 TO OS OP	57 TO OS OP	58 TO OS OP	59 TO OS OP	60 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
Linguaged	1 21184864	1 21184864	1 21184864	1 21184864	1 21180800
61 TO OS OP	62 TO OS OP	63 TO OS OP	64 TO OS OP	65 TO OS OP	66 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
67. 70.00.00	60 70 06 00	60 70 00 00	70 70 00 00	74 70 00 00	72 70 00 00
67 TO OS OP	68 TO OS OP	69 TO OS OP	70 TO OS OP	71 TO OS OP	72 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
73 TO OS OP	74 TO OS OP	75 TO OS OP	76 TO OS OP	77 TO OS OP	78 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
79 TO OS OP	80 TO OS OP	81 TO OS OP	82 TO OS OP	83 TO OS OP	84 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
85 TO OS OP	86 TO OS OP	87 TO OS OP	88 TO OS OP	89 TO OS OP	90 TO OS OP
P Engaged	P Engaged	P Engaged	P Engaged	P Engaged	P Engaged
		. 2.184864	. 21184864	. 2.180800	. 2.150500

TO:	/90x100 =	(C:	%)	OS:	/90x100 =	(C:	_%)	OP:	/90x100 =	(C:	%
P:	_/90x100 =	(C:	%)	Engaged:	/90x100 =	(C:	%)				

APPENDIX E TRAINING TIMELINE AND PROCEDURES FOR TEACHERS

1. Introductions

You will first receive an email from Mrs. Cheema where she will introduce herself and the study. Once consent forms have been filled out, she will ask for contact information and a time and day to set up the first in person meeting. Also, prior to the beginning of the study, she will provide assent forms to all students. This form will inform parents for the current study. If they sign and return the form, their child will not participate in the study.

2. In Person Meeting

In this in person meeting, you will discuss what you will be engaging in across the 8-10 weeks in more detail. Mrs. Cheema will provide you with a permission form for you to fill out. Also, she will provide you with a rating form for you to complete. She will send an electronic form for you to enter demographic information. You can email it to her at heema@okstate.edu within three days, or you have the option to complete it at the in-person meeting.

3. Observations

Mrs. Cheema and her research assistants will observe in the room for 15 minutes. They will adjust their position, so they are not interrupting your teaching. After 15 minutes, they will quietly leave the room. Observations will continue for a minimum of 5 days.

4. Training 1: Basics of Behavior Management

You will be given access to this training via email. Once you receive the virtual training videos, Mrs. Cheema will provide you with a timeline to complete (1 week), alongside a tracking sheet so you can track your progress. There will be questions throughout the video to ensure understanding of content. She will check in with you twice a week during the training weeks to address any questions or concerns you may have. For this first training, you will have one week to complete. During training, observations will occur twice a week in your classroom.

5. Observations

Ms. Cheema and her research assistants will observe in the room for about 15 minutes. They will adjust their position, so they are not interrupting your teaching. After 15 minutes, they will quietly leave the room. Observations will continue for a minimum of 5 days.

6. Training 2: Behavior Reduction

You will be given access to this training via email as well. Once you receive the virtual training videos, Mrs. Cheema will provide you with a timeline to complete the videos (three weeks), and a tracking sheet so you can track your progress. There will be questions throughout the video to ensure understanding of content. She will check in with you twice a week during the training weeks to address any questions or concerns you may have. For this first training, you will have three weeks to complete in addition to the quizzes. During training, observations will occur twice a week in your classroom.

7. Observations

Mrs. Cheema and her research assistants will observe in the room for about 15 minutes. They will adjust their position, so they are not interrupting your teaching. After 30 minutes, they will quietly leave the room. Observations will continue for a minimum of 5 days.

8. Post Training

After the last weeks of observations, you will be asked to fill out the rating form and evaluation via email and turn it in within three days. You will also have an option to schedule a feedback session with Mrs. Cheema after the completion of the study.

APPENDIX F

TEACHER INTEGRITY SHEET

	Length	Date Video Completed	Start time	Stop Time	Total Time
Basics of Behavior Management					
Part 1	60				
Part 2	60				
Part 3	60				
Behavior Reduction					
Behavior Reduction Plan	33				
Functions of Behavior	52				
Antecedent Intervention Part One	45				
Antecedent Intervention Part Two	46				
Motivating Operations	38				
Discriminative Stimuli	37				
Differential Reinforcement Part One	46				
Differential Reinforcement Part Two	48				
Extinction	57				
Punishment	60				
Crisis Procedures	48				

APPENDIX G TEACHER PERMISSION FORM

Dear Teacher,

I am writing to request your permission to work with you for a period of time at

Elementary. I am a student at Oklahoma State University, and my goal is to see if two virtual behavior management trainings will provide effective behavior management strategies for your classroom. Here are some details about the project:

Project Title:

An Evaluation of Behavior Management Training: Training Teachers to Improve Classroom Management Skills.

Principal Investigator:

Hiba Cheema, M.S.

Oklahoma State University School Psychology

Purpose:

The purpose of this study is to evaluate the efficacy of two virtual pre-recorded training on behavior management, and to explore if the trainings has a significant effect in improving teacher classroom management skills, and student behavior.

Procedures:

This is a study that will take about 13 hours of video training across 8-10 weeks. First, I will observe the teachers and students in a classroom and provide a survey looking at the teachers preferences to handle student behavior in a class. Then, teachers will participate in a three-hour training across 1 week. Following the first training, I will observe the teacher in the classroom again in the same way. I will work with each teacher to ensure all questions are answered throughout the study. Then, teachers will participate in a ten-hour training across 2 weeks. Following the second training, I will observe the teacher in the classroom again in the same way. Additionally, students will be observed alongside teacher observations. All observation information will be stored in a secure location, and students' names will **not** be included in any reports. All data will be stored anonymously. You may choose to withdraw from the project at any time.

Risks of Participation:

There are no risks with being a part of this project that are not already happening during the school day.

Benefits of Participation:

Participating in this project may give you additional behavior management strategies to use in the classroom. Incentives will also be given to teachers actively participating in the study (i.e., gift cards, coffee, cookies, sonic drinks).

*If you agree to participate in these trainings and observations, please sign on the back section of the page.

Sincerely,	
Hiba M. Cheema, M.S.	
School Psychology Doctoral Program	
Oklahoma State University	
405-826-0908	
hcheema@okstate.edu	
I give permission to be included in the research pro	ject.
Teacher Signature:	Date:

APPENDIX H PARENT PERMISSION FORM

Dear Parent/Guardian,

Your son or daughter has been identified as a child who is enrolled in one of the selected classrooms where research on a teacher training program will be conducted. Below we have provided important information about the study and how it will involve your student.

Overview and purpose of the study:

This research study will look at the impact of two behavior management trainings called *Basics of Behavior Management* and *Behavior Reduction*. The purpose of this study is to evaluate the efficacy of two virtual pre-recorded training on behavior management, and to explore if the trainings have a significant effect in improving teacher classroom management skills, and student behavior. The trainings were created to give teachers skills that may help them increase positive behaviors such as providing praise to students, giving clear instructions, modeling appropriate behavior, and overall manage classrooms better. We hope this training program will help keep highly qualified teachers in the public education system.

Why have I been asked to participate in this study?

Your child is being asked to participate because your child is enrolled in one of the selected classrooms where their classroom teacher will partake in the behavior management training.

What is involved in the study?

Your child will continue their education in the orderly routine. The teacher trainings are made to help teachers learn outside the classroom. In order to make sure that the researchers follow the training methods, your child will be observed for 15 minutes durations from two to five days a week for 8-10 weeks. The observations are not labeled with any names or identifying information. The observation data are only viewed by the primary investigators, and trained graduate research assistants. All observation documents are stored in a locked and secure file cabinet. These documents will be stored in a locked cabinet for no more than 6 months year after the trainings have ended before being destroyed.

In addition, trained graduate research assistants will watch classroom behaviors as children attend to their teacher and lesson and/or with other children. These trained researchers will only watch teachers and kids during a teaching session. They will never talk, play, or interact with any teachers or children.

Confidentiality

Any information that could possibly identify your child will not be included in this study. Student observations will output an average of the total classroom On-task and off-task behavior, so, identifying information is not collected. All the research data will be kept on an encrypted drive stored in a locked filing cabinet and only the research team members will have access to the files. This information will not be shared with anyone outside the project. Research data will be stored in locked cabinets until the summer of 2022 before being destroyed.

What are the risks of the study?

There are no known risks (dangers) to you or your child from being in this research study. It is possible children may feel a little uncomfortable being observed in the classroom by the researchers, but typically the students forget the observers are present.

<u>Can your child catch COVID-19 if I participate in this study?</u> We will do everything we can to keep from spreading the virus and are following local, state, and federal guidelines. We will wash our hands or use hand sanitizer, wear masks and use social distancing guidelines. We would like you to wear a mask too or you don't have to wear a mask if you don't want to

Are there benefits to taking part in the study?

It is expected that teachers and children in this study will benefit directly from their participation. Participation in the study may provide teachers with classroom management skills. It is anticipated that children participating in the study will have improved behaviors in the classroom. We hope that the information learned from this study will benefit teachers and children.

Please only return this form if you **do not** want your child to participate. If you are comfortable with your child being involved, you do not need to return this form.

If you have any questions with regards to your child's involvement in this study, please contact us at your earliest convenience. For any information regarding the protection of human subjects, you can also contact Dawnett Watkins, CIP, IRB Manager, 405-744-5700 or dawnett.watkins@okstate.edu.

Sincerely,

Hiba Cheema, M.S. School Psychology Doctoral Candidate Oklahoma State University 405-826-0908 hcheema@okstate.edu

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No, I prefer that my child not be included in the research project.	i 1
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Parent/Guardian Signature:	i
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APPENDIX I IRB APPROVAL LETTER



Oklahoma State University Institutional Review Board

Date: 03/04/2022 Application Number: IRB-22-89

Proposal Title: An Evaluation of Behavior Management Training: Training

Teachers to Improve Classroom Management Skills

Principal Investigator: Hiba Cheema

Co-Investigator(s):

Faculty Adviser: Gary Duhon

Project Coordinator: Research Assistant(s):

Processed as: Expedited

Expedited Category:

Status Recommended by Reviewer(s): Approved

Approval Date: 03/04/2022

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which <u>continuing review is not required.</u> As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent, and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

- 1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
- 2. Submit a status report to the IRB when requested
- 3. Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- 4. Maintain accurate and complete study records for evaluation by the OSU IRB and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- 5. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely, Oklahoma State University IRB

VITA

Hiba M. Cheema

Candidate for the Degree of

Doctor of Philosophy

Dissertation: AN EVALUATION OF BEHAVIOR MANAGEMENT TRAINING: TRAINING TEACHERS TO IMPROVE CLASSROOM MANAGEMENT SKILLS

Major Field: School Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in School Psychology at Oklahoma State University, Stillwater, Oklahoma in May, 2023.

Completed the requirements for the Master of Science in Educational Psychology at Oklahoma State University, Stillwater, Oklahoma in 2019.

Completed the requirements for the Bachelor of Arts in Psychology at University of Central Oklahoma, Edmond, Oklahoma in 2018.

Experience:

Doctoral Intern through the Oklahoma Private Practice Internship Consortium, at Cornerstone Behavioral Health and Pediatric Therapies, Oklahoma (2022-2023)

Systems level coach through Oklahoma Tiered Systems of Support, Oklahoma State Department of Education (2020-2022)

Teaching Assistant, Oklahoma State University, Stillwater (2018-2020)

Professional Memberships:

Oklahoma Psychological Association

National Association of School Psychologists