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## **Preliminary Outcomes and Feasibility of a Brief Online Teacher Training in Culturally Responsive Practices (CRP) To Reduce Disproportionate Discipline in Prek-3rd Grade Classrooms**

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PRELIMINARY OUTCOMES AND FEASIBILITY OF A BRIEF ONLINE TEACHER  
TRAINING IN CULTURALLY RESPONSIVE PRACTICES (CRP) TO REDUCE  
DISPROPORTIONATE DISCIPLINE IN PREK-3<sup>RD</sup> GRADE CLASSROOMS

by

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## **DEDICATION**

This dissertation is dedicated to my family, who have inspired and supported my love of learning, and to all of the wonderful educators in my life, but especially to my earliest teachers at Harry Dewey Fundamental in Fair Oaks, CA, who made school a place where I knew I belonged.

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## **ABSTRACT**

School discipline policies that rely on exclusionary discipline practices, such as office discipline referrals, suspensions, and expulsions, negatively and disproportionately impact racial minority students, beginning in preschool. Disproportionate discipline persists even when schools implement schoolwide interventions that reduce overall rates of exclusionary discipline, suggesting that schools must do more to address other likely causes of the discipline gap, including implicit racial bias, insufficient teacher training in classroom management, and a cultural mismatch between schools and minority students. There has been an increased call for teacher professional development in culturally responsive behavior management practices, but such interventions are often poorly evaluated and resource-intensive. The current study had three aims: 1) to characterize the preliminary impacts a brief, online teacher professional development training in culturally responsive practices (CRP) on self-efficacy for culturally responsive classroom management (CRCM), expected positive outcomes from CRP, and self-reported implementation of CRP; 2) to determine the social validity and feasibility of the training; and 3) to inform wider dissemination of the training and implementation of CRCM by determining areas for improvement and additional training and support needs. The study utilized a mixed-methods, pre/post non-experimental design using a volunteer sample of 3K-3<sup>rd</sup> grade educators in South Carolina ( $N = 74$ ). Results indicated that the online CRP training significantly increased participants' self-efficacy for CRCM practices, expected

positive outcomes from using CRP, and overall level of self-reported implementation of CRP in the classroom. Mixed-method assessment of intervention feasibility and social validity suggested that the online CRP training was acceptable, practical, perceived as efficacious, and demonstrated adequate demand, particularly when teachers were given the option to complete the training during school hours. Findings highlighted broad support for CRP training and provided insight into areas for improvement and implementation support needs that can inform wider dissemination. Implications and directions for future research are discussed.

*Keywords:* disproportionate discipline, culturally responsive practices, teacher training, self-efficacy, feasibility

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# **CHAPTER 1**

## **INTRODUCTION**

The disproportionate disciplining of Black students, beginning in preschool, has been widely and consistently documented in American schools, which have been called to address this persistent discipline gap (Carter et al., 2017; Katsiyannis et al., 2016). This chapter characterizes the nature of discipline disproportionality, its consequences, and theorized causes and proposed solutions. It explores a multi-component model schools can use to incorporate considerations of student culture and context into their efforts to promote positive behaviors and reduce disproportionate discipline. Particular focus is given to the role of teacher professional development within this model, with information provided on essential elements of teacher training in culturally responsive practices (CRP), the nature and results of prior research in this area, strategies for evaluating training effectiveness and feasibility, and the opportunity for increasing training accessibility through online delivery. Finally, the nature and aims of the current study – an investigation into the preliminary impacts and feasibility of an online training in CRP for 3K – 3<sup>rd</sup> grade educators – are introduced.

### **1.1 Disproportionate Discipline**

Contrary to America’s promise that all children receive equal educational opportunities, decades of data have demonstrated that exclusionary discipline practices fall disproportionately on minority students and that this discipline gap between Black

students and their White peers has increased over time (Losen & Skiba, 2010; U. S. Department of Education Office for Civil Rights, 2014). This disproportionality refers to the over- or under-representation of a group on a particular data point relative to their representation within the population (Bryan et al., 2012). Exclusionary discipline refers to discipline actions, such as office discipline referrals (ODRs), suspensions, and expulsions, which remove and exclude students from instructional environments. School discipline policies that rely on exclusionary discipline practices negatively and disproportionately impact Black students (Fabelo et al., 2011; Kim et al., 2010; Losen et al., 2015; Losen & Skiba, 2010; Noguera, 2003; Skiba et al., 2002; Vincent, Swain-Bradway, et al., 2011). Black students are punished more frequently than their White peers and given harsher punishments (e.g., higher average number of days of suspension) for similar discipline infractions (Skiba et al., 2014). Disproportionate discipline affects even our youngest students: although Black children account for only 18% of preschool enrollment, they represent 42% of preschool students suspended once and 48% of preschool students suspended more than once (U. S. Department of Education Office for Civil Rights, 2014).

In Southern states, disproportionate discipline is particularly problematic. A report by the Center for the Study of Race and Equity in Education found that 55% of the 1.2 million suspensions Black students received nationwide occurred in thirteen Southern states (Smith & Harper, 2015). This disproportionality extends to South Carolina elementary schools, where Black students represent 32% of the student population, but account for 61% of all out-of-school suspensions (OSS). Comparatively, White students account for 51% of elementary student enrollment but only 27% of suspensions (U. S.

Department of Education Office for Civil Rights, 2019). This means that Black elementary students in South Carolina are over 3.5 times more likely to receive an OSS than their White classmates.

**1.1.1 Consequences of disproportionate discipline.** The consequences of relying upon exclusionary discipline are significant and unequally borne by Black students. By its definition, exclusionary discipline removes students from settings where instruction takes place. There is a strong relationship between instructional time and positive learning outcomes (Gettinger & Walter, 2012). Schools with more frequent use of exclusionary discipline demonstrate lower schoolwide academic achievement (American Psychological Association [APA] Zero Tolerance Task Force, 2008). Instructional time lost due to exclusionary discipline is not inconsequential: Losen et al. (2015) estimate that public school students collectively lost almost 18 million days of instruction during the 2011-2012 school year because of exclusionary discipline policies. Students who experience disproportionate rates of exclusionary discipline miss important instructional time, placing them at greater risk for disengagement from school and diminished educational opportunities (Losen, 2011). Noting that students of color receive a disproportionate share of suspensions and expulsions, Gregory et al. (2010) argue that lower rates of academic achievement among students of color may be at least partially attributed to disproportionality in school discipline.

Suspensions and expulsions have been linked to numerous negative long-term consequences, including a reduced sense of school belonging (Bottiani et al., 2017); higher rates of delinquency, academic failure, and school dropout; and greater risk for entering into the juvenile justice system (Fabelo et al., 2011; Noguera, 2003; Rausch &

Skiba, 2004; Toldson, 2011). Some may justify exclusionary discipline as a lamentable but necessary tool for deterring students from future misbehavior, but it is ineffective at even that: studies have shown that suspensions exacerbate rather than reduce students' subsequent problem behavior (Martinez, 2009).

**1.1.2 Causes of disproportionate discipline and proposed solutions.** To develop effective interventions that promote more equitable educational experiences, it is necessary to understand why discipline disproportionality exists. Bradshaw et al. (2010) identified several factors believed to contribute to disproportionality, including 1) “Zero Tolerance” policies that emphasize the use of exclusionary discipline, 2) implicit racial bias, 3) insufficient teacher training focused on addressing challenging student behavior, and 4) cultural conflicts resulting from inconsistencies between home and school culture. An overview of these four factors that drive disproportionality and strategies that schools may use to address each factor individually is provided below.

***1.1.2.1 Reducing an overreliance on exclusionary discipline with Positive Behavioral Interventions and Supports.*** Zero-tolerance discipline policies, initially intended to prevent problematic behaviors and increase school safety through harsh predetermined punishments, resulted in a dramatic increase in rates of exclusionary discipline, particularly for students from racial/ethnic minority backgrounds (APA, 2008). Many schools have attempted to reduce the use of exclusionary discipline practices through Positive Behavioral Interventions and Supports (PBIS), a three-tiered model of behavioral support. PBIS is a schoolwide prevention and intervention model that proactively addresses school behavior concerns by teaching and reinforcing desirable student behaviors. PBIS emphasizes early intervention and prevention, continuous

progress monitoring, data-based decision making, utilization of evidence-based interventions, and coordination of school activities and systems through team-based meetings (Sugai & Horner, 2002). At the universal (Tier 1) level, all students are taught social skills and expected school behaviors, given opportunities to practice those expected behaviors, and positively reinforced when they demonstrate desirable behaviors. The selective (Tier 2) level focuses on providing targeted, often small-group-based support for students with risk factors for or showing early signs of behavioral concerns. Individualized, intensive strategies designed to reduce the severity of ongoing problem behaviors for students are provided at the indicated (Tier 3) level (Sugai & Horner, 2002).

PBIS is a widely popular model for student behavior support and has been implemented in over 26,000 schools in the United States (Office of Special Education Programs, 2017). When implemented with fidelity, PBIS has been shown to decrease student misbehavior and overall rates of exclusionary discipline in K-12 settings, with some of its strongest outcomes in elementary schools (Bradshaw et al., 2010; Bradshaw et al., 2012). An adaptation of the PBIS framework, called the Pyramid Model, has also been developed for early childhood settings (Hemmeter et al., 2007), where its use has been associated with reductions in challenging student behavior and improved social emotional skills (Benedict et al., 2007; Steed et al., 2013).

Originally conceptualized as “culture-neutral,” PBIS was expected to be equally effective for all students if implemented with high fidelity (Sugai et al., 2000). However, even in schools implementing PBIS with adequate fidelity, Black students remain overrepresented in ODRs, suspensions, and expulsions (Vincent & Tobin, 2011; Vincent,

Swain-Bradway, et al., 2011). Additional work is required to make PBIS interventions responsive to a wide variety of local cultural contexts if schools wish to promote student success more equitably and eliminate discipline disproportionality (Vincent, Randall, et al., 2011).

***1.1.2.2 Disrupting the influence of implicit racial bias with training.*** Structural explanations for disproportionate discipline rates (e.g., poverty) lack empirical support. Even after controlling for individual student variables such as academic achievement and socioeconomic status and teacher ratings of disruptive behavior, Black students are more likely to receive ODRs and suspensions than White students (Bradshaw et al., 2010; Fabelo et al., 2011; Skiba et al., 2005; Wallace et al., 2008). Additionally, no published study has demonstrated that Black students are being disciplined more frequently because they are engaging in more misbehavior than other students (Losen & Skiba, 2010; McCarthy & Hoge, 1987; Skiba et al., 2002). Disproportionate discipline occurs most frequently in referrals for subjective infractions (e.g., disrespect, defiance, uncooperative behavior, insubordination) where teachers are required to make a judgement call about the nature and intent of student behavior and less often for infractions that rely on more objective decision criteria, such as bringing a weapon to school (Gregory & Weinstein, 2008; Skiba et al., 2002; Skiba et al., 2008; Losen & Gillespie, 2012; Losen et al., 2014).

In spite of clear disproportionality in the data, many educators believe that their interactions with students are unbiased and endorse explicitly egalitarian racial beliefs (Olivos et al., 2010; Van den Bergh et al., 2010). These findings suggest that *implicit* racial bias may play an important role in the discipline gap (McIntosh, Girvan, et al., 2014) by influencing the way teachers respond to the behaviors of minority students

(McIntosh, Barnes, et al., 2014; Skiba et al., 2002). Implicit bias refers to unconscious beliefs and stereotypes that are triggered unknowingly and without intention (Banks et al., 2006) and which impact our perceptions, interactions, behaviors, and feelings towards others (Gay, 2010). Implicit bias can produce behavior that diverges from an individual's stated beliefs and values (Dovidio et al., 2005) and may influence the way teachers manage classrooms, build relationships with their students, and respond to rule-breaking (Weinstein, 2002). Research has shown that early education teachers spend more time tracking Black students when asked to monitor for potentially challenging behaviors (Gilliam et al., 2016). Teachers are also more likely to recommend more severe punishment and label the student a troublemaker when presented with an office discipline referral for a student with a stereotypically Black name (Okonofua & Eberhardt, 2015).

Thankfully, for educators motivated by equity, intervention research has demonstrated that it is possible to override the influence of harmful unconscious biases on decision-making. Studies have shown that interventions focused on helping individuals recognize interactions where implicit bias may influence their thoughts and behavior, "slow down" their thinking, and follow specific guidelines for decision-making can lead to more unbiased decisions and behaviors (Devine et al., 2012; Lai et al., 2013; Lai et al., 2014).

***1.1.2.3 Bolstering insufficient pre-service teacher training in classroom management with in-service training.*** It has been suggested that the prevention of disciplinary problems may rest in training teachers to effectively manage their classrooms (Reglin et al., 2012). Effective, proactive classroom management is particularly important for young students new to the routine of school and school-specific behavioral

expectations. In spite of its importance, pre-service teacher training programs often fall short in preparing teachers adequately for the classroom (Palardy & Rumberger, 2008; Porter & Brophy, 1988). Teachers identify preventing and responding to student problem behaviors as one of their most significant challenges and sources of stress (Bushaw & Calderon, 2014) and many believe that they are unable to manage their classroom well (Dicke et al., 2014). When teachers feel that they lack the ability to proactively manage and respond to problem behaviors, they are more likely to rely on exclusionary discipline practices rather than attempt to manage student behavior within the classroom (Skiba & Peterson, 2003). Because many of the student behavioral challenges that lead to suspension and expulsion originate in the classroom, it is essential that teachers feel adequately equipped to positively manage their teaching environments (Delale-O'Connor et al., 2017).

Professional development (e.g., in-service training) represents an important opportunity to address knowledge and skill gaps teachers may bring with them from pre-service training programs, where curriculum and experiences rarely provide teachers with “all the knowledge and skill necessary to successful teaching” (Ingersoll, 2012, p. 47). Teachers report feeling particularly underprepared when it comes to addressing the behavioral, social, and emotional needs of children from diverse backgrounds (Hemmeter et al., 2008; Siwatu & Starker, 2010; Trent et al., 2008; Vincent, Randall, et al., 2011), suggesting that cultural considerations should be highlighted within in-service teacher training.

*1.1.2.4 Acknowledging potential cultural mismatch between school and home expectations for minority students.* Incongruence between home and school behavioral expectations may contribute to disciplinary disproportionality, especially for subjective discipline incidents (Cartledge et al., 2001; Neal et al., 2003; Skiba et al., 2002; Townsend, 2000). Cultural conflicts may result from teachers misinterpreting a child's classroom behavior and taking unnecessary discipline action for behaviors that may actually be appropriate, normative, or even adaptive when viewed through the student's cultural lens (Monroe & Obidah, 2004; Weinstein et al., 2004). Studies have shown that teachers often possess a general awareness of the way a student's culture may influence their behavior at school, but infrequently consider how they might take action to provide a more equitable, culturally responsive learning environment when there is a cultural mismatch (Nelson & Guerra, 2014). Teachers often hold deficit-based beliefs about students from culturally, linguistically, and economically diverse students and families, attributing failure to understand and adhere to school-based expectations as a deficiency within those children rather than attributing it to a cultural mismatch between school and home (Garcia & Guerra, 2004).

Teachers may lack professional development opportunities where they are encouraged to consider students' cultural context and how it may influence their behavior in the classroom (Sugai et al., 2012; Townsend, 2002). Vincent, Randall, and colleagues (2011) suggest that teacher training in classroom management needs to "bridge various degrees of divergence between students' cultural identities and the school environment" (p. 221) to facilitate the success of all students, including those from diverse cultures.

## **1.2 Strategies for Reducing Disproportionate Discipline through Culturally and Contextually Responsive PBIS (CR-PBIS)**

Researchers have recently begun considering how culture can be incorporated into PBIS implementation (Vincent, Randall, et al., 2011; Fallon et al., 2012; Sugai et al., 2012) as a way of interrupting the negative trajectories associated with exclusionary discipline and promoting variables (e.g., student engagement and motivation, positive teacher-student relationships) essential for *all* students to succeed (Gregory et al., 2016; Roorda et al., 2011). Fallon and colleagues (2015) write, “Persistently unequal outcomes suggest the need for comprehensive changes in school systems by way of evidence-based culturally and contextually relevant behavioral strategies” (p. 251). Adopting these comprehensive changes requires commitment and action at multiple levels of the school system, including administrators, data and discipline teams, and authentic engagement with school stakeholders (e.g., students, families, community members), and policy change at the federal, state, district, and school levels (Abrams & Gibbs, 2000; Klingner et al., 2005). Culturally and contextually responsive PBIS (CR-PBIS) provides a model for how the school system can promote more equitable outcomes through comprehensive change.

CR-PBIS represents a multi-component initiative requiring a commitment from district- and school-level administrators to systematically address issues of equity. CR-PBIS seeks to enhance PBIS practices and reduce patterns of disproportionate discipline by minimizing cultural mismatches in behavioral expectations, creating a cultural lens for viewing behavioral norms, and affirming diversity found within the school environment. This requires that schools: 1) identify cultural inconsistencies in disciplinary practice

(Hershfeldt et al., 2009) and monitor disparities in discipline and other outcomes by regularly reviewing school data disaggregated by race (Tobin & Vincent, 2011); 2) work together with minority communities, students, and families to determine culturally valid schoolwide behavioral expectations (Bal, 2018; Vincent, Randall, et al., 2011); and 3) provide professional development for teachers focused on increasing their awareness of disproportionate discipline and building the skills and awareness necessary to better interpret and intervene with a wide variety of student behaviors (Eber et al., 2010). Collectively, these teacher-focused classroom skills are referred to as culturally responsive practices.

**1.2.1 Culturally responsive practices.** Culturally responsive practices (CRP) are defined as the process of “using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively” (Gay, 2002, p. 106). It is a “frame of mind, more than a set of strategies or practices, that guides the management decisions that teachers make” to achieve an ultimate goal of providing all students with equitable opportunities for learning (Weinstein et al., 2004, p. 27).

CRP holds that the behavioral expectations, norms, and values found in schools are not “neutral” and that it is necessary to consider the sociocultural factors that may influence students’ behavior (Harris-Murri et al., 2006). Culture influences the ways in which people engage in everyday activities (Rogoff, 2003), and it is quite likely that students -- who typically represent a more diverse population than their often White, middle class, and female teachers (Cartledge et al., 2008) -- may bring experiences, expectations, and goals learned at home that differ from those set by their school. Rather than punish students for these cultural mismatches, CRP establishes a cultural lens for

determining normative behaviors, validates student for who they are, and builds on their culturally-derived strengths to help them meet high expectations for behavior and learning (Gay & Howard, 2000). To be culturally responsive, teachers must engage in the self-reflection necessary to recognize their own biases, develop knowledge about their students' cultural backgrounds, demonstrate an ability and willingness to use culturally responsive classroom management (CRCM) strategies, and commit to building caring classroom communities where diverse students feel welcomed and appreciated in ways that support their academic and social success (Coffey & Farinde-Wu, 2016; Weinstein et al., 2004). Because existing pre- and in-service teacher trainings rarely address these topics (Han, 2014), schools committed to reducing disproportionality in discipline through CRP will need to invest in effective and feasible teacher professional development.

### **1.3 A Focus on Professional Development for Teachers**

Teacher professional development is considered an essential element of CR-PBIS (Allen & Steed, 2016) as “we cannot improve schools without improving the skills and abilities of the teacher within them” (Guskey, 1994, p. 9). Teacher training in CRCM strategies has been suggested as a promising method for addressing disproportionality by giving teachers the skills to proactively address behavior concerns before students are referred to the office (Bradshaw et al., 2010; McIntosh, Barnes, et al., 2014; Pas et al., 2016). Given the extensive amount of time they spend with students, teachers are considered integral to achieving the goal of supporting and responding to student behavior in a culturally responsive manner (Hershfeldt et al., 2009; Vincent, Randall, et

al., 2011). Previous research suggests that teachers require training and support to implement CRPM (Larson, 2016).

To promote the implementation of CR-PBIS and CRPM strategies, professional development for teachers should include:

1. Investigating one's implicit bias through didactic material and self-reflection activities that make teachers aware of implicit bias, capitalizes on their good intentions to respond to students in an unbiased way, and helps them engage in critical reflection at vulnerable decision points where bias might influence their discipline decisions (McIntosh, Barnes, et al., 2014; Weinstein et al., 2004). Promoting awareness of implicit bias and its role in how teachers perceive and respond to student behavior is considered necessary for effectively implementing CRP (McIntosh, Girvan, et al., 2014).
2. Self-reflection to build teachers' cultural self-awareness and awareness of the culture of their students. Abstract knowledge of culture is ineffective in meaningfully changing teachers' classroom behaviors (Pollock et al., 2010). On the other hand, cultural self-awareness has been identified as a key element of CRPM (Cartledge & Kourea, 2008) and a prerequisite to understanding the culture of others (McAllister & Irvine, 2000). Teachers interested in CRPM must be knowledgeable about the dimensions along which cultural differences and similarities can be defined (e.g., communication styles, interactions between generations, expressiveness, role of authority) and aware of the ways in which cultural differences may manifest through student behavior (Gay, 2002; Weinstein et al., 2004). Learning about their students' cultural backgrounds can help

teachers understand factors that impact student behavior, use culturally responsive strategies during teacher-student interactions, and avoid misinterpretations that could lead to exclusionary discipline (Gay, 2010; Monroe, 2005).

3. Strategies for establishing meaningful connections with students, validating others' culture, and increasing cultural relevance of social skills and classroom behaviors (Vincent, Randall, et al., 2011)

**1.3.1 Prior research on CRP professional development.** Studying the impact of interventions to improve the use of CRP in schools is a relatively new field. A review of CRP interventions found that the majority of outcome-focused studies (just 10 of the 179 papers reviewed) were published in the last decade (Bottiani et al., 2018). The majority of papers on CRP professional development recommended strategies for practice without presenting the results of an intervention; those that did study the impact of interventions failed to employ rigorous design features. Additionally, studies either failed to report or reported limited information with regard to external validity of findings, contextual and demographic information on participants, measure psychometrics, or feasibility and readiness for dissemination. Although they concluded that the research base is “inadequate to draw conclusions regarding effectiveness,” CRP interventions were often associated with some gains in teachers' knowledge, skills, or use of CRP (Bottiani et al., 2018, p. 380).

A recently completed efficacy trial of Double Check, a cultural responsiveness and student engagement model that combines teacher-focused classroom coaching with five hours of face-to-face schoolwide professional development in CRP, stands in contrast to the weak intervention designs cited by Bottiani and colleagues (2018). The Double Check

trial found that teachers demonstrated improvements in self-reported culturally responsive behavior management and self-efficacy after receiving CRP-focused professional development (Bradshaw et al., 2018). Teachers who received ongoing coaching in CRCM deemed coaching to be both acceptable and feasible (Pas et al., 2016). When teachers were given performance feedback from coaches, they were able to implement a CRP improvement plan with high fidelity (Fallon et al., 2018). Observers noted more proactive behavior management, greater student cooperation, and fewer disruptive behaviors in classrooms where teachers received coaching (Bradshaw et al., 2018).

Although promising, the Double Check model is comparatively resource intensive, requiring a staff of coaches, classroom observations, and in-person professional development to support CRCM implementation. This complexity may present challenges for sustainable, high quality implementation in real-world school settings not participating in a research trial (McHugh & Barlow, 2010). Recognizing that opportunities for robust university-school partnerships may be limited for many schools where students could benefit from CRCM, there is a need to thoroughly investigate a potentially more scalable teacher training option: online professional development in CRCM.

**1.3.2 Online professional development for teachers.** Online professional development (OPD) is a promising tool for addressing many of the concerns (e.g., time commitment [Stormont et al., 2015], availability of high-quality instructors [Bayar, 2014], cost) raised about teacher in-service trainings. OPD provides teachers an opportunity to participate in trainings that may not be available locally, allows them to

work at their own pace and at times convenient to their schedule, and does not incur costs associated with face-to-face professional development such as class release time, space rental, and travel (Treacy et al., 2002). OPD offers a convenient vehicle for delivering high quality, consistent professional development content to teachers, especially those in rural or remote geographical regions (Dede et al., 2009; Erickson et al., 2012; O’Dwyer et al., 2007). OPD in CRP may be a particularly attractive option for South Carolina schools, where 50% of the 116,000 students in rural districts are students of color, nearly 70% are from low-income families, and both educational spending and achievement are low compared to national averages (Showalter et al., 2017). Finally, research has shown that OPD can be effective even without interaction between participants (Carey et al., 2008) and that, when training content is the same, OPD delivers the same outcomes in teacher knowledge and beliefs, increased motivation, and classroom practices as traditional face-to-face training (Fishman et al., 2013; Kabilan, 2014).

Online delivery may be a particularly apt medium for training teachers in CRP. Self-reflection – on their personal biases, attitudes, and culturally responsive practice – is an essential component of teacher training in CRP (Weinstein et al., 2014). Compared to the time-limited nature of in-person trainings, OPD can promote in-depth reflection on content because participants are free from time constraints (Delfino & Persico, 2007). OPD in CRCM strategies is likely to be well received by teachers: teachers often express high levels of satisfaction with OPD (Guskey, 2000), especially when it focuses on strategies that are easily transferred to the classroom (Reeves & Pedulla, 2011). OPD may also be a cost-effective strategy for promoting widespread familiarization with CRP

among a state or district's teaching staff, creating a foundation for more resource-intensive coaching in implementing CRP.

#### **1.4 Evaluating the Impact of CRP Teacher Training**

Professional development trainings within schools are often poorly evaluated (Office for Standards in Education, 2006); however, it is important to understand the impact that schools may reasonably expect from investing in a professional development program and where they will need to make additional investments in implementation support to bring about desired outcomes.

Desimone (2009) articulated a theory of change for effective professional development, whereby professional development increases teachers' knowledge and skills and/or changes their attitudes and beliefs. New knowledge, skills, attitudes, and beliefs are then used to improve the quality of their teaching and classroom interactions, which foster improved student outcomes. Immediate outcomes of professional development in CRP specifically may include enhanced awareness of research on discipline disproportionality, self-reflection on personal cultural influences, increased comfort discussing issues around culture and bias, and increased awareness of students' cultural context and factors that may influence behavior (Bradshaw et al., 2018). More intermediate outcomes may include increased self-efficacy to use CRP, more positive beliefs about the benefits of CRP, and increased use of CRP in the classroom. Achieving the ultimate goal of eliminating disproportionate discipline, while desirable, is unlikely without concurrent implementation of the disaggregated data review, policy changes, and stakeholder engagement described above.

Studies of teacher professional development programs often examine the effect of training on teacher attitudes, self-efficacy, and reported or observed implementation of strategies/skills from the intervention (Bottiani et al., 2018). Evidence from past studies on CRP-related professional development and support suggest that more intensive interventions, such as coaching, may be necessary for improving teacher and student behaviors, but that professional development interventions can be effective at improving attitudinal outcomes, including teacher beliefs about CRCM, self-efficacy for CRCM implementation, and self-reported use of CRCM strategies (Bradshaw et al., 2018; Diedrichs & Barlow, 2011; Girod et al., 2016). Additional information on these likely outcomes is provided below.

**1.4.1 Self-efficacy.** Engaging in the challenging task of critical self-reflection and considering the role of race and culture in the classroom requires teachers to be motivated and committed to reducing disproportionality in discipline. To implement CRCM strategies, teachers must not only acquire the skills to implement CRP, but they must possess adequate self-efficacy. Within social cognitive theory, Bandura (1977) proposed that self-efficacy is required for an individual to put learned knowledge and skills to use. Self-efficacy is “not simply a matter of how capable one is, but of how capable one believes oneself to be” (Pajares, 2002, para. 35). Closely linked to motivation, beliefs about one’s self-efficacy for a task influences how much effort an individual will expend and how long they will persist to overcome barriers (Bandura, 1995, 1997).

Professional development has been found to have significant impacts on improving teacher self-efficacy (Gettinger et al., 2008; Schwehr, 2014). Teachers with higher self-efficacy are more likely to try new teaching ideas, persist in efforts to help

struggling students, utilize classroom management strategies that promote high levels of on-task student behavior, and hold more positive beliefs about managing student behavior (Graham et al., 2001; Ross & Bruce, 2007; Woolfolk et al., 1990).

***1.4.1.1 Self-efficacy and outcome expectancy beliefs for CRCM.*** Self-efficacy beliefs are context-, task-, and domain-specific (Bandura, 1977). Therefore, measures of self-efficacy must closely correspond with the desired behavior in order to predict future behavior (Bandura, 1986).

Self-efficacy for CRCM is defined as “an individual’s beliefs in his or her capabilities to successfully perform CRCM tasks” (Siwatu et al., 2017, p. 868) including setting appropriate behavioral expectations, consistently and equitably enforcing rules, creating a caring classroom environment, understanding that student behavior may be a reflection of cultural norms that differ from behavioral expectations in traditional classrooms, and using appropriate interventions to assist students with behavior problems. Self-efficacy for CRCM is theorized to develop through mastery experiences, vicarious experiences, social persuasion, and affective or psychological states (Bandura, 1977). OPD in CRCM may promote greater self-efficacy by sharing examples of successful implementation (vicarious experiences), discussing content in a respectful and encouraging tone (positive affective or psychological states), and promoting the belief that teachers are capable of using recommended strategies and are actively taking steps to incorporate CRCM in their classrooms (social persuasion).

It is important to understand teachers’ self-efficacy for CRCM in order to improve the design and use of efficacy-building interventions (Malo-Juvera et al., 2018). Teachers

are more likely to commit to the work of implementing CRCM practices if they believe that they are capable of doing so successfully (i.e., self-efficacy) and feel that CRCM strategies will lead to positive outcomes (i.e., positive outcome expectancy beliefs; Siwatu, 2007). It is theorized that self-efficacy and outcome expectancy beliefs can serve as an indicator of future classroom behavior (Pajares, 2003). Self-efficacy has been linked to greater implementation of school-based interventions (Downer et al., 2009); prior research has shown significant associations between teacher's self-efficacy beliefs and their observed implementation of proactive and supportive strategies for improving student behavior (Almog & Shechtman, 2007; Debnam et al., 2015). Professional development on CRCM has led to consistent increases in teachers' self-efficacy for these practices (Tucker et al., 2005), although teachers may continue to feel most self-efficacious in their ability to perform easier classroom management tasks associated with CRCM (e.g., clearly communicating classroom policies, teaching students how to work together) and least self-efficacious in their ability to perform more difficult tasks (e.g., using culturally responsive discipline practices to alter defiant behavior) (Siwatu et al., 2017).

**1.4.2 Self-Reported Implementation of CRCM.** Perhaps due to social desirability bias, teachers tend to self-report higher rates of CRCM implementation than are recorded by externally conducted observations (Debnam et al., 2015). More intensive implementation supports, such as ongoing coaching and consultation, may be necessary for effecting observable, objective changes in teacher behavior (Bradshaw et al., 2018). However, self-assessment can heighten teacher *awareness* of their current practices (Hershfeldt et al., 2009) -- considered the first step in making real change towards

incorporating CRP (Skiba et al., 2008) -- and provides important information about ongoing professional development needs.

### **1.5 Evaluating the Feasibility and Social Validity of CRP Teacher Training**

It is important to evaluate whether teachers find professional development in CRP and more specific CRPM strategies socially valid because there is a strong relationship between social validity, implementation fidelity, and improved outcomes (Fallon et al., 2015; Gresham et al., 2000; Lane et al., 2009; Elliott et al., 1984). Socially valid interventions are perceived as acceptable and capable of producing valued positive outcomes (Gresham et al., 2000). Social validity can include measures of perceived acceptability, efficacy, accessibility, and feasibility. Feasibility is defined as the extent to which an intervention is able to be implemented as planned within a setting or population (Bowen et al., 2009) and, similar to social validity, can include elements of acceptability, practicality (i.e., dose), demand (i.e., response to recruitment, expressed interest), and fidelity.

**1.5.1 Acceptability.** Acceptability is a frequent measure of feasibility focused on measuring participants' satisfaction with the intervention (Bowen et al., 2009). Self-report measures that include questions about participants' level of satisfaction, enjoyment, likelihood of recommending the intervention to a colleague, and perceived benefits of the intervention are commonly used to assess acceptability.

**1.5.2 Practicality.** Practicality measures the extent to which an intervention can be implemented when resources (e.g., time, funding) are limited (Bowen et al., 2009).

Time commitment is a common concern in the teacher professional development

literature (Stormont et al., 2015). Given the extensive demands made on their time, training completion rates are commonly conceptualized as a measure of teachers' ability to carry out and engage in intervention activities (Bowen et al., 2009).

**1.5.3 Demand.** Demand for an intervention is an indication of how likely a program will be utilized by possible participants (Bowen et al., 2009). Measures of intervention demand may include study sample size or participants' initial response to recruitment (i.e., percentage of teachers who participated in the intervention relative to the school's total number of faculty who could have possibly participated).

**1.5.4 Fidelity.** Assessing intervention fidelity, or the degree to which an intervention is delivered as intended (Carroll et al., 2007), is required for valid interpretation of intervention outcomes and identifying essential mechanisms of change. One benefit of OPD is its standardization of content delivery: as long as participants watch the included videos (the completion of which is logged by the training platform) they will all receive the same content, delivered by a national expert.

In spite of the importance of feasibility and social validity in effective and sustainable interventions, feasibility data on interventions are generally underreported (Bird et al., 2014). Published research on the feasibility of CRP teacher interventions is incredibly limited. Only one recent study (Pas et al., 2016) reported on elements of feasibility (e.g., dosage, fidelity, acceptability) related to an adaptation of the Classroom Check-Up coaching model to promote CRCM. Although Fallon and colleagues (2015) reported more extensively on the social validity of recommended practices involved in CR-PBIS, the educators surveyed in this study were responding to hypothetical practices

rather than practices on which they had received training. Before South Carolina schools endorse the widespread use of OPD in CR-CRM or make a commitment to CR-PBIS, it is essential that they have a sense of their perceived social validity and feasibility among educators who have experience with the training.

## **1.6 The Current Study**

This study was conducted as part of the efforts of the Education Workgroup of the South Carolina Child Well-Being Coalition, a project of the South Carolina Department of Health and Environmental Control, Bureau of Maternal and Child Health, managed and facilitated by Children’s Trust of South Carolina. The purpose of the Coalition was to work collectively to support and implement evidence-based and promising practices and policies that would alleviate the effects of poverty and improve outcomes for all children in South Carolina.

The Education Workgroup chose to focus on reducing missed learning days due to suspension or expulsion, beginning in early childhood. A review of available data demonstrated that South Carolina followed national trends in disproportionate discipline: across South Carolina elementary schools, Black students are over 3.5 times more likely to receive an OSS than White students (U. S. Department of Education Office for Civil Rights, 2019). This was considered important because suspensions can hinder academic growth and contribute to racial disparities in achievement (Morris & Perry, 2016).

Although schoolwide efforts to reduce rates of exclusionary discipline through PBIS have demonstrated effectiveness in reducing overall rates of exclusionary discipline when implemented with high fidelity, they do not eliminate disproportionalities in

discipline (McIntosh et al., 2018). Hypotheses for why disproportionality remains have focused on the role of implicit bias and cultural mismatch between diverse students and majority school culture. Racial disparities in school discipline are associated with county-level rates of implicit bias (Riddle & Sinclair, 2019) and Black students tend to be disciplined most disproportionately for infractions that involve subjective judgement (Morris & Perry, 2017), suggesting that they be a result of cultural mismatch or misinterpretation of behavior considered culturally appropriate in the child's culture.

There has been a call to reduce disproportionality and the impact of implicit bias by promoting the use of CRCM practices within PBIS. Teacher professional development in CRP represents a relatively new field of study. A recent systematic review of professional development for CRP found that few studies reported on intervention outcomes, detailed information about participants, or intervention feasibility (Bottiani et al., 2018). The authors identified a need for additional research to determine sufficient training dosage, report more contextual and demographic information on participants (e.g., years in education, gender, preservice exposure to CRP practices), and examine readiness for implementation. Elements of feasibility and social validity were not described within the review but are crucial for improving the relevance and acceptability of effective interventions before wide scale dissemination. More recent intervention studies not included in the review (i.e., Bradshaw et al., 2018; Fallon et al., 2018; Pas et al., 2016) have studied relatively resource intensive intervention models, which may not always be feasible for real-world school settings without substantial external support.

Considering the importance of reducing disproportionate discipline and the limits of existing research on the impact and feasibility of scalable teacher professional

development options, this study aimed to characterize the impact, social validity, and feasibility of a brief OPD training in CRP. Specific aims for the current study included:

**Aim 1.** Characterize the impact of a brief online training on CRP, including its effect on improving self-efficacy for CRCM, expected positive outcomes from CRP, and self-reported implementation of CRP.

**Hypothesis 1.** Based on theoretical and preliminary evidence, teachers who completed the training were expected to report increases in self-efficacy for and more positive expected outcomes resulting from using culturally responsive classroom practices. Prior research indicates that behavioral changes may require more intensive implementation support, such as coaching (Bradshaw et al., 2018), so changes in self-reported CRP implementation were not expected.

**Aim 2.** Determine the social validity and feasibility of online professional development on CRP, as measured by adequate (a) acceptability, (b) practicality, (3) demand, and (4) scores on a measure used to reliably assess factors associated with the quality of school-based intervention use and maintenance over time.

**Hypothesis 2.** Due to its accessible mode of training delivery and relatively brief structure, it was anticipated that participants would find the OPD module to be acceptable, practical, and demonstrate adequate demand, as indicated by quantitative data collected at post-intervention.

**Aim 3.** Inform wider dissemination of the training and implementation of CRCM by determining areas for improvement, additional training and support needs, and

attitudes about classroom- and professional development-focused components of CR-PBIS.

**Hypothesis 3.** Consistent with prior research (Fallon et al., 2015), it was anticipated that participants would express positive attitudes about classroom- and professional development-focused components of CR-PBIS. No pilot information had been published about this particular training, making the collection of information about areas for improvement and additional support especially important for schools interested in making this training salient and useful for their teachers.

## CHAPTER 2

### METHOD

#### 2.1 Participants

Data for the current study were collected from preschool (3K)-3<sup>rd</sup> grade teachers and instructional aides ( $N = 74$ ) in South Carolina. Participants included 32 3K-5K teachers, 18 3K-5K instructional aides, 19 1<sup>st</sup>-3<sup>rd</sup> grade teachers, and five 1<sup>st</sup>-3<sup>rd</sup> grade instructional aides. Study participants represented staff at 20 schools in six public school districts in South Carolina. The sample was predominantly female (97.3%), White (82.4%), and ranged from ages 23 to 70 years ( $M$  age = 43.45 years;  $SD = 12.45$ ). Regarding education level, 14.9% of participants reported having less than a bachelor's degree, 29.7% reported have a bachelor's degree only, 29.7% reported having a master's degree, 13.5% reported having a master's degree + 30 graduate credits, and 1.4% reported having a doctoral degree. Participants' years of experience in the education system ranged from 0 to 41 years ( $M = 14.53$ ;  $SD = 11.03$ ). Prior to this training, 27% of participants reported that they had received training or instruction on implicit bias; 66.2% had received training on CRP, culturally responsive teaching, or teaching diverse students; and 90.5% had received training on classroom management practices (see Table 2.1 for a summary of participant sociodemographic characteristics).

During the semester when participants completed the training and data collection, 79.7% primarily participated in in-person classroom learning and 20.3% taught via

hybrid learning (i.e., partial in-person learning, partial virtual/distance learning). In their current classrooms, 54% of participants reported that a majority of their students belonged to a racial/ethnic minority group, 62.2% of participants reported that less than 5% of their students spoke English as a second language, and 54% of participants reported that a majority of their students qualified for free/reduced lunch (see Table 2.2 for a summary of participant classroom characteristics).

The final sample consisted of 74 participants. All participants completed the pre-intervention survey, online training and reflection questions, and post-intervention survey, except one participant who completed the pre-intervention survey and online training but only partially completed the post-intervention survey. Therefore, 74 participants were included in the characterization of the sample (i.e., participant sociodemographic data, classroom characteristics, classroom management self-efficacy) and analysis of post-training qualitative feedback and the training-specific social validity questionnaire, but only 73 participants were included in analysis of the preliminary training outcomes (CRCM self-efficacy, CRP outcome expectations, CRP implementation checklist) and participant attitudes about CR-PBIS professional development and classroom practices.

## **2.2 Procedure**

Intervention implementation and data collection procedures received approval by the University of South Carolina Institutional Review Board (IRB) and, when required, additional approval by the school district's IRB. The study utilized a mixed-methods, pre/post non-experimental design.

**2.2.1 School recruitment.** In response to a pause necessitated by the COVID-19 pandemic, schools were recruited in two phases: an initial statewide recruitment strategy based on school-level rates of disproportionate discipline in 2019 and a second convenience sampling strategy involving two districts that had demonstrated commitment to PBIS/Pyramid Model implementation and expressed a strong interest in training their teachers on CRP in 2020-2021.

During the initial recruitment phase, potential schools for the study were identified by calculating relative rate indices from 2015-2016 discipline data compiled by the Office for Civil Rights (U. S. Department of Education Office for Civil Rights, 2019). Relative rate indices represent a statistically unbiased approach for calculating disproportionality and are not affected by the relative proportion of minority students to the total school population (Feyerherm & Butts, 2003). Education Workgroup members reviewed the list of school districts where Black students were at least twice as likely to receive at least one OSS as a White student, discussed their experiences working with these districts and knowledge of current district initiatives, and reached out with information about the study to their district contacts.

Districts who responded were contacted with additional information about the study and to confirm that their elementary schools were currently implementing schoolwide strategies to promote positive behavior and reduce exclusionary discipline practices. This stipulation was included because the CRP training was designed to serve as a supplement for schools already implementing PBIS/the Pyramid Model. As requested, additional meetings and conference calls were conducted with district-level staff to answer questions about participation requirements. Eleven elementary schools

from six districts agreed to participate and identified approximately 122 teachers who wished to complete the training and surveys. School administrators were instructed to distribute study participation invitations to eligible instructional staff via email at the beginning of March 2020. On March 15, 2020, South Carolina's governor ordered all public schools to close in response to the COVID-19 pandemic (SC Exec. Order No. 2020-09, 2020). Active recruitment and data collection were paused in late March 2020 to reduce the influence of the pandemic and virtual learning on participant responses. Before the pause, 17 teachers completed the study sign-up survey and gained access to the training; seven teachers completed the pre-intervention survey, online training, and post-intervention survey. Administrators from this initial group of eleven schools did not respond to outreach to redistribute the training opportunity to their teachers when the study resumed in Fall 2020.

In the second phase of school recruitment in October 2020 – January 2021, two school districts were identified through the Behavioral Alliance of South Carolina (a state-funded initiative to improve school behavioral health programming in South Carolina emphasizing working with students with disabilities, see [www.schoolbehavioralhealth.org/basc](http://www.schoolbehavioralhealth.org/basc)) that expressed a strong interest in providing their teachers with training on CRP. These districts had both made a significant investment in training their teachers in the implementation of PBIS and the Pyramid Model and were committed to creating safe and supportive classroom environment for all of their students through recent district-level diversity, equity, and inclusion (DEI) initiatives. One district elected to give elementary principals the choice to offer the training opportunity to their teachers to complete outside of school time. The second district decided to prioritize

training for preschool staff, identified a list of participants, and arranged for participants to complete the training and surveys during a district professional development day or during the school day while their classroom was covered by a substitute teacher.

**2.2.2 Teacher recruitment.** Teachers and instructional aides in 3K-3<sup>rd</sup> grade at participating schools were invited via email to complete informed consent as well as pre-intervention demographic and baseline measures. Participants who completed these measures were sent an access code and instructions to complete the online training, associated reflection questions, and post-intervention measures. Participants were instructed to complete these tasks within ninety days (i.e., the length of time participants had access to the online training once their account was activated). Individuals with incomplete participation were sent weekly to biweekly email reminders to complete the training and survey. The training and all measures could be completed on any computer with internet access. All study data were collected and managed using REDCap electronic data capture tools hosted at the University of South Carolina (Harris et al., 2009; Harris et al., 2019). REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies.

Access to the online training package was granted at no cost to participants (typical cost is \$29). Participants who completed the online training had the option of downloading a Pyramid Model Certificate of Training attesting that they completed two hours of professional development. Participants who successfully completed the training and measures outside the school day received a \$20 Amazon gift card in appreciation of their time. Participants in the district which arranged for participation during the school day were prohibited by district policy from receiving the financial incentive; instead, the

district arranged for participants who completed all study requirements to receive district continuing education credits for their participation.

**2.2.3 Intervention.** The online training employed in this study was designed by Dr. Rosemary Allen of Metropolitan State University of Denver as a professional development module to supplement the Pyramid Model (i.e., early childhood PBIS) training for early childhood educators. The training module was accessed through an online learning portal hosted by The Pyramid Model Consortium (<https://www.pyramidmodel.org/online-courses-epyrmaid/>). The training was minimally interactive, with approximately two hours of videos to convey didactic material, pauses in material delivery to encourage participant self-reflection in response to open-ended thought questions, and several downloadable worksheets with exercises corresponding to training content. This study aimed to encourage a less passive learning experience by requesting that participants submit their responses to the thought questions and worksheets offered within the training module as proof of training completion.

The goal of the training was to provide “information on the importance of culturally responsive practices in enhancing outcomes for all children, especially those from diverse backgrounds” (National Center for Pyramid Model Innovations, 2016). Training content focused on the nature and role of implicit bias in inequitable outcomes for students, how to recognize and identify implicit bias, the importance of CRP, and ideas to implement seven principles of CRP in the classroom. It followed several recommended strategies for combating implicit bias (Allen & Steed, 2016; Weinstein et al., 2004), including: 1) raising awareness of the nature of implicit bias and its role in creating inequitable outcomes; 2) creating a space for teachers to reflect on their thought

processes and beliefs about students to determine where and when implicit bias may influence teacher behavior and decision making; 3) recognizing how culture influences our values and expectations, and how teachers, schools and the homes/communities of students may hold different cultural values and therefore behavioral norms and expectations; and 4) exploring how teachers can use CRP to enhance outcomes for all children, but especially those from diverse backgrounds. Importantly, the training invited teachers to engage in self-reflection based on their own experiences in the classroom and with their students. Dr. Allen communicates that there are “no quick and simple solutions” that work for all students in every classroom. Therefore, the training focused on building motivation for addressing the issue of implicit bias and its contribution to disproportionate discipline and encouraging teachers to engage in the self-reflection necessary for bringing implicit, unconscious influences into conscious consideration and engaging in more equitable, intentional classroom actions.

### **2.3 Measures**

Basic demographic data (e.g., age, gender, race/ethnicity, level of education, years of elementary teaching experience) and information about prior training on related professional development topics (e.g., implicit bias, classroom management, CRP) was obtained during pre-intervention data collection. Participants were also asked to provide some information to characterize their current classrooms, including the approximate percentage of students who were not White, spoke English as a second language, and qualified for free/reduced lunch. In South Carolina, teachers have access to this information through a web-based portal called South Carolina Enrich (South Carolina Department of Education, 2021).

**2.3.1 Fidelity of SWPBIS implementation.** Because the CRP training was designed to serve as a supplement for schools already implementing PBIS/the Pyramid Model, schools were asked to assess their current level of SWPBIS implementation to ensure that they met an adequate level of implementation fidelity. PBIS teams at each participating school were asked to complete the Tier 1 scale of the SWPBIS Tiered Fidelity Inventory (TFI) (Algozzine et al., 2014). Members of the PBIS leadership team at each school were asked to review the TFI individually and determine preliminary ratings. The team then came together for a consensus meeting facilitated by a District Climate Coach, where team members shared and discussed their preliminary ratings until they came to consensus on scores for their school. TFI scores were reported in the PBISapps TFI website (<https://www.pbisapps.org/products/tfi>) by District Climate Coaches, from which Tier 1 reports were generated for this study. The Tier 1 scale included 15 items. Prior studies have demonstrated evidence of reliability for the Tier 1 score, as well as convergent validity with other Tier 1 SWPBIS measures, content validity, factor structure, and interrater and test-retest reliability (Mercer et al., 2017; McIntosh et al., 2017). Schools that scored at or above 70% on the scale were considered to have demonstrated adequate Tier 1 SWPBIS implementation.

**2.3.2 Self-efficacy in classroom management.** Teachers' perceptions of their ability to successfully accomplish specific classroom management tasks (e.g., "How much can you do to control disruptive behavior in the classroom?") were assessed at pre-intervention using the 8-item classroom management subscale of the Teacher Sense of Efficacy (TSE) Scale (Tschannen-Moran & Hoy, 2001). Participants were asked to indicate "how much" they can do to accomplish each classroom management task on a

10-point scale ranging from 0 (*nothing*) to 9 (*a great deal*). Responses to each item were summed and divided by the total number of items to create a subscale mean. Participants with higher mean scores demonstrate greater self-efficacy in classroom management tasks. Prior psychometric analyses of the TSE Scale and its subscales have demonstrated a unified and stable factor structure with good construct validity and internal reliability ( $\alpha = .90$ ) (Tschannen-Moran & Hoy, 2001). Internal consistency of the classroom management subscale in the current sample was excellent ( $\alpha = .92$ ). It has been suggested that teachers may consider basic classroom management strategies a precursor to addressing more challenging culturally responsive strategies (Pas et al., 2016); therefore, this information provided important context for measures related to CRP.

**2.3.3 Self-efficacy in CRCM.** Teachers' self-efficacy to perform classroom management tasks often associated with CRP was assessed at pre-intervention and post-intervention using an adapted version of the Culturally Responsive Classroom Management Self-Efficacy (CRCMSE) Scale (Siwatu et al., 2017). The 30-item scale asked participants to rate their confidence in completing specific tasks (e.g., "Critically assess whether a particular behavior constitutes misbehavior.") on a rating scale from 0 (*no confidence at all*) to 100 (*completely confident*). Prior research on self-efficacy scales found a 0 to 100 rating scale to be psychometrically stronger and produce greater discrimination in participant responses than narrower Likert-type scales (Pajares et al., 2001). Responses to each item were summed and divided by the total number of items to generate a CRCMSE mean. Participants with higher mean scores demonstrate greater self-efficacy in CRCM tasks. Prior psychometric analyses of the CRCMSE Scale have suggested a one-factor structure with good construct validity and internal reliability

(Siwatu et al., 2017). Internal consistency of the full scale in the current sample was excellent at both pre-intervention ( $\alpha = .98$ ).and post-intervention ( $\alpha = .98$ ).

**2.3.4 Outcome expectations for CRP.** Teachers' beliefs in the positive outcomes associated with CRP were assessed at pre-intervention and post-intervention using an adapted version of the Culturally Responsive Teaching Outcome Expectation (CRTOE) Scale (Siwatu, 2007). This 14-item scale asked participants to rate their certainty that CRP would lead to a specified outcome (e.g., "Acknowledging the ways that the school culture is different from my students' home culture will minimize the likelihood of discipline problems") on a rating scale from 0 (*entirely uncertain*) to 100 (*entirely certain*). Responses to each item were summed and divided by the total number of items to generate a CRTOE mean. Participants with higher mean scores demonstrate stronger beliefs in the benefits of implementing CRP. Prior psychometric analyses of the CRTOE Scale have suggested a one-factor structure and good internal reliability (Siwatu, 2007). Internal consistency of the full scale in the current sample was excellent at both pre-intervention ( $\alpha = .93$ ).and post-intervention ( $\alpha = .95$ ).

**2.3.5 Self-reported implementation of CRP.** At pre-intervention and post-intervention teachers completed a self-assessment of the frequency with which they engage in 23 culturally responsive classroom practices related to reflective thinking (five items), authentic teacher-student relationships (six items), effective communication (six items), connection to the curriculum (three items), and sensitivity to students' cultural identities (three items). For each item, they were asked to assess the "ease and effectiveness" with which they apply each strategy on a continuum from 1 (*Never in my class and school*) to 4 (*Regularly in my class and school*). This teacher self-assessment

was originally used in a trial of the Double-Check framework to determine areas of CRP where teachers required additional professional development training, resources, or coaching (Hershfeldt et al., 2009). Means were calculated for each of the five practice areas (i.e., reflective thinking, authentic teacher-student relationships, effective communication, connection to the curriculum, sensitivity to students' cultural identities) and the total scale. Higher scores represent greater self-reported implementation of CRP. Internal consistency of the full scale in the current sample was excellent at both pre-intervention ( $\alpha = .90$ ) and post-intervention ( $\alpha = .93$ ).

**2.3.6 Feasibility/social validity.** A mixed methods approach (i.e., quantitative self-report measures, qualitative feedback) was used to measure program feasibility and social validity. In addition to quantitative self-report measures, participants were asked to respond to several feedback questions about the online training and CRP at post-intervention. Additional measures of program feasibility included response to recruitment (i.e., whether the full number of teachers for whom training codes were available signed up for the training), program completion (i.e., percentage of participants who are logged as completing the full online training), and a review of the reflection questions completed as part of the training to determine if participants engaged in the reflection activities. Additionally, participants were asked to share the total amount of time required to complete the training and reflection questions to more accurately assess its demand on teacher time.

**2.3.7 Social validity of online CRP training.** Participants were asked to complete an adapted version of the Usage Rating Profile-Intervention Revised (URP-IR) (Chafouleas et al., 2011) at post-intervention. Items on the URP-IR were designed to

reliably assess factors associated with the quality of school-based intervention use and maintenance over time. These factors included acceptability ( $\alpha = .81$ ), understanding ( $\alpha = .79$ ), feasibility ( $\alpha = .62$ ), family-school collaboration ( $\alpha = .55$ ), system climate ( $\alpha = .79$ ), and system support ( $\alpha = .80$ ). The Acceptability subscale asked questions about the participant's interest in and commitment to implement the intervention, as well as their perception of the intervention as generally appropriate and effective for addressing student problems. The Understanding subscale assessed whether the participant understood how to implement the intervention. The Feasibility subscale focused on the perceived complexity of the intervention and whether or not the time and resources required to implement the intervention were reasonable. The Family-School Collaboration subscale measured whether collaboration and communication with students' families would be required for effective implementation. The System Climate subscale assessed whether the intervention was consistent with the culture and priorities of their school. And, finally, the System Support subscale determined whether the intervention was perceived to require additional professional development, consultation, or resources to implement well.

Participants were asked to rate the extent to which he/she agreed or disagreed with 28 statements (e.g., "I would be committed to carrying out this intervention.") using a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). This instrument was designed to be helpful in planning and evaluating intervention efforts in schools and has been assessed for factor structure and internal consistency (Briesch et al., 2013). The six factors can be interpreted individually and as an overall mean. However, the Family-School Collaboration subscale was excluded from analyses due to unacceptable levels of

internal consistency (i.e.,  $\alpha \leq .60$ ; DeVillis, 2016). Scores from the remaining five subscales (25 total items) were summed and averaged to create a total social validity score. When composing an overall mean or interpreting higher scores as more feasible/socially valid, System Support questions were reverse coded (Chafouleas et al., 2011). Internal consistency of the full scale in the current sample was good ( $\alpha = .89$ ). Participants were expected to respond favorably to most items on the URP-IR, consistent with teacher evaluation of other CRP interventions (Fallon et al., 2018). Results from the scale were used to identify perceived barriers and facilitators to implementing the online training and related CRP strategies.

**2.3.8 Social validity of specific CRP and professional development topics.** To assess the social validity of specific culturally responsive classroom practices and related professional development topics, participants were asked to complete an adapted version of the survey used by Fallon et al. (2015) at post-intervention. Items for this survey were originally generated from the recommendations for culturally and contextually responsive SWPBIS practices proposed by Sugai et al. (2012) and Fallon et al. (2012). Participants were asked to rate the acceptability (“This practice is relevant and useful to the work I do.”), feasibility (“I could implement this practice given the knowledge, time, and resources I have.”), and efficacy (“This practice would work to improve behavior for all my students.”) of eight recommended classroom practices and the acceptability, feasibility, efficacy, and accessibility (“I have access to professional development and training relevant to this practice.”) of five professional development topics using a 6-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). Higher scores indicate greater social validity. The classroom practices and professional development domains

have previously demonstrated adequate internal consistency reliability ( $\alpha = .74-.93$ ) and were evaluated by PBIS content experts for clarity and content validity (Fallon et al., 2015). Internal consistency of the classroom practices ( $\alpha = .89-.91$ ) and professional development ( $\alpha = .93-.94$ ) domains in the current sample were excellent.

## **2.4 Analytic Procedure**

All quantitative analyses were conducted using SPSS v. 27.0 (IBM Corp, 2020). Qualitative analyses were conducted using Dedoose Version 7.0.23 (<https://www.dedoose.com/>), a collaborative, cloud-based software for managing, analyzing, and presenting qualitative and mixed method research data (Salmona et al., 2019). De-identified survey data from post-training open-ended qualitative questions were uploaded to Dedoose, where the application allowed researchers to independently review responses, tag text excerpts, and apply codes. As codes were assigned, Dedoose organized the qualitative data and supplied reports of aggregated codes and text excerpts that had been coded by researchers.

**2.4.1 Teacher and school characteristics.** Descriptive statistics (i.e., total count, percentage, mean, standard deviation) were calculated for teacher sociodemographic and classroom characteristics, teacher classroom management self-efficacy, and Tier 1 TFI scores in order to characterize the sample.

### **2.4.2 Aim 1: Preliminary intervention outcomes.**

**2.4.2.1 Effect of online CRP training on teacher outcome measures (CRCMSE Scale, CTROE Scale, Double-Check Self-Assessment).** Dependent samples *t*-tests were used to examine changes from pre- to post-intervention on all teacher outcome variables.

Cohen's *d* effect sizes were calculated for the change from pre- to post-intervention using unadjusted means. An effect of up to .20 was considered small, an effect from .20 to .50 was considered moderate, and an effect above .50 was considered large (Cohen, 1992). A Bonferroni correction was not used in order to minimize the risk of Type II error with an underpowered sample. An a priori power analysis determined that 90 participants would be required to detect an effect size of 0.3 with a power of 80% and  $p < .05$ ; the final sample for pre-post analyses was 73 participants.

**2.4.2.2 Item-level analysis of CRCMSE Scale.** Siwatu et al. (2017) recommends examination of both global scale scores and item-specific responses to identify the types of tasks in which teachers feel most and least self-efficacious. To that end, item-level descriptive statistics were calculated based on post-intervention CRCMSE Scale responses and the items which teachers rate in the upper and lower quartiles were identified. Identifying item-level behaviors in which teachers remain least self-efficacious was important for recommending areas in which teachers may need additional support.

**2.4.2.3 Qualitative feedback on impact of online training.** Using Dedoose software, qualitative data collected at post-intervention was analyzed by two independent coders (two doctoral psychology students) at the semantic level using inductive thematic analysis (Patton, 1990) following the qualitative analytic procedures described by Braun and Clarke (2006). This procedure involved first examining participants' written responses to questions related to training impact (i.e., "What was the most important thing you learned as part of this training?" and "Describe the impact the training had on how you think of student behavior and classroom management.") and identifying meaningful units of text relevant to the intervention. Then, both raters independently

coded each response with one or more provisional codes. Provisional codes were then compared across raters and discussed until unanimous agreement was achieved for each response, assuring inter-rater reliability. Finally, both raters reviewed the codes and grouped them into overarching analytic themes and subthemes (Moretti et al., 2011). The inductive thematic analysis resulted in 13 codes related to training impact, which were then grouped into four key themes.

### **2.4.3 Aim 2: Intervention social validity and feasibility.**

**2.4.3.1 Usage Rating Profile-Intervention Revised (URP-IR).** Descriptive statistics (i.e., means, standard deviations) were computed for the full scale and all subscales with acceptable internal consistency at post-intervention.

**2.4.3.2 Quantitative measures of intervention social validity and feasibility.** Acceptability was assessed by determining the percentage and number of participants who responded in the affirmative to the question, “Would you recommend this training to other elementary school teachers?” at post-intervention. Practicality was assessed by calculating completion rates for participants from the second phase of recruitment. Completion rates (i.e., percentage, total number of participants) were calculated for participants who had completed the training and for participants who completed all study requirements for the entire sample and for each of the two participating districts in the second study phase. Descriptive statistics (i.e., mean, standard deviation) were calculated for the number of minutes participants reported was required to complete the training. Demand for the training was calculated for each of the two districts in the second

recruitment phase by determining the percentage of the possible recruitment pool that signed up to participate in the study.

**2.4.3.3 *Qualitative feedback on intervention social validity and feasibility.*** The qualitative analytic procedure described above was used to analyze open-ended, post-intervention feedback related to the acceptability and practicality of the training. Inductive thematic analysis resulted in five codes related to the theme of training acceptability and three codes related to the theme of training practicality.

#### **2.4.4 Aim 3: Informing dissemination of online CRP training.**

##### **2.4.4.1 *Social validity of specific CRP and professional development topics.***

Descriptive statistics (i.e., means, standard deviations) were computed for each item and domain of the adapted CR-PBIS survey developed by Fallon et al. (2015).

**2.4.4.2 *Qualitative feedback on areas for improvement and additional training and support needs.*** The qualitative analytic procedure described above was used to analyze open-ended, post-intervention feedback related to ways in which the training could be improved, areas in which participants would like additional training or resources, and additional supports schools could provide that would help participants implement and sustain use of CRP. The inductive thematic analysis resulted in nine codes related to areas for improvement, which were then grouped into two key themes, and eight codes related to support needs for CRP implementation, which were grouped into four key themes.

Table 2.1. Sociodemographic characteristics of the current study.

Sociodemographic characteristic ( <i>N</i> = 74)	%	<i>n</i>
Gender		
Female	97.3	72
Male	2.7	2
Race/Ethnicity		
White/Caucasian	82.4	61
Black	16.2	12
Hispanic/Latinx	1.4	1
Level of education		
Bachelor's degree	40.5	30
Master's degree	29.7	22
Master's + 30	13.5	10
Doctoral degree	1.4	1
Other	14.9	11
Grade level/Role		
3K-5K Teacher	43.2	32
3K-5K Aide	24.3	18
1 <sup>st</sup> -3 <sup>rd</sup> Grade Teacher	25.7	19
1 <sup>st</sup> -3 <sup>rd</sup> Grade Aide	6.8	5
Prior classroom management training		
Yes	90.5	67
No	9.5	7
Prior implicit bias training		
Yes	27	20
No	73	54
Prior CRP training		
Yes	66.2	49
No	33.8	25

Table 2.2. Classroom characteristics of the current study.

Classroom characteristic ( <i>N</i> = 74)	%	<i>n</i>
Teaching modality		
In-person	79.7	59
Hybrid learning	20.3	15
Percentage of minority students		
0 – 5	13.5	10
6 -- 10	5.4	4
11 -- 25	5.4	4
26 -- 50	21.6	16
51 -- 75	27.0	20
76 -- 100	27.0	20
Percentage of students on free/reduced lunch		
0 -- 5	14.9	11
6 -- 10	9.5	7
11 -- 25	8.1	6
26 -- 50	13.5	10
51 -- 75	21.6	16
76 -- 100	32.4	24
Percentage of students who speak English as second language		
0 – 5	62.2	46
6 – 10	8.1	6
11 – 25	9.5	7
26 -- 50	6.8	5
51 – 75	6.8	5
76 -- 100	6.8	5

## CHAPTER 3

### RESULTS

#### 3.1 Sample Descriptives

**3.1.1 Fidelity of SWPBIS implementation.** Five of the 20 schools included in the study provided Tier 1 TFI reports to characterize their school's current level of SWPBIS implementation. All schools exceeded the 70% implementation cut-off, indicating adequate SWPBIS implementation. Overall and subscale implementation fidelity results can be found in Table 3.1. Tier 1 TFI reports were not requested from schools involved in pre-pandemic recruitment or from early childhood centers/preschools implementing the Pyramid Model.

**3.1.2 Participant self-efficacy in classroom management.** Overall, results from the classroom management subscale of the TSE Scale indicate that study participants possess good self-efficacy with respect to classroom management tasks. Specifically, on a scale of 0 (*nothing*) to 9 (*a great deal*), participants, on average, felt that they could do a good deal to control disruptive behavior in the classroom ( $M = 7.68, SD = .98$ ). Possessing adequate basic classroom management strategies has been considered a precursor to addressing more challenging culturally responsive strategies (Pas et al., 2016); insufficient classroom management self-efficacy should not be a barrier to considering CRP for this sample.

### 3.2 Aim 1: Preliminary Intervention Outcomes

The study's first primary aim was determining whether the online CRP training was effective in (a) increasing participants' self-efficacy for CRCM practices and (b) increasing expected positive outcomes from use of CRP. CRPs in which teachers reported the most and least self-efficacy at post-intervention were also identified. A secondary aim was characterizing the impact of the training on teacher's self-reported implementation of CRP. Results of dependent samples *t*-tests for pre- to post-intervention on all participant outcome variables are reported in Table 3.2.

**3.2.1 Effect of online CRP training on CRCM self-efficacy and outcome expectations.** Results from dependent samples *t*-tests indicated significant increases in self-efficacy for CRCM from pre- to post-intervention ( $t(72) = 5.93, p = .000$ ), with a large effect size ( $d = .69$ ). Similarly, there was a significant increase in expected positive outcomes from use of CRP from pre- to post-intervention ( $t(72) = 2.364, p = .021$ ), although the effect size was moderate ( $d = .28$ ).

Item-level analysis of post-intervention CRCMSE responses identified areas in which participants felt most and least self-efficacious at post-intervention. Consistent with Siwatu et al.'s scale validation study (2017), participants reported feeling most self-efficacious in their ability to perform basic classroom management tasks associated with CRCM (e.g., clearly communicating classroom policies, including materials with diverse student representation in the classroom) and least self-efficacious in their ability to perform more advanced classroom management tasks associated with CRCM (e.g., using culturally responsive discipline practices to alter defiant behavior, applying culturally

appropriate methods to partner with parents). A summary of the items teachers rated in the upper and lower quartiles are reported in Table 3.3. It should be noted that, on average, participants reported high self-efficacy for CRCM at post-intervention (on a scale from 0 to 100, mean item-level scores ranged from 80.59 – 94.58).

### **3.2.2 Effect of online CRP training on self-reported CRP implementation.**

Results from dependent samples *t*-tests indicated significant increases in total self-reported implementation of CRP from pre- to post-intervention ( $t(72) = 2.58, p = .000$ ), with a moderate effect size ( $d = .30$ ). Statistically significant increases in self-reported implementation of reflective thinking ( $t(72) = 2.44, p = .017$ ) and effective communication ( $t(72) = 2.01, p = .048$ ) practices were observed from pre- to post-intervention. Effect sizes were similarly moderate for improvements in reflective thinking ( $d = .29$ ) and effective communication ( $d = .24$ ). No significant increases in self-reported implementation from pre- to post-intervention were observed for authentic teacher-student relationships ( $t(72) = .99, p = .327$ ), connection to the curriculum ( $t(72) = 1.78, p = .079$ ), or sensitivity to students' cultural identities ( $t(72) = 1.36, p = .179$ ).

### **3.2.3 Qualitative feedback on impact of online training.**

After completing the training, 78.4% of participants reported that they would think about student behavior and classroom management differently than they did before the training. Seventy-three participants provided responses to open-ended questions about how the training would impact their behavior as educators. Analysis of these qualitative responses resulted in three distinct themes: (a) teacher-focused cognitive processes, (b) teacher-focused behavioral processes, and (c) family engagement strategies. Participants who reported that the training did not change how they would think about or approach student behavior

and classroom management attributed this lack of impact to: (a) already treating all students equally (e.g., “I have always tried to be open-minded and fair to everyone”), (b) finding their current behavior management strategies effective (e.g., “I do not have many behavior problems, and when I do I think I address them effectively”), and (c) already using CRP strategies in their classroom (e.g., “I feel like I am already following the suggestions from this training”). A summary of these themes and codes can be found in Table 3.4.

**3.2.3.1 Teacher-focused cognitive processes.** When asked to reflect on the most important lesson they learned from the training and to share how the training would impact their behavior in the classroom, participants most frequently listed cognitively-oriented impacts. The training encouraged them to consider how culture and prior experience can influence student behavior (e.g., “understand our students’ culture and home life because that can be the cause of their behaviors, not because they are trying to intentionally be bad”) and to engage in self-reflection (e.g., “to self-reflect and examine how my biases influence the behavioral expectations I have for my students”; “This training made me think more about journaling daily as a teacher to help deepen my understanding and look for patterns in how I handle discipline issues”). Participants reflected that the training helped them be more aware and open-minded (e.g., “just because I believe something to be one way, it’s not how someone else sees it”; “This training was a good reminder that not all students are raised the way that we were. This difference is not a deficit”). It also encouraged them to be more patient, not make assumptions, and not jump to punishment when they engage in behavior management (“I

will keep in mind that my students may not be intentionally misbehaving. I will be slower to judge the situation based on my own beliefs/values”).

**3.2.3.2 *Teacher-focused behavioral processes.*** Participants described ways that the training would influence their behavior in the classroom, including by providing ideas for incorporating CRP in their classroom (e.g., “incorporate more diversity in my lessons”; “ways I can change to become more culturally responsive in the classroom”), reinforcing the importance of using positive behavior management practices (“I need to teach what desired behaviors look like”; “I should not assume that kids know the rules of school when they start with me”), and by encouraging them to act in such a way that all students feel heard and valued (“It is important to make sure that all children feel that they are accepted, smart, beautiful, and a very important part of the school’s population”).

**3.2.3.3 *Family engagement strategies.*** Finally, participants described ways that the training encouraged them to be more intentional and active in their engagement with students and their families. Participants noted the importance of asking questions to learn more about an individual’s background, culture, or perceived differences (e.g., “It’s imperative and ok to ask and find out about cultural differences for the sake of the child’s success”; “We have to understand their lives at home and their culture to understand our students”). After completing the training, participants expressed a greater commitment to making connections through listening and engaging with their students and their families (e.g., “I must make connections with every child and with their families”; “Specific ways to engage in conversations with children to make them feel important and heard”) and in engaging more with families to promote desired behaviors at school (e.g., “I will ask the

parents for suggestions on how to deal with the behavior before it gets out of hand”; “talk with parents...how they reward their children for positive behavior”).

### **3.3 Aim 2: Intervention Social Validity and Feasibility**

The study’s second aim was determining whether the online CRP training was socially valid and feasible, as demonstrated by adequate (a) acceptability, (b) practicality, (c) demand, and (d) scores on a measure used to reliably assess factors associated with the quality of school-based intervention use and maintenance over time. A mixed methods approach (i.e., quantitative self-report measure, qualitative feedback at post-intervention) was used to address this aim. Participants’ ratings of the social validity of the training as measured by the URP-IR are contained in Table 3.5.

**3.3.1 Results of URP-IR.** Overall, results from the URP-IR administered at post-intervention indicate that participants favorably rated the online CRP training and implementation of practices it taught as something that could be implemented and sustained in schools. Specifically, on a scale of 1 (strongly disagree) to 6 (strongly agree), participants, on average, “agreed” ( $M = 5.10$ ,  $SD = .52$ ) that CRP were something they were interested in and committed to implementing and that the training was appropriate and effective for addressing student problems. On average, participants “agreed” ( $M = 5.16$ ,  $SD = .49$ ) that the training was delivered in such a way that they understood CRPs and how to implement them. Participants, on average, “slightly agreed” ( $M = 4.74$ ,  $SD = .58$ ) that CRPs would be easy to implement with the resources and time they currently had available at their schools. With respect to system climate, participants, on average, “agreed” ( $M = 5.05$ ,  $SD = .64$ ) that the training and implementation of CRPs was

consistent with the culture and priorities of their school. And, on average, participants “disagreed” ( $M = 2.96$ ,  $SD = .1.13$ ) that they would need additional professional development or resources to implement CRPs well after receiving the training.

**3.3.2 Acceptability.** Acceptability of the training was assessed by asking participants if they would recommend the training to other elementary school teachers in South Carolina and through qualitative analysis of open-ended feedback collected at post-intervention. Overall, participants would overwhelmingly recommend the training to their peers: after completing the training, a full 98.6% of the sample indicated that they would recommend it to other teachers. The sole dissenter cited the length of the training (“too long”) for why they would not recommend it to other teachers.

Qualitative analysis of the open-ended feedback questions resulted in five codes related to the acceptability of the training. These reasons for finding the training acceptable and recommending it to other teachers included 1) a general appreciation for the training; 2) the high quality of the training; and specific benefits of the training, such as 3) greater self-awareness and self-reflection, 4) the inclusion of practices and information important for promoting good outcomes for all students, and 5) its ability to encourage discussions about race and bias.

When given the opportunity to provide feedback or comment, nine participants expressed their appreciation for the training, including gratitude for the opportunity to access the training and how they found it enjoyable (e.g., “I am glad I spent the time in this training”; “Really loved it!”; “Thank you for allowing me to be a part of this important training”). Eighteen participants shared that they would recommend the

training to others because it was a high-quality training (e.g., “It was very well done. The information was meaningful and presented in a way that was easy to understand”; “I thought this was presented very well, without an accusatory approach...I appreciate the presenter’s honesty in her mistakes. She gave great examples that hit home with me”). Forty-three participants would recommend the training to other teachers because of perceived benefits of the training, including how it promoted self-awareness and self-reflection (e.g., “The training really opened my eyes to things I would have never even considered when making my classroom culturally responsive and inclusive”; “Makes you think about student behavior in a different way”), covered a topic that was important to address in order to promote good outcomes for all students (e.g., “We have to understand these ideas if we want to change outcomes for our students”; “It is important to recognize these biases to make changes in a positive direction for yourself, your students, our community, and our world”), and encouraged important conversations about race and bias in schools (e.g., “It is addressing the foundations of bias and a starting point to have conversations”; “I would recommend the training to others because I believe that it will open the discussion about race and bias in the classroom/schools”).

**3.3.2 Practicality.** Practicality of the training was assessed by training completion rates, length of time commitment to complete the training and reflection questions, and qualitative analysis of open-ended feedback collected at post-intervention.

**3.3.2.1 Training completion rates.** Training completion rates were calculated for participants from the two districts involved the second phase of recruitment. Participants from the initial round of recruitment were not included in these calculations because they were told that the study and data collection was going to be paused soon after receiving

the study invitation. Within the second phase, 80 potential participants signed up for the training. Of those who signed up for the training, 72 individuals (90.0%) completed the training, and 67 individuals (83.8%) completed the training, reflection questions, and post-intervention survey. Within the first district, eligible participants were informed of the opportunity via email and required to complete the training and surveys outside of school hours. Thirty-three individuals signed up to complete the training, of which 27 (81.8%) completed the training and 24 (72.7%) completed the training, reflection questions, and post-intervention survey. Within the second district, eligible participants were nominated by district and school leaders and given protected time during a professional development day or school hours to complete the training and surveys. In this group, 47 individuals were identified to complete the training, 45 (95.7%) completed the training, and 43 (91.5%) completed the training, reflection questions, and post-intervention survey. Completion of the training (i.e., participants watched all videos and interacted with all training-related worksheet or handout materials) was verified by weekly progress reports generated by the training website host; completion of the reflection questions was verified by visual inspection of responses on REDCap.

**3.3.2.2 Time required to complete training.** Participants reported that, on average, it took them approximately three hours to watch the two hours of training videos and respond to the associated reflection questions ( $M = 184.51$  minutes,  $SD = 66.73$  minutes). Because the run time of the prerecorded videos is standardized, variability in the length of time it took for participants to complete the training may be a product of taking breaks between the segments of the training or greater engagement with the reflection questions.

**3.3.2.3 Qualitative feedback.** Qualitative analysis of the open-ended feedback questions resulted in three codes related to the practicality of the training. Twenty-four participants found the training practical because it covered content that was applicable to their work as educators (e.g., “It is important and applicable to our daily work as teachers”; “Important information that all teachers could benefit from. So much information that teachers can take back to their classroom to better understand and connect with students”). Other participants found the training practical because it addressed an existing need (e.g., “These are important, meaningful concerns happening in our world today”; “I’m sure that teachers from South Carolina have personal learned behaviors that need to be uncovered and adjusted”) and reminded them of good teaching practices (e.g., “It reminded me how I should teach to meet the needs of every child”).

**3.3.3 Demand.** Demand for the training was measured by response to recruitment and whether the full number of funded training codes were utilized. Because recruitment strategies significantly differed between the two districts involved in the second phase of recruitment, response to recruitment has been calculated separately for each. Within the first district, where potential participants were emailed the opportunity by their school administrator, approximately 35% of the possible recruitment pool (i.e., total number of 3K-3<sup>rd</sup> grade teachers and instructional aides at participating schools) signed up to complete the training. Within the second district where participants were nominated by district and school leadership to complete the training, 95.6% of the identified participants responded to the training nomination and completed the training. Following the study-related training group, this second district is now in communication with the Pyramid Consortium to purchase additional training codes for their remaining 3K-3<sup>rd</sup>

grade instructional staff, suggesting particularly strong demand at the district-level. Between the two recruitment phases, 100% of the purchased training codes provided by the Education Workgroup of the Child Well-Being Coalition were distributed to potential participants.

### **3.4 Aim 3: Informing Dissemination of Online CRP Training**

The study's third aim aimed to inform wider dissemination of the online CRP training and implementation of CRCM by determining (a) areas for improvement, (b), additional training and support needs, and (c) attitudes about classroom- and professional development-focused components of CR-PBIS.

**3.4.1 Qualitative feedback.** At post-intervention, participants were given the opportunity to provide suggestions for improving the online CRP training and supports that would help them implement and sustain use of CRP at their school. A summary of qualitative themes from their responses is provided below and in Tables 3.6 and 3.7.

**3.4.1.1 Recommendations for improvement.** Fifty-seven participants provided qualitative feedback on how the training could be improved. These suggestions yielded two broad themes: modifications to the training format and changes to training elements.

With respect to training format, the most common recommendation for improvement was to incorporate an opportunity for group discussion (e.g., "It would be nice to discuss these things in a safe place with other teachers"; "Group discussion with others. I am curious what others in my school thought as they listened to the modules"). Multiple participants noted the length of the training and suggested changes to the pace of delivery (e.g., "It is a lot of content. I think breaking it apart over several days would

allow me more reflection time”). Five participants noted that they would have preferred for the training to be delivered in-person rather than online (e.g., “would rather this be in person”). Finally, two participants suggested that the training be offered earlier in the year, rather than in the winter or spring (e.g., “I wish this training had been done earlier in the year”).

Proportionately fewer individuals offered suggestions that related to changing elements of the training itself (seventeen suggestions for training elements vs. thirty-six suggestions for training format). The most common suggestion for improving the training itself was to include more examples and videos demonstrating the use of CRP and CRCM in the classroom (e.g., “It would be helpful to see video clips of the classroom management practices that are being discussed”; “Examples of all different kinds of cultural situations and how to better handle them”). Four participants requested more supplementary resources, such as handouts and books related to the training material (e.g., “I’d like to have some books/videos/additional trainings suggested to supplement this training”; “more printable handouts”). Three participants expressed a desire for more interactive training elements, apart from reflection questions (e.g., “Give real life scenarios for teachers to watch/read and allow them to respond and have them see if their response has any bias”). Finally, two participants suggested changes to the training videos themselves, including one who requested the incorporation of more visual elements within the videos to maintain attention (e.g., “I think this training could be improved with more visual aids. I found myself zoning out a little during the videos and then having to skip the video back to hear what I had missed”) and one who wished that

the videos featured more presenters than Dr. Rosemary Allen (e.g., “having a variety of speakers”).

When asked how the training could be improved, sixteen participants wrote that no improvement was needed or offered a positive comment (e.g., “I really thought the training was well paced. The presenter was pleasant and shared many personal experiences”; “No suggestions, thought it was fine the way it was”; “I think the training was good! It was easy to follow along with and wasn’t ‘boring’”).

**3.4.1.2 Additional training needs.** Overall, participants perceived the training to be thorough and comprehensive. After completing the training, only 9.5% of participants reported that they still had questions that were not answered by the training and 13.5% of participants requested additional training or resources. The most commonly requested areas for follow-up included strategies for addressing CRP as a schoolwide improvement goal (e.g., “how to bring this topic to our school”; “how to address when building leaders do not find this work to be essential”), more information about different cultures (e.g., “I need more information on cultures that are different from my own”; “I would love more information on specific cultural differences that may come into play in the classroom”), and additional training on implicit bias. Individual participants requested additional training in each of the following areas related to CRP: more information about specific CRP practices and how to implement them in the classroom, strategies for addressing problematic/offensive behavior from colleagues, engaging with students about race/cultural differences (e.g., “How to have conversations about race and cultural differences with students of different ages and abilities”), and parent engagement (e.g., “Training on how to bring parents into the schools and have discussion”). Additional

training requests included one individual interested in more information about child-centered learning and one participant who wanted examples of CRP from other Pyramid Model schools.

**3.4.1.3 Support needs for CRP implementation.** Over fifty participants provided feedback on how their schools could help them implement and sustain use of CRP. These suggestions fell into three broad support-related themes: implementation resources, training and technical assistance needs, and organizational supports. Four participants shared that no additional supports were needed (e.g., “I feel that we have all the resources we need to implement this at our school”) and three wrote that they were not sure what additional supports they would need to implement CRP.

With respect to implementation resources, the most commonly requested support focused on tangible culturally responsive classroom materials, such as books, posters, and games. One participant wrote, “It would be great if our PTA could support a grant for teachers to build their classroom libraries with more culturally diverse books and posters.” Others requested “having access to more play materials from different cultures” and “classroom read aloud books about culture.” Six participants felt that it would be easier to implement CRP if they had specific actions and ideas to use in their classroom (e.g., “a manual with examples and scenarios of different approaches to teaching cultural awareness practices to students”; “create a bank of real-life actions/phrases we can use”).

In terms of training and technical assistance needs, fourteen participants identified offering ongoing training, coaching, and/or consultation as a support that would help them implement CRP (e.g., “I believe we just need a little reminder here and there to

remember the things we have learned during this training”; “It should be ongoing so that we can get past some of the racial discomfort and learn to treat all children equally”; “Have ongoing training of all aspects so we all do not “soon forget””). Three participants felt that their school could support implementation by training more individuals within their school community (e.g., “education for all staff”; “I wish my coworkers were able to do this training”; “More parent education needs to be offered”).

Finally, with respect to organizational supports, participants most frequently commented that having a full-school commitment to CRP, including leadership support would help them implement what they learned in the training (e.g., “the willingness for all school personnel to commit and be involved”; “support/recognition from administrators”; “I think our entire school team needs to recognize their biases so we can learn and move forward together. It’s hard to be transitional when you are an island”). Consistent with the implementation literature, one participant described the essential role that school leadership could play in facilitating CRP implementation, writing: “This mission should be projected at the top with the school administration. They are in a position to look and determine what is on the “school plate” and determine “is it balanced or do some things warrant being taken off?” so a better approach can replace it.”

Consistent with this idea of balancing school priorities to include CRP, four participants shared that CRP implementation could be supported by providing them with protected time to do so (e.g., “Time to implement these things; Using the first month of school to grow as a classroom community and not focus so much on academics”).

**3.4.2 Attitudes about CR-PBIS classroom practices and professional development components.** Results from the CR-PBIS survey administered at post-intervention indicated that, overall, participants found the classroom-focused and professional development practices recommended within CR-PBIS to be acceptable, feasible, efficacious, and moderately accessible. These results are summarized in Table 3.8 and Table 3.9.

On a scale of 1 (strongly disagree) to 6 (strongly agree), participants, on average, “agreed” that CR-PBIS classroom practices were relevant and useful to the work that they do (acceptability;  $M = 5.40$ ,  $SD = .55$ ); were possible to implement with the knowledge, time, and resources they had (feasibility;  $M = 5.23$ ;  $SD = .60$ ); and would work to improve behavior for all of their students (efficacy;  $M = 5.27$ ;  $SD = .58$ ). With respect to CR-PBIS professional development, on average, participants “agreed” that these practices were acceptable ( $M = 5.32$ ,  $SD = .60$ ), feasible ( $M = 5.03$ ,  $SD = .81$ ), and efficacious ( $M = 5.21$ ,  $SD = .62$ ). Mean ratings for accessibility (“I have access to professional development and training relevant to this suggested CR-PBIS practice.”) were still favorable, but offered less strong agreement ( $M = 4.84$ ,  $SD = .91$ ) and had the greatest variation in participant response, as measured by standard deviation.

Table 3.1 Tier 1 SWPBIS implementation fidelity scores for select study schools.

School	Subscale			Overall Tier 1 (%)
	Teams (%)	Implementation (%)	Evaluation (%)	
School A	75	94	100	93
School B	100	83	88	87
School C	100	89	100	93
School D	100	78	100	87
School E	100	83	100	90
<i>Sample Average</i>	95	85.4	97.6	90

Note: Scores at or above 70% indicate adequate Tier 1 implementation.

Table 3.2. Mean comparisons of all participant outcome variables.

Outcome measure (scale) ( <i>n</i> = 73)	Pre		Post		<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
CRCMSE total (0 -- 100)	81.37	15.07	88.50*	11.40	.69
CRTOE total (0 – 100)	91.10	8.96	93.76*	7.65	.28
Implementation total (1 -- 4)	3.69	.25	3.77*	.27	.30
Reflective Thinking (1 – 4)	3.62	.36	3.73*	.34	.29
Relationships (1 – 4)	3.89	.22	3.91	.21	.12
Communication (1 – 4)	3.70	.27	3.76*	.28	.24
Curriculum (1 – 4)	3.55	.43	3.64	.40	.21
Student Culture (1 – 4)	3.74	.39	3.81	.34	.16

\* Mean differences from pre- to post-intervention significant at  $p < .05$ .

Table 3.3. CRCM behaviors with greatest and least self-efficacy at post-intervention.

Item ( <i>n</i> = 73)	<i>M</i>	<i>SD</i>
<i>Upper Quartile (greatest self-efficacy)</i>		
Clearly communicate classroom policies.	94.58	8.68
Teach students how to work together.	93.42	7.49
Establish routines for carrying out specific classroom tasks.	92.75	13.45
Structure the learning environment so that all students feel like a valued member of the learning community.	92.27	12.20
Design the classroom in a way that communicates respect for diversity.	91.66	13.46
Create a learning environment that conveys respect for the cultures of all students in my classroom.	91.42	13.17
Use strategies that will hold students accountable for producing high quality work.	90.90	11.33
<i>Lower Quartile (lowest self-efficacy)</i>		
Use culturally responsive discipline practices to alter the behavior of a student who is being defiant.	80.59	16.51
Modify aspects of the classroom so that it matches aspects of students' home culture.	84.19	17.18
Use culturally appropriate methods to relate to parents from culturally and linguistically diverse backgrounds.	84.51	17.05
Implement an intervention that minimizes a conflict that occurs when a student's culturally-based behavior is not consistent with school norms.	84.79	16.90
Develop a partnership with parents from diverse cultural and linguistic backgrounds.	84.82	16.84
Develop an effective classroom management plan based on my understanding of students' family background.	85.22	17.04
Critically analyze students' classroom behavior from a cross-cultural perspective.	85.37	16.50

Table 3.4. Themes characterizing impact of training identified in semantic thematic analysis

Teacher-focused cognitive processes	Teacher-focused behavioral processes	Family engagement strategies	Reasons for no training-related behavior change
I will consider how culture and background can influence student behavior. (41)	I will ensure that all students feel heard and valued in my classroom. (11)	I will ask more questions about an individual's background, culture, or differences. (17)	I already treat all students equally. (3)
This training caused me to engage in self-reflection, including on the impact of current practices. (31)	I gained ideas for incorporating specific CRPs in my classroom. (10)	I will make connections by listening and engaging with students and their families. (5)	My current behavior management strategies are effective. (2)
I am now more aware and open-minded. (16)	The training reinforced the importance of using positive behavior management practices. (8)	I will make a greater effort to engage more with families. (4)	I am currently using these CRP strategies in my classroom. (4)
I will be more patient with student behaviors. I will slow down, not make assumptions, and not jump to punishment. (10)			

Note: Number in parentheses denotes how many times a thematic code was assigned.

Table 3.5 Results of URP-IR social validity questionnaire at post-intervention.

Factor ( <i>N</i> = 74)	<i>M</i>	<i>SD</i>
Acceptability	5.10	.52
Understanding	5.16	.49
Feasibility	4.74	.58
System Climate	5.05	.64
System Support	2.96	1.13
<i>Overall</i>	4.90	.47

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly agree.

Note:

8 Items from Home-School Collaboration factor were neither analyzed nor included in total score because of unacceptably low internal reliability.

System Support items were reverse-coded for inclusion in the overall mean. On its own, lower scores reflect greater ability to independently implement CRP.

Table 3.6. Themes characterizing recommendations for improvement identified in semantic thematic analysis

Changes to training format	Changes to training elements
Offer opportunity for group discussion (20)	Provide more examples and videos demonstrating the use of CRP in the classroom (8)
Provide more time to complete the training (9)	Offer a list of supplementary resources for additional training/information (4)
Prefer in-person format (5)	Make the training more interactive, including practices scenarios or vignettes (3)
Offer earlier in the school year (2)	Include more visual aids within training videos (1)
	Feature additional presenters with varied experiences and identities (1)

Note: Number in parentheses denotes how many times a thematic code was assigned.

Table 3.7. Themes characterizing additional support needs identified in semantic thematic analysis

Implementation resources	Organizational supports	Training and technical assistance	None or not sure
Culturally responsive classroom materials (21)	Full-school commitment to CRP, including leadership support (11)	Offer ongoing training, coaching, and/or consultation (14)	No additional supports needed (4)
Specific actions/ideas to implement in classroom (6)	Time to focus on building community and behavioral expectations rather than curriculum (4)	Need to train more people within school community (3)	Not sure what additional supports are needed (3)

Note: Number in parentheses denotes how many times a thematic code was assigned.

Table 3.8. Results from survey measuring participant attitudes about CR-PBIS classroom practices

Item ( <i>n</i> = 73)	Acceptability <i>M</i> (SD)	Feasibility <i>M</i> (SD)	Efficacy <i>M</i> (SD)
<i>Classroom teachers should...</i>			
Define behavior form a local and setting-specific perspective.	5.21 (.76)	4.96 (.87)	5.05 (.72)
Increase positive interactions with students, families, and staff members.	5.53 (.63)	5.25 (.83)	5.33 (.78)
Decrease negative interactions with students, families, and staff members.	5.33 (.73)	5.27 (.73)	5.25 (.74)
Engage in equitable interactions with students.	5.52 (.60)	5.42 (.64)	5.40 (.64)
Set explicit, realistic, high, and challenging expectations for all students.	5.27 (.99)	5.21 (.91)	5.19 (.95)
Teach social skills to all students.	5.51 (.65)	5.33 (.73)	5.41 (.68)
Learn, include, and use students' culture and language in instruction and interactions.	5.34 (.73)	5.01 (1.01)	5.15 (.76)
Use effective instructional practices and curricula for all students.	5.51 (.60)	5.41 (.62)	5.36 (.70)
<i>Classroom Practices Domain Average</i>	5.40 (.55)	5.23 (.60)	5.27 (.58)

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly agree.

Table 3.9. Results from survey measuring participant attitudes about CR-PBIS professional development

Item ( <i>n</i> = 73)	Acceptability <i>M</i> (SD)	Feasibility <i>M</i> (SD)	Efficacy <i>M</i> (SD)	Accessibility <i>M</i> (SD)
<i>Professional development opportunities should encourage all school personnel to...</i>				
Adopt the perspective that culture and context influence how and what students learn.	5.36 (.67)	5.04 (.86)	5.19 (.74)	4.85 (.94)
Self-assess or self-reflect on the influence of cultural and contextual features on their instructional and behavioral decisions.	5.36 (.70)	5.08 (.88)	5.23 (.68)	4.86 (1.02)
Assess and consider their students' cultures.	5.29 (.63)	5.01 (.91)	5.18 (.67)	4.79 (1.07)
View and involve families as resources.	5.33 (.69)	5.00 (.94)	5.23 (.66)	4.79 (1.00)
Use data to set goals and evaluate outcomes.	5.27 (.69)	5.00 (.93)	5.19 (.74)	4.89 (1.02)
<i>Professional Development Domain Average</i>	5.32 (.60)	5.03 (.81)	5.21 (.62)	4.84 (.91)

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly agree.

## **CHAPTER 4**

### **DISCUSSION**

School discipline policies that rely on exclusionary discipline practices, such as office discipline referrals, suspensions, and expulsions, negatively and disproportionately impact racial minority students, beginning in preschool (U. S. Department of Education Office for Civil Rights, 2014). Disproportionate discipline persists even when schools implement schoolwide interventions that reduce overall rates of exclusionary discipline, suggesting that schools must do more to address other likely causes of the discipline gap (Vincent & Tobin, 2011; Vincent, Randall, et al., 2011). There has been an increased call for teacher professional development in culturally responsive behavior management practices, but such interventions are often poorly evaluated and resource-intensive (Bottiani et al., 2018). The co-occurrence of a global pandemic that necessitated school closures with a national reckoning on systemic racism and racial inequality in America made it evident that professional development for educators must continue, even if individuals are not able to meet in traditional settings. Evaluating an online professional development training on CRP can help facilitate program improvements and inform decisions to scale-up use or consider other training options (Archibald et al., 2011) as part of South Carolina's desire to give every child an equitable opportunity to learn.

The principal aim of this study was to examine the preliminary outcomes and feasibility of a brief, online teacher professional development training in CRP using a

nonexperimental, pre/post, mixed methods design with 3K-3<sup>rd</sup> grade educators in South Carolina. It was hypothesized that educators who completed the training would report greater self-efficacy for CRCM practices and believe that using CRP in the classroom would lead to more positive outcomes than they did before taking the training. The study also assessed the social validity and feasibility of the training and, with the help of educator feedback, explored how future dissemination and implementation efforts could be improved.

Overall, results of the study suggest that (a) the online CRP training was effective in improving self-efficacy for CRCM and increasing expected positive outcomes from CRP; (b) educators reported moderate but statistically significant increases in self-reported implementation of CRP in the classroom after completing the training; and (c) the online CRP training was feasible and socially valid, with educators reporting that it was acceptable, practical, and perceived as both relevant and efficacious. Participants expressed broad support for CRP training and principles to be implemented in their schools and provided insights into areas for improvement and implementation support needs that can inform wider dissemination. These findings are discussed below.

#### **4.1 Preliminary Intervention Outcomes**

The first aim centered around understanding preliminary impacts of the online CRP training. As predicted, analysis of preliminary intervention outcomes confirmed hypotheses regarding increases in self-efficacy and positive expectancies around use of CRPs in the classroom (see Table 3.2). After completing the training, educators reported significant increases in CRCM self-efficacy and expectations about positive outcomes

resulting from CRP and training effect sizes on these outcomes were large and moderate, respectively.

After completing the training, participants reported high self-efficacy for a range of CRCM tasks (mean item-level scores ranged from 80.59 – 94.58 on a scale from 0 to 100), but reported the greatest self-efficacy for basic classroom management tasks and comparatively less self-efficacy in more advanced CRCM tasks that explicitly call for culturally responsive approaches to manage defiant behavior and partner with diverse parents. This finding is consistent with the literature (Siwatu et al., 2017), and suggests that additional training or coaching may be necessary to boost educator self-efficacy in these areas.

These post-intervention increases in self-efficacy and positive beliefs about the benefits of CRP are consistent with the literature on outcomes from CRP-focused professional development (Bradshaw et al, 2018; Gettinger et al., 2008; Schwehr, 2014; Tucker et al., 2005). Training-related improvements in self-efficacy may be a function of the training emphasizing many of the elements that Bandura (1977) theorized led to the development of self-efficacy, including examples of successful implementation by the trainer (vicarious experiences), discussing content in a respectful and encouraging tone (positive affective or psychological states), and promoting the belief that teachers are capable of using recommended strategies and are actively taking steps to incorporate CRCM in their classrooms by increasing their awareness of the issue and engaging in self-reflection (social persuasion). Participants made specific note of many of these aspects within the qualitative feedback they provided on the training (e.g., “really opened my eyes to things I would have never even considered when making my classroom

culturally responsive and inclusive”; “it’s imperative and ok to ask and find out about cultural differences for the sake of the child’s success”; “this was presented very well, without an accusatory approach”; “great examples that hit home with me”).

It is interesting to note that this study was able to achieve a larger effect size for improvements in self-efficacy ( $d = .69$ ) following a 2-hour online training than the longer, more resource-intensive 5-hour training and individual classroom coaching model studied by Bradshaw et al. (2018) (culturally responsive teaching self-efficacy:  $d = .48$ ). Within their study, analyses showed that the addition of classroom coaching did not boost increases in educator self-efficacy. In combination, this suggests that improvements in educator CRCM self-efficacy may be driven by the training itself and that a longer training does not necessarily result in greater self-efficacy gains.

Developing more positive beliefs about the benefits of CRP in the classroom is an additional preliminary outcome of completing CRP training, although the training effect size on this outcome was moderate in size. Believing that CRP practices will lead to positive classroom outcomes is essential for providing teachers with the motivation to implement these practices in their classroom. This outcome may have only demonstrated moderate improvements at post-intervention because educators had not yet had the opportunity to personally experience or witness these outcomes in their own classrooms (Schunk, 1987) through mastery or vicarious experiences; it may have also been impacted by restrictions resulting from the pandemic classroom context. Future research involving follow-up data collection should investigate whether positive outcome expectancies improve over time for teachers who implement CRP post-intervention.

Because the study included only pre-post data collection on self-reported implementation of CRP, it was not hypothesized that teachers would report improved implementation of CRP practices after completing the training. Had a follow-up data collection timepoint been maintained within the study design, a small increase in self-reported implementation may have been expected. Prior research indicates that observable, objective behavioral changes may require more intensive implementation supports, such as ongoing coaching and consultation (Bradshaw et al., 2018).

However, contrary to expectations, results indicated significant increases in total self-reported implementation of CRP from pre- to post-intervention, with a moderate effect size ( $d = .30$ ). In particular, participants reported significant increases in self-reported implementation of reflective thinking and effective communication, with moderate effect sizes from the training. These results suggest that educators may have immediately put some of the CRP strategies discussed in the training into use and/or that they may have rated themselves as implementing these practices more frequently after recognizing their typical behaviors in the practices described in the training. Reflective thinking is one CRP category that could be amenable to immediate increases in use: the training's integrated self-reflection activities are consistent with the assessed reflective thinking practices (see Hershfeldt et al., 2009), and these practices resemble the teacher-focused cognitive processes a majority of participants noted in their descriptions of training impacts (e.g., engaging in self-reflection, considering themselves more aware and open-minded; see Table 3.4).

No significant increases were reported for authentic teacher-student relationships, connection to the curriculum, or sensitivity to students' cultural identities. These practice

areas may not have demonstrated significant increases immediately post-intervention because they require the educator to take specific actions outside of the training (e.g., adjust instructional materials and lessons to incorporate culture; see Hershfeldt et al., 2009) or because they require additional information/training specific to their students. More information about different cultures (e.g., “information on specific cultural differences that may come into play in the classroom”; “I need more information on cultures that are different from my own.”) was one of the most commonly requested areas for additional training by study participants and is required for educators to effectively demonstrate sensitivity to their students’ cultural identities in the classroom.

Qualitative feedback from participants on how they were impacted by the training suggests that this training successfully accomplished many of the recommended objectives of professional development in this area (i.e., promoting awareness of implicit bias and its role in how teachers perceive and respond to student behavior (McIntosh, Girvan, et al., 2014), self-reflection to build teachers’ cultural self-awareness and awareness of the culture of their students (Pollock et al., 2010), strategies for creating meaningful connections with students and increasing the cultural relevance of classroom behaviors (Vincent, Randall, et al., 2011)) . After completing the training, participants most frequently cited that they would now consider how culture can influence student behavior; this directly addresses a primary theorized cause of disproportionate discipline: teachers taking unnecessary disciplinary action when there is a cultural mismatch between home and school behavioral expectations, particularly with respect to behaviors that may be appropriate or even adaptive when viewed through the student’s cultural lens (Cartledge et al., 2001; Monroe & Obidah, 2004; Weinstein et al., 2004). Stating that they

would pause and engage in critical reflection at these vulnerable decision points ( “I will be more patient with student behaviors. I will slow down, not make assumptions, and not jump to punishment.”) suggests that more distal desired outcomes, like reduced disproportionate discipline for subjective concerns, may follow.

Preliminary outcomes demonstrated in this study were consistent with the immediate outcomes of CRP training found in other studies, including enhanced awareness of research on discipline disproportionality, self-reflection on personal cultural influences, increased comfort discussing issues around culture and bias, and increased awareness of students’ cultural context and factors that may influence behavior (see Bradshaw et al., 2018). However, it is likely that additional supports and school-level actions (e.g., disaggregated data review, policy changes, intentional diverse stakeholder engagement to develop culturally responsive behavioral expectations) are needed to observe more distal desired outcomes, including reduced rates of disproportionate discipline. In particular, disaggregated data review may help address the concerns of the small proportion of participants who felt that they would not think about student behavior and classroom management differently than they did before the training because they were already treating all students equally (see McIntosh, Barnes, et al., 2014).

In spite of not measuring more distal outcomes like changes in discipline rates or teacher classroom behaviors, the results of this study are still promising for schools invested in promoting these positive changes. Many of the preliminary outcomes on which positive pre-post-training changes were noted are considered prerequisites for behavioral change. Self-efficacy is believed to be a prerequisite for individuals to put learned knowledge and skills to use (Bandura, 1977) and prior research has shown

significant associations between teacher’s self-reported self-efficacy and their observed implementation of proactive and supportive strategies for improving student behavior (Almog & Shechtman, 2007; Debnam et al., 2015). Studies have also shown that interventions focused on promoting awareness of helping individuals recognize instances where implicit bias may influence their thoughts and behavior, “slow down” their thinking, and follow specific guidelines for making decisions can lead to more unbiased decisions and behaviors (Devine et al., 2012; Lai et al., 2013; Lai et al., 2014) and are considered necessary for effectively implementing CRP (McIntosh, Girvan, et al., 2014). Finally, self-assessment of current CRP implementation, as was accomplished through data collection for the study, can heighten educator self-awareness (Hershfeldt et al., 2009), an important first step in determining how they can improve their classrooms by incorporating more CRP (Skiba et al., 2008).

#### **4.2 Intervention Social Validity and Feasibility**

The study’s second aim focused on determining whether the online CRP training was socially valid and feasible. A recent review of CRP trainings for educators found that few studies reported on intervention feasibility (Bottiani et al., 2018). However, it is important to evaluate whether teachers find professional development in CRP and CRPM strategies to be socially valid because there is a strong relationship between social validity, implementation fidelity, and improved outcomes (Fallon et al., 2015; Gresham et al., 2000; Lane et al., 2009; Elliott et al., 1984). Investigating elements of feasibility and social validity – including acceptability, fidelity, practicality, and demand – can help schools interested in adopting CRP training anticipate likely attitudes about the training

experience and structure the training opportunity in such a way that maximizes completion rates.

As predicted, data suggest that participants found the online CRP training to be both socially valid and feasible. Educators found the training highly acceptable: after completing the training, all but one of the participants indicated that they would recommend it to other elementary school teachers in South Carolina. Participants reported that they were both interested in learning about and committed to implementing CRP and that the training was relevant to their work and offered effective strategies for addressing student problems. Qualitative feedback revealed that this sample of educators believed that the online CRP training was high-quality, easy to understand, covered a topic that was important to address in order to promote good outcomes for their students, and had the added benefits of promoting self-awareness/self-reflection – key elements of disrupting the influence implicit bias plays in discipline-related decision-making (Cartledge & Kourea, 2008; McIntosh, Girvan, et al., 2014) – and encouraging important conversations about race and bias in schools, which they may not have been comfortable doing before. The impact of disproportionate discipline on young students and the role that implicit bias plays in creating inequitable educational experiences is a comparatively new topic in educator professional development – only 27% of participants reported that they had received prior training in implicit bias, whereas 90.5% had received training in classroom management practices – but this study has demonstrated that it is well-received by educators.

Overall, the online CRP training was practical for participants to complete and eligible educators demonstrated adequate demand when given the opportunity to

complete the training. Differences in how the two districts involved in the second phase approached recruitment and study participation by their educators offer important insights for schools and districts interested in adopting this training. With respect to practicality, although the training consists of two hours of prerecorded videos, participants reported needing, on average, approximately three hours to watch the videos and meaningfully respond to the associated reflection questions. Participants provided feedback that they completed the five-part training in multiple sessions or took breaks between the segments of the training in order to better process the material. Being able to complete the training at one's own pace is a benefit to online professional development (Treacy et al., 2002); it is much more difficult to modulate the pace of group, in-person trainings to match each individual's attentional/learning needs. This finding suggests that schools must budget more than the allotted run time of training videos for teachers to complete the training, especially when the information presented is novel and encourages self-reflection.

The standardized nature of a prerecorded online training makes it easy to ensure high fidelity exposure to the training material at a relatively low cost (Bayar, 2014; Dede et al., 2009). Although it was not possible to guarantee that participants completed the training in an environment absent of distractions, the training website allowed administrators to conduct routine monitoring of participant progress through the training to make sure that they had watched and interacted with 100% of the training materials. Within the participant interface, a similar progress bar was visible, and participants could only download a desirable certificate of completion once they had completed watching the videos. This form of training delivery is less expensive than arranging for an in-person training by a national expert if the expert is not located locally and may result in

higher fidelity delivery of training content than trainings that use a train-the-trainer model (Erickson et al., 2012). In addition to offering more consistent exposure to training content, an online, on-demand training allows for new staff to be trained as they are hired, rather than requiring them to wait until a follow-up in-person training is scheduled.

Recruitment and training completion rates varied significantly by district and school. Within one district, eligible participants were informed of the training opportunity via email and required to complete the training and surveys outside of school hours in exchange for a \$20 gift card. Within this district, approximately 35% of the possible recruitment pool signed up to complete the training and, of this group, 82% completed the training, and 73% completed all study requirements. This may be compared to a second district, where participants were nominated by district and school leadership to complete the training and given protected time during professional development days or school hours (with substitute teacher coverage) to complete the training and surveys. In this district, 96% of identified participants responded to the training nomination and completed the training and 92% completed all study requirements.

Differences in recruitment and completion rates may highlight the importance of leadership support and scheduling job-related trainings during school hours. District- and school-level leadership play an important role in building staff motivation for and openness to participating in a non-academic intervention like an online CRP training (Anderson-Butcher et al., 2010; Van de Ven et al., 1999). Within the district with lower recruitment rates, 83% of total participants worked at two of the five elementary schools where principals agreed to distribute the opportunity to their staff. The principals at these two schools demonstrated strong support for the training, communicated consistently

with the study coordinator, and provided information on how they would encourage staff participation by checking in with teachers and talking about the training at staff meetings. Conveying the importance of the training opportunity and its consistency with school values and goals appears to have been more effective at encouraging educators to complete the training than sending out an email and/or allowing outside staff to introduce the opportunity at a related training. Schools and districts interested in adopting the training should pay attention to communicating strong leadership buy-in and support of the training when they push the opportunity to educational staff.

Recruitment and training completion also appeared to be impacted by whether teachers were required to complete the training outside of or during the work day. Notably higher recruitment and training completion rates occurred in the district that gave teachers the opportunity to participate within protected time, for example, during a professional development day or during the school day with substitute teacher coverage. During a school year where teachers reported exceptionally high levels of stress and longer work hours (Diliberti et al., 2021), lack of time may have prevented educators who were interested in the training topic from signing up to participate in the study. At least two of the participants who signed up for the training but did not complete it reached out to the study coordinator and cited a lack of time as their reason for no longer being able to participate in the study. Schools who wish their staff to complete the online training should specifically allocate time for staff to complete the training during the workday, rather than expect it to be completed outside of work hours.

### **4.3 Implications and Recommendations for Dissemination**

Gathering feedback that would inform wider dissemination of the online CRP training and facilitate successful implementation of CRCM was always a central concern of the study and a priority for the Education Workgroup of the Child Well-Being Coalition. Data collection was intentionally designed to solicit qualitative feedback from participants on areas for improvement and additional support needs in order to involve them in the design and planning of educator-focused professional development (Bayar, 2014) and to contextualize the sample with demographic and prior training data rarely reported within CRP intervention studies.

Good self-efficacy in classroom management is considered a necessary foundation for addressing sources of disproportionality through more advanced CRCM techniques (Bradshaw et al., 2010). The majority of participants in the study reported high self-efficacy in general classroom management, high levels of prior training in classroom management practices, and worked in schools with at least adequate schoolwide PBIS (SWPBIS) implementation. It is unlikely that educators in schools with similar levels of SWPBIS or Pyramid Model implementation would identify ineffective behavior management strategies as a barrier to incorporating CRP in their classrooms, but supplementary training in positive behavior management could be offered for teachers who identify this as an area for growth in addition to CRP training. As expected, fewer educators reported prior experience with training or instruction in implicit bias (27%) and its role in disproportionate discipline, even though nearly two-thirds endorsed having received training on CRP, culturally responsive teaching, or teaching diverse students. Bringing awareness to the existence and role of implicit bias in teacher-student

interactions around discipline can help teachers understand why CRP are so important in diverse classrooms, which the majority of educators in the sample endorsed teaching in.

A major theme within the qualitative data was recommendations for improvement. Although there are limited opportunities for making changes to the content of a prerecorded training, participants offered suggestions for improvement to the training content that could be achieved by supplementing the existing training module, including examples demonstrating the use of CRP and CRCM in the classroom in the form of either videos or stories from other teachers, optional supplementary materials related to the training material (e.g., a number of educator-focused resources on cultural responsiveness and equity have been collected by the National Center for School Mental Health and can be found here: <http://www.schoolmentalhealth.org/Cultural-Responsiveness--Equity/>), and more interactive prompts exploring educators' reactions to challenging situations.

The desire for more interaction with their fellow educators was the most common recommendation for improvement (e.g., "Group discussion with others. I am curious what others in my school thought as they listened to the modules."). Research has shown that online professional development can be effective even without interaction between participants (Carey et al., 2008) and deliver the same outcomes in teacher knowledge and beliefs, increased motivation, and classroom practices as traditional face-to-face training (Fishman et al., 2013; Kabilan, 2014). However, this desire for group discussion could easily be incorporated into other suggested changes to the pace of delivery and request for an in-person training component. Because the online training gives three months of access to the training material, schools could consider breaking up the training content, instruct teachers to watch one of the five parts of the training each week during a

planning period, and then engage in a guided discussion of their reactions to the material, reflection questions, and ideas for incorporating the content (as applicable) into their classroom practices in small groups at a staff or grade-level meeting. This would allow for standardized delivery of training content to be maintained, while encouraging deeper engagement with peers around how the material applies to their school and classroom.

With respect to additional training needs, participants perceived the two-hour training to be thorough and comprehensive. On average, educators felt that they could implement CRPs well after completing the online training without additional professional development. Those participants that requested additional training specified topics that would only further facilitate adoption of the culturally and contextually responsive PBIS (CR-PBIS) model and higher quality implementation of CRP in the classroom.

Participants were interested in strategies for addressing CRP as a schoolwide improvement goal, suggesting support for taking a more comprehensive, systems-level approach to addressing disproportionate discipline and incorporating CRPs (see below for a more detailed discussion of CR-PBIS). Participants often specified a desire to learn more about the different cultural backgrounds of their students as an area for additional training. Learning about their students' cultural backgrounds can help teachers understand factors that impact student behavior, use culturally responsive strategies during teacher-student interactions, and avoid misinterpretations that could lead to exclusionary discipline (Gay, 2010; Monroe, 2005). This information would need to be tailored to the particular student population of each school, as abstract knowledge of culture is ineffective in meaningfully changing teachers' classroom behaviors (Pollock et al., 2010). Participants' interest in resources for engaging with young students and

parents about race and cultural differences suggests that the training was effective at reducing stress and discomfort around discussing these topics and is well-aligned with many new classroom resources and materials recently published on this topic by organizations such as the APA’s RESilience Initiative (<https://www.apa.org/res>), the Southern Poverty Law Center’s Learning for Justice project (<https://www.learningforjustice.org/>), and Sesame Street in Communities’ Coming Together racial justice initiative (<https://sesamestreetincommunities.org/topics/racial-justice/>).

Anticipating implementation support needs can help schools and districts interested in implementing CRP increase the likelihood that investments in CRP training will lead to increases in CRP implementation. On average, participants “slightly agreed” that CRPs would be easy to implement with the resources and time they currently had available at their schools, but offered specific requests for support from their schools that encompasses three broad themes: implementation resources, training and technical assistance needs, and organizational supports (see Table 3.7). With respect to implementation resources, the most commonly requested support focused on having access to tangible culturally responsive classroom materials, including books, posters, and games. Schools interested in becoming culturally responsive should look for opportunities through their PTA or classroom grants for acquiring these materials to minimize out-of-pocket costs to educators.

Although only a small number of participants stated that they needed more training content after completing the online CRP training, many identified offering ongoing training, coaching, and/or consultation as a support that would help them

implement CRP (e.g., “Have ongoing training...so we all do not “soon forget”). Effective teacher professional development is often viewed as a process rather than a one-time event (Borko et al., 2010). Extended exposure to the training material by breaking up the training content over a longer period of time (as discussed above) and including opportunities for “community of practice” coaching and reflection as educators work to implement the principles recommended within the training could lead to more meaningful and sustainable behavior change. Online training may be a cost-effective strategy for promoting widespread familiarization with CRP content among teaching staff, creating a foundation for more resource-intensive coaching in implementing CRP. Coaching can lead to positive improvements in observable CRP use, including more proactive behavior management, greater student cooperation, and fewer disruptive behaviors (Bradshaw et al., 2018).

Although not an embedded component of the online training, results from self-reported CRP implementation inventories or CRCM self-efficacy measures could help determine areas in which educators need additional skill development and support in a data-informed way. For example, after determining patterns of low self-efficacy, schools may consider developing a mentorship model, where novice educators can reflect on their classroom experiences and incorporate CRP with the guidance of a more veteran teacher who expressed greater self-efficacy in CRCM (Coffey & Farinde-Wu, 2016). Developing personalized CRP improvement plans based on individual areas of growth can be an effective strategy for improving CRP implementation in the classroom (Fallon et al., 2018) and could be facilitated by CRP coaches or local mentors.

Lastly, participants felt that organizational-level support for CRP was needed to facilitate sustained individual-level implementation (e.g., “This mission should be projected at the top with the school administration”). Educators understood that addressing implicit bias and disproportionate discipline and creating a more culturally- and contextually-responsive learning environment required the commitment of the whole school, including leadership support to ensure continued prioritization of schoolwide CRP goals and to provide educators with protected time to engage with families, build supportive relationships with students, and incorporate CRP into the classroom (Payne & Wolfson, 2000).

It is important for schools and districts to recognize that educator professional development is only one component of CR-PBIS. Eliminating disproportionality will require action beyond providing a brief professional development training on implicit bias and CRP. PBIS stresses systemic change (Sugai & Horner, 2006) and it is expected that significant systems-level commitment to the other components of CR-PBIS -- including identifying areas of cultural mismatch in classroom practices, monitoring disproportionality by reviewing school data disaggregated by race, and partnering with families to determine culturally-valid schoolwide behavioral expectations -- will be necessary to achieve school-level reductions in disproportionate discipline (McIntosh, Girvan, et al., 2014). However, educational leaders should take heart that the adoption of more culturally- and contextually-responsive PBIS practices is supported by educators who have been trained in implicit bias and CRP. After completing the online training, participants agreed that classroom- and professional development-focused components of CR-PBIS were acceptable, feasible, and efficacious. Additionally, they agreed that CRP

training and the implementation of CRPs in the classroom was consistent with the culture and priorities of their school. Access to professional development opportunities where educators are encouraged to consider culture and its role in student behavior in the classroom was rated lowest and most variably by participants, but increasing access by regularly incorporating considerations of culture and equity into trainings is within the power of schools. With the knowledge that educators find CRP relevant, important, and feasible and are supportive of schoolwide efforts to become more culturally responsive, schools interested in meaningfully engaging in systemic change are in an excellent position to communicate CR-PBIS as a priority to educators throughout the school and to establish school-specific improvement goals and expectations in support of that change.

The results of this study can also inform continued efforts of the Child Well-Being Coalition and the Behavioral Alliance of South Carolina as they help South Carolina schools promote equitable outcomes for and the well-being of all students. This study revealed areas where widespread training was lacking (i.e., implicit bias, school-specific considerations of student culture and how it may influence school-home and teacher-student relationships) and showed that a training on challenging topics like disproportionate discipline, implicit bias, and CRP could be well-received and deemed both important and relevant by educators. Should these community-based entities prioritize sponsoring wider dissemination of the training in South Carolina, positive educator feedback on the training could be used to encourage participation by other districts (see Fallon et al., 2015), qualitative improvement themes (e.g., provide the training earlier in the year, encourage training completion in segments rather than all at once, incorporate opportunities for discussion with peers about training content and

specific classroom applications; see Table 3.6) could be shared to help schools maximize training engagement, and preliminary outcomes (i.e., improved CRCM self-efficacy, more positive outcome expectancies from using CRP, some increases in self-reported CRP implementation) could be shared to set realistic expectations about what could be achieved by providing the training and nothing more.

If these groups are interested in helping schools cultivate more comprehensive change, qualitative results from feedback on how schools can facilitate CRP implementation (e.g., demonstrating a “whole school commitment” with support from leadership, distributing diverse classroom materials, providing periodic reminders of CRP implementation ideas and goals; see Table 3.7) could be helpful in broader discussions with schools about their specific goals with respect to becoming more culturally and contextually responsive to their students and reducing discipline disproportionality, how leadership is demonstrating their support for this initiative, and their plans for engaging with students, families, and the broader community about cultural norms and strengths. And, if they are unable to continue funding or promoting dissemination of CRP educator training, these groups can still model practices that encourage cultural responsiveness and more equitable outcomes (e.g., disaggregating data by race and gender, engaging with and empowering diverse stakeholders, including cultural considerations in trainings and presentations; see Tobin & Vincent, 2011 and Bal, 2018) in their own work.

#### **4.4 Study Strengths, Limitations, and Future Directions**

This study features several strengths and limitations that can inform future teacher-focused CRP training research. Research on an online teacher training on implicit

bias and CRP was incredibly timely in 2020. As the United States grappled with addressing systemic racism following the murder of George Floyd, educational institutions felt compelled to take a hard look at how they addressed concerns around diversity, inclusion, equity, and cultural responsiveness. At the same time, the global COVID-19 pandemic grounded travel, prohibited large group meetings, and forced a quick pivot from in-person to virtual learning. If educators were going to receive urgent professional development in 2020, it would be done online. No outcome or feasibility data had been published about this particular online CRP training, although it was widely accessible to Pyramid Model schools interested in becoming more culturally responsive. Studying the training for preliminary impacts, feasibility, and recommendations for dissemination can help schools make an informed investment in a professional development option that is salient and useful to their educators.

The current study employed a rich mixed-methods design, where qualitative feedback was able to provide context to quantitative results and give a voice to educators who served as “early adopters” of the training and CRP in their schools. Their feedback highlights specific, actionable steps that districts and schools can take to more successfully incorporate the training into their professional development schedule and support implementation of CRP at the classroom level.

From its initial impetus, brainstorming, recruitment, and funding through the Child Well-Being Coalition Education Workgroup to its utilization of existing networks through the Behavioral Alliance of South Carolina to connect with motivated school districts, this study was rooted in a number of community psychology practice principles, including fostering connections and resource sharing between different groups,

improving the Workgroup's capacity to achieve its goals, and using research and evaluation skills to support school improvement efforts (Scott & Wolfe, 2014).

Recent intervention studies (i.e., Bradshaw et al., 2018; Fallon et al., 2018; Pas et al., 2016) have investigated relatively resource-intensive intervention models, which may not always be feasible for school settings to adopt without substantial external support or university-school partnerships as part of a research study. A comparatively low-cost online training that features consistently high-quality content from a national expert and can be accessed on demand may be a more feasible option for many schools. This study demonstrated that such a training can produce many of the same desirable preliminary outcomes as more resource-intensive interventions and, at times, produce even greater effect sizes. This informs the question of determining sufficient training dosage, which had been identified as an area requiring additional research (Bottiani et al., 2018).

And, lastly, this study includes many elements that are rarely reported in research on professional development for CRP, including: detailed information about participants (e.g., years of experience in education, educational background, demographics, prior exposure to related professional development, classroom characteristics), measure psychometrics, outcomes related to readiness to implement CRP (i.e., self-efficacy and outcome expectancies), and extensive focus on feasibility and social validity. In spite of the importance of feasibility and social validity in effective and sustainable interventions, feasibility data on interventions are generally underreported (Bird et al., 2014). This study gathered both qualitative and quantitative data on the feasibility and social validity of the online CRP training and the larger model of CR-PBIS from individuals who could

provide information based on personal experience with the training rather than hypothetical examples (as was done in Fallon et al., 2015).

Limitations of the current study largely center around design and sampling limitations. The study was paused after the COVID-19 pandemic resulted in school closures with an uncertain timeline for when they would re-open; it was resumed once the study team realized that a complete “return to normal” was unlikely within the 2020-2021 school year. With managing and responding to COVID-19-related concerns a top priority of most schools, the study was required to pivot to a recruitment strategy that focused on districts who had already demonstrated a strong commitment to positive behavior management and had developed district-level initiatives focused on improving cultural responsiveness, diversity, equity, and inclusion. Perceived acceptability of CRP may be higher among teachers in districts that have communicated that they value cultural responsiveness than in other districts that have not taken these steps. Relying upon a convenience sample of volunteers in one of these districts prevents us from being able to rule out selection effects. This sampling method may have also led to an overestimate on measures of acceptability, as educators who expressed interest in completing the training may have already had more positive attitudes about the importance of addressing implicit bias and incorporating CRPs than educators who did not sign up for the training (data was not collected from non-responders on their reasons for not signing up to complete the training). A second limitation was the pre/post non-experimental design without a control group, which prevents us from definitively attributing preliminary impacts to the training. A quasi-experimental design was not feasible because of the truncated timeline necessitated by the pandemic and limited funding, which the Education Workgroup

directed be used to maximize educator exposure to the CRP training. Future studies should incorporate random assignment into intervention and waitlist or active control groups. Third, in order to reduce measurement burden on participants during an especially stressful year and because of the uncertain and variable impact of COVID-19 on typical classroom practice, a third data collection timepoint that would have provided follow-up data on participants' CRCM self-efficacy, outcome expectancies, and self-reported use of CRP six-to-eight weeks after completing the training was eliminated in favor of focusing on immediate preliminary outcomes and social validity of the training. Follow-up measurement is a necessary next step for determining whether immediate improvements in self-efficacy and CRP outcome expectancies are maintained or strengthened over time and to measure changes in self-reported CRP implementation.

Although outside the scope of the resources available for this study, using third-party systematic classroom observation to objectively measure CRP implementation and more distal outcomes like positive student behaviors and classroom climate would help characterize valued intervention outcomes. Future research may also measure the impact of CRP training on outcomes negatively impacted by disproportionate use of exclusionary discipline practices, including classroom climate, quality of teacher-student relationships, student engagement, and parent attitudes about school. Although there is strong evidence for the equivalence of in-person and online professional development, future research may also compare the preliminary outcomes and feasibility of different training delivery options, including comparing the online CRP training to an in-person training of similar length or to a hybrid delivery model that reflects participant improvement recommendations (e.g., completing the online training in parts over several

weeks with guided opportunities for in-person group discussion with their peers). Finally, Bradshaw and colleagues (2019) demonstrated that coaching combined with professional development led to more positive changes in teacher and student behaviors compared to teachers who received the professional development training alone. However, employing a coach to provide teachers with performance feedback and help them develop an improvement plan may be cost-prohibitive and a barrier to wider dissemination. Additional research may be conducted to determine if similar behavioral and classroom outcomes could be accomplished with self-guided assessments and quality improvement planning guides and/or a peer mentorship model.

#### **4.5 Conclusions**

Teacher professional development is considered an essential element of CR-PBIS (Allen & Steed, 2016), but is often poorly evaluated, especially with respect to elements of feasibility and social validity. Online professional development is a promising and convenient tool for delivering consistently high-quality trainings to educators at comparatively low cost. The results of this pre/post nonexperimental study provide evidence for a brief online training having a large effect on improving self-efficacy for CRCM practices and a moderate effect on increasing expected positive outcomes from CRP. The training also had a moderate but statistically significant effect on increasing educators' self-reported implementation of CRP, particularly with respect to practices concerning effective communication and self-reflection.

Mixed-method assessment of intervention feasibility and social validity suggests that the online CRP training was acceptable, practical, perceived as efficacious, and

demonstrated adequate demand, particularly when teachers were given the option to complete the training during school hours. Participants who completed the training overwhelmingly recommended it to other South Carolina elementary teachers, citing its quality, relevance to their work, and ability to start important conversations about race and bias in education. Schools can help educators translate what they learned in the training into practice by facilitating opportunities for them to discuss the material with their peers, purchasing culturally responsive classroom materials, providing ongoing implementation support, and demonstrating a schoolwide commitment to cultural responsiveness and equity, particularly by school leadership. Participants expressed broad support for this kind of schoolwide commitment in the form of CR-PBIS.

A key direction of future research should involve measuring longer term outcomes of the training to determine whether preliminary positive impacts are maintained over time. Comparing the effectiveness of different levels of implementation support in achieving desired attitudinal and behavioral outcomes over time would help educational agencies make data-informed decisions about allocating resource dollars as they disseminate this important work.

## REFERENCES

- Abrams, L. S., & Gibbs, J. T. (2000). Planning for school change: School-community collaboration in a full-service elementary school. *Urban Education, 35*(1), 79-103.
- Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., & Sugai, G. (2014). School-wide PBIS tiered fidelity inventory. *Office of Special Education Technical Assistance Center on Positive Behavioral Interventions and Supports*, 1-30.
- Allen, R., & Steed, E. A. (2016). Culturally responsive pyramid model practices: Program-wide positive behavior support for young children. *Topics in Early Childhood Special Education, 36*(3), 165-175.
- Almog, O., & Shechtman, Z. (2007). Teachers' democratic and efficacy beliefs and styles of coping with behavioural problems of pupils with special needs. *European Journal of Special Needs Education, 22*(2), 115-129.
- American Psychological Association Zero Tolerance Task Force. (2008). Are zero tolerance policies effective in the schools?: an evidentiary review and recommendations. *The American Psychologist, 63*(9), 852.
- Anderson-Butcher, D., Lawson, H. A., Iachini, A., Bean, G., Flaspohler, P. D., & Zullig, K. (2010). Capacity-related innovations resulting from the implementation of a

- community collaboration model for school improvement. *Journal of Educational and Psychological Consultation*, 20(4), 257-287.
- Archibald, S., Coggsall, J. G., Croft, A., & Goe, L. (2011). High-Quality Professional Development for All Teachers: Effectively Allocating Resources. Research & Policy Brief. *National Comprehensive Center for Teacher Quality*.
- Bal, A. (2018). Culturally responsive positive behavioral interventions and supports: A process-oriented framework for systemic transformation. *Review of Education, Pedagogy, and Cultural Studies*, 40(2), 144-174.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies*. Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Banks, R. R., Eberhardt, J. L., & Ross, L. (2006). Discrimination and implicit bias in a racially unequal society. *California Law Review*, 94(4), 1169-1190.
- Bayar, A. (2014). The Components of Effective Professional Development Activities in Terms of Teachers' Perspective. *Online Submission*, 6(2), 319-327.

- Benedict, E. A., Horner, R. H., & Squires, J. K. (2007). Assessment and implementation of positive behavior support in preschools. *Topics in early childhood special education, 27*(3), 174-192.
- Bird, V. J., Le Boutillier, C., Leamy, M., Williams, J., Bradstreet, S., & Slade, M. (2014). Evaluating the feasibility of complex interventions in mental health services: standardised measure and reporting guidelines. *The British Journal of Psychiatry, 204*(4), 316-321.
- Borko, H., Jacobs, J., & Koellner, K. (2010). Contemporary approaches to teacher professional development. *International encyclopedia of education, 7*(2), 548-556.
- Bottiani, J. H., Bradshaw, C. P., & Mendelson, T. (2017). A multilevel examination of racial disparities in high school discipline: Black and white adolescents' perceived equity, school belonging, and adjustment problems. *Journal of Educational Psychology, 109*(4), 532.
- Bottiani, J. H., Larson, K. E., Debnam, K. J., Bischoff, C. M., & Bradshaw, C. P. (2018). Promoting educators' use of culturally responsive practices: A systematic review of inservice interventions. *Journal of Teacher Education, 69*(4), 367-385.
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., ... & Fernandez, M. (2009). How we design feasibility studies. *American journal of preventive medicine, 36*(5), 452-457.

- Bradshaw, C. P., Mitchell, M. M., O'Brennan, L. M., & Leaf, P. J. (2010). Multilevel exploration of factors contributing to the overrepresentation of black students in office disciplinary referrals. *Journal of Educational Psychology, 102*(2), 508.
- Bradshaw, C. P., Pas, E. T., Bottiani, J. H., Debnam, K. J., Reinke, W. M., Herman, K. C., & Rosenberg, M. S. (2018). Promoting cultural responsiveness and student engagement through Double Check coaching of classroom teachers: An efficacy study. *School Psychology Review, 47*(2), 118-134.
- Bradshaw, C. P., Waasdorp, T. E., & Leaf, P. J. (2012). Effects of school-wide positive behavioral interventions and supports on child behavior problems. *Pediatrics, 130*(5), e1136-e1145.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.
- Briesch, A. M., Chafouleas, S. M., Neugebauer, S. R., & Riley-Tillman, T. C. (2013). Assessing influences on intervention implementation: Revision of the Usage Rating Profile-Intervention. *Journal of school psychology, 51*(1), 81-96.
- Bryan, J., Day-Vines, N. L., Griffin, D., & Moore-Thomas, C. (2012). The disproportionality dilemma: Patterns of teacher referrals to school counselors for disruptive behavior. *Journal of Counseling & Development, 90*(2), 177-190.
- Bushaw, W. J., & Calderon, V. J. (2014). Americans put teacher quality on center stage: The 46th annual PDK/Gallup poll of the public's attitudes toward the public schools: Part II. *Phi Delta Kappan, 96*(2), 49-59.

- Carey, R., Kleiman, G., Russell, M., Venable, J. D., & Louie, J. (2008). Online courses for math teachers: Comparing self-paced and facilitated cohort approaches. *The Journal of Technology, Learning and Assessment*, 7(3).
- Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation science*, 2(1), 40.
- Carter, P. L., Skiba, R., Arredondo, M. I., & Pollock, M. (2017). You can't fix what you don't look at: Acknowledging race in addressing racial discipline disparities. *Urban education*, 52(2), 207-235.
- Cartledge, G., & Kourea, L. (2008). Culturally responsive classrooms for culturally diverse students with and at risk for disabilities. *Exceptional children*, 74(3), 351-371.
- Cartledge, G., Singh, A., & Gibson, L. (2008). Practical behavior-management techniques to close the accessibility gap for students who are culturally and linguistically diverse. *Preventing School Failure: Alternative Education for Children and Youth*, 52(3), 29-38.
- Cartledge, G., Tillman, L. C., & Talbert Johnson, C. (2001). Professional ethics within the context of student discipline and diversity. *Teacher Education and Special Education*, 24(1), 25-37.

- Chafouleas, S. M., Briesch, A. M., Neugebauer, S. R., & Riley-Tillman, T. C. (2011). Usage Rating Profile–Intervention (Revised). *Storrs, CT: University of Connecticut.*
- Coffey, H., & Farinde-Wu, A. (2016). Navigating the journey to culturally responsive teaching: Lessons from the success and struggles of one first-year, Black female teacher of Black students in an urban school. *Teaching and Teacher Education, 60*, 24-33.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.
- Debnam, K. J., Pas, E. T., Bottiani, J., Cash, A. H., & Bradshaw, C. P. (2015). An examination of the association between observed and self-reported culturally proficient teaching practices. *Psychology in the Schools, 52*(6), 533-548.
- Dede, C., Jass Ketelhut, D., Whitehouse, P., Breit, L., & McCloskey, E. M. (2009). A research agenda for online teacher professional development. *Journal of teacher education, 60*(1), 8-19.
- Delale-O'Connor, L. A., Alvarez, A. J., Murray, I. E., & Milner, IV, H. R. (2017). Self-efficacy beliefs, classroom management, and the cradle-to-prison pipeline. *Theory Into Practice, 56*(3), 178-186.
- Delfino, M., & Persico, D. (2007). Online or face-to-face? Experimenting with different techniques in teacher training. *Journal of Computer Assisted Learning, 23*(5), 351-365.

- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational researcher*, 38(3), 181-199.
- Devine, P. G., Forscher, P. S., Austin, A. J., & Cox, W. T. (2012). Long-term reduction in implicit race bias: A prejudice habit-breaking intervention. *Journal of experimental social psychology*, 48(6), 1267-1278.
- Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, 106(2), 569.
- Diedrichs, P. C. & Barlow, F. K. (2011). How to lose weight bias fast! Evaluating a brief anti-weight bias intervention. *British journal of health psychology*, 16(4), 846-861.
- Diliberti, M. K., Schwartz, H. L., & Grant, D. (2021). *Stress Topped the Reasons Why Public School Teachers Quit, Even Before COVID-19*. Santa Monica, CA: RAND Corporation. <https://doi.org/10.7249/RRA1121-2>
- Dovidio, J. F., Glick, P. E., & Rudman, L. A. (2005). *On the nature of prejudice: Fifty years after Allport*. Malden, MA: Blackwell Publishing.
- Downer, J. T., Kraft-Sayre, M. E., & Pianta, R. C. (2009). Ongoing, web-mediated professional development focused on teacher-child interactions: Early childhood

- educators' usage rates and self-reported satisfaction. *Early Education and Development*, 20(2), 321-345.
- Eber, L., Upreti, G., & Rose, J. (2010). Addressing ethnic disproportionality in school discipline through positive behavior interventions and supports (PBIS). *Building Leadership*, 17(8), 1-11.
- Elliott, S. N., Witt, J. C., Galvin, G. A., & Peterson, R. (1984). Acceptability of positive and reductive behavioral interventions: Factors that influence teachers' decisions. *Journal of School Psychology*, 22(4), 353-360.
- Erickson, A. S. G., Noonan, P. M., & McCall, Z. (2012). Effectiveness of online professional development for rural special educators. *Rural Special Education Quarterly*, 31(1), 22-32.
- Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). Breaking schools' rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement. *New York: Council of State Governments Justice Center*.
- Fallon, L. M., Cathcart, S. C., DeFouw, E. R., O'Keeffe, B. V., & Sugai, G. (2018). Promoting teachers' implementation of culturally and contextually relevant class-wide behavior plans. *Psychology in the Schools*, 55(3), 278-294.
- Fallon, L. M., O'Keeffe, B. V., Gage, N. A., & Sugai, G. (2015). Brief report: Assessing attitudes toward culturally and contextually relevant schoolwide positive behavior support strategies. *Behavioral Disorders*, 40(4), 251-260.

- Fallon, L. M., O’Keeffe, B. V., & Sugai, G. (2012). Consideration of culture and context in school-wide positive behavior support: A review of current literature. *Journal of Positive Behavior Interventions, 14*(4), 209-219.
- Feyerherm, W. H., & Butts, J. (2003). Proposed Methods for Measuring Disproportionate Minority Contact. *Washington, DC: Office of Juvenile Justice and Delinquency Prevention.*
- Fishman, B., Konstantopoulos, S., Kubitskey, B. W., Vath, R., Park, G., Johnson, H., & Edelson, D. C. (2013). Comparing the impact of online and face-to-face professional development in the context of curriculum implementation. *Journal of teacher education, 64*(5), 426-438.
- Garcia, S. B., & Guerra, P. L. (2004). Deconstructing deficit thinking: Working with educators to create more equitable learning environments. *Education and urban society, 36*(2), 150-168.
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of teacher education, 53*(2), 106-116.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Gay, G., & Howard, T. C. (2000). Multicultural teacher education for the 21st century. *The teacher educator, 36*(1), 1-16.

Gettinger, M., Stoiber, K., & Kosciak, R. (2008). Effects of a preparation program focused on accommodating children with challenging behaviors. *Teacher Education and Special Education, 31*(3), 164-181.

Gettinger, M., & Walter, M. J. (2012). Classroom strategies to enhance academic engaged time. In *Handbook of research on student engagement* (pp. 653-673). Springer, Boston, MA.

Gilliam, W. S., Maupin, A. N., Reyes, C. R., Accavitti, M., & Shic, F. (2016). Do early educators' implicit biases regarding sex and race relate to behavior expectations and recommendations of preschool expulsions and suspensions. *Research Study Brief. Yale University, Yale Child Study Center, New Haven, CT.*

Girod, S., Fassiotto, M., Grewal, D., Ku, M. C., Sriram, N., Nosek, B. A., & Valentine, H. (2016). Reducing implicit gender leadership bias in academic medicine with an educational intervention. *Academic Medicine, 91*(8), 1143-1150.

Graham, S., Harris, K. R., Fink, B., & MacArthur, C. A. (2001). Teacher efficacy in writing: A construct validation with primary grade teachers. *Scientific studies of reading, 5*(2), 177-202.

Gregory, A., Hafen, C. A., Ruzek, E., Mikami, A. Y., Allen, J. P., & Pianta, R. C. (2016). Closing the racial discipline gap in classrooms by changing teacher practice. *School psychology review, 45*(2), 171-191.

- Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin?. *Educational Researcher*, 39(1), 59-68.
- Gregory, A., & Weinstein, R. S. (2008). The discipline gap and African Americans: Defiance or cooperation in the high school classroom. *Journal of School Psychology*, 46(4), 455-475.
- Gresham, F. M., MacMillan, D. L., Beebe-Frankenberger, M. E., & Bocian, K. M. (2000). Treatment integrity in learning disabilities intervention research: Do we really know how treatments are implemented? *Learning Disabilities Research & Practice*, 15(4), 198-205.
- Guskey, T. R. (1994). Professional development in education: In search of the optimal mix (Report No: ED 369181). American Educational Research Association, New Orleans, LA.
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Han, H. S. (2014). Supporting early childhood teachers to promote children's social competence: Components for best professional development practices. *Early Childhood Education Journal*, 42(3), 171-179.
- Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., ... & Duda, S. N. (2019). The REDCap consortium: Building an international community of software platform partners. *Journal of biomedical informatics*, 95, 103208.

- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of biomedical informatics*, 42(2), 377-381.
- Harris-Murri, N., King, K., & Rostenberg, D. (2006). Reducing disproportionate minority representation in special education programs for students with emotional disturbances: Toward a culturally responsive response to intervention model. *Education and Treatment of Children*, 29(4), 779.
- Hemmeter, M. L., Fox, L., Jack, S., & Broyles, L. (2007). A program-wide model of positive behavior support in early childhood settings. *Journal of Early Intervention*, 29(4), 337-355.
- Hemmeter, M. L., Santos, R. M., & Ostrosky, M. M. (2008). Preparing early childhood educators to address young children's social-emotional development and challenging behavior: A survey of higher education programs in nine states. *Journal of Early Intervention*, 30(4), 321-340.
- Hershfeldt, P. A., Sechrest, R., Pell, K. L., Rosenberg, M. S., Bradshaw, C. P., & Leaf, P. J. (2009). Double-Check: A framework of cultural responsiveness applied to classroom behavior. *Teaching Exceptional Children Plus*, 6(2), 2-18.
- IBM Corp. Released 2020. IBM SPSS Statistics for Windows, Version 27.0. Armonk, NY: IBM Corp.

- Ingersoll, R. M. (2012). Beginning teacher induction what the data tell us. *Phi Delta Kappan*, 93(8), 47-51.
- Kabilan, M.K. (2004) Online Professional Development, *Journal of Computing in Teacher Education*, 21:2, 51-57
- Kim, C. Y., Losen, D. J., & Hewitt, D. T. (2010). *The school-to-prison pipeline: Structuring legal reform*. NYU Press.
- Klingner, J., Artiles, A. J., Kozleski, E., Harry, B., Zion, S., Tate, W., ... & Riley, D. (2005). Addressing the disproportionate representation of culturally and linguistically diverse students in special education through culturally responsive educational systems. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 13, 1-40.
- Lai, C. K., Hoffman, K. M., & Nosek, B. A. (2013). Reducing implicit prejudice. *Social and Personality Psychology Compass*, 7(5), 315-330.
- Lai, C. K., Marini, M., Lehr, S. A., Cerruti, C., Shin, J. E. L., Joy-Gaba, J. A., ... & Frazier, R. S. (2014). Reducing implicit racial preferences: A comparative investigation of 17 interventions. *Journal of Experimental Psychology: General*, 143(4), 1765.
- Lane, K. L., Kalberg, J. R., Bruhn, A. L., Driscoll, S. A., Wehby, J. H., & Elliott, S. N. (2009). Assessing social validity of school-wide positive behavior support plans: Evidence for the reliability and structure of the Primary Intervention Rating Scale. *School Psychology Review*, 38(1).

- Larson, K. E. (2016). Classroom management training for teachers in urban environments serving predominately African American students: A review of the literature. *The Urban Review*, 48(1), 51-72.
- Losen, D.J. (2011). *Discipline Policies, Successful Schools, and Racial Justice*. Boulder, CO: National Education Policy Center. Retrieved August 1, 2019 from <http://nepc.colorado.edu/publication/discipline-policies>.
- Losen, D. J., & Gillespie, J. (2012). Opportunities suspended: The disparate impact of disciplinary exclusion from school. *Civil Rights Project/Proyecto Derechos Civiles*.
- Losen, D. J., Hodson, C., Keith, M. A., Morrison, K., & Belway, S. (2015). Are we closing the school discipline gap? Los Angeles, CA: Center for Civil Rights Remedies at the Civil Rights Project at UCLA.
- Losen, D. J., Martinez, T. E., & Okelola, V. (2014). Keeping California's kids in school: Fewer students of color missing school for minor misbehavior. *Los Angeles: The Center for Civil Rights Remedies at the Civil Rights Project of UCLA*.
- Losen, D.L. & Skiba, R.J. (2010). *Suspended Education: Urban Middle Schools in Crisis*. Los Angeles: The Civil Rights Project at UCLA.  
[http://civilrightsproject.ucla.edu/research/k-12-education/school-discipline/suspended-education-urban-middle-schools-in-crisis/Suspended-Education\\_FINAL-2.pdf](http://civilrightsproject.ucla.edu/research/k-12-education/school-discipline/suspended-education-urban-middle-schools-in-crisis/Suspended-Education_FINAL-2.pdf)

- Malo–Juvera, V., Correll, P., & Cantrell, S. (2018). A mixed methods investigation of teachers' self-efficacy for culturally responsive instruction. *Teaching & Teacher Education, 74*, 146–156.
- Martinez, S. (2009). A system gone berserk: How are zero-tolerance policies really affecting schools?. *Preventing school failure: alternative education for children and youth, 53*(3), 153-158.
- McAllister, G., & Irvine, J. J. (2000). Cross cultural competency and multicultural teacher education. *Review of educational research, 70*(1), 3-24.
- McCarthy, J. D., & Hoge, D. R. (1987). The social construction of school punishment: Racial disadvantage out of universalistic process. *Social Forces, 65*(4), 1101-1120.
- McHugh, R. K., & Barlow, D. H. (2010). The dissemination and implementation of evidence-based psychological treatments: a review of current efforts. *American Psychologist, 65*(2), 73.
- McIntosh, K., Barnes, A., Eliason, B., & Morris, K. (2014). Using discipline data within SWPBIS to identify and address disproportionality: A guide for school teams. *Technical Assistance Center on Positive Behavioral Interventions and Supports.*
- McIntosh, K., Gion, C., & Bastable, E. (2018). Do Schools Implementing SWPBIS Have Decreased Racial and Ethnic Disproportionality in School Discipline?. *PBIS Evaluation Brief. Office of Special Education National Technical Assistance Center on Positive Behavioral Interventions and Supports.*

- McIntosh, K., Girvan, E. J., Horner, R., & Smolkowski, K. (2014). Education not incarceration: A conceptual model for reducing racial and ethnic disproportionality in school discipline. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 5(2), 4.
- McIntosh, K., Massar, M. M., Algozzine, R. F., George, H. P., Horner, R. H., Lewis, T. J., & Swain-Bradway, J. (2017). Technical adequacy of the SWPBIS tiered fidelity inventory. *Journal of Positive Behavior Interventions*, 19(1), 3-13.
- Mercer, S. H., McIntosh, K., & Hoselton, R. (2017). Comparability of fidelity measures for assessing tier 1 school-wide positive behavioral interventions and supports. *Journal of Positive Behavior Interventions*, 19(4), 195-204.
- Monroe, C. R. (2005). Why are "bad boys" always black?: Causes of disproportionality in school discipline and recommendations for change. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 79(1), 45-50.
- Monroe, C. R., & Obidah, J. E. (2004). The influence of cultural synchronization on a teacher's perceptions of disruption: A case study of an African American middle-school classroom. *Journal of Teacher Education*, 55(3), 256-268.
- Moretti, F., van Vliet, L., Bensing, J., Deledda, G., Mazzi, M., Rimondini, M., ... & Fletcher, I. (2011). A standardized approach to qualitative content analysis of focus group discussions from different countries. *Patient education and counseling*, 82(3), 420-428.

- Morris, E. W., & Perry, B. L. (2016). The punishment gap: School suspension and racial disparities in achievement. *Social Problems*, 63(1), 68-86.
- Morris, E. W., & Perry, B. L. (2017). Girls behaving badly? Race, gender, and subjective evaluation in the discipline of African American girls. *Sociology of education*, 90(2), 127-148.
- National Center for Pyramid Model Innovations (NCPMI) (2016). Online Training [Website]. [www.pyramidmodel.org/services/online-training/](http://www.pyramidmodel.org/services/online-training/)
- Neal, L. V. I., McCray, A. D., Webb-Johnson, G., & Bridgest, S. T. (2003). The effects of African American movement styles on teachers' perceptions and reactions. *The Journal of Special Education*, 37(1), 49-57.
- Nelson, S. W., & Guerra, P. L. (2014). Educator beliefs and cultural knowledge: Implications for school improvement efforts. *Educational Administration Quarterly*, 50(1), 67-95.
- Noguera, P. A. (2003). Schools, prisons, and social implications of punishment: Rethinking disciplinary practices. *Theory into Practice*, 42(4), 341-350.
- O'Dwyer, L. M., Carey, R., & Kleiman, G. (2007). The Louisiana Algebra I online initiative as a model for teacher professional development: Examining teacher experiences. *Journal of Asynchronous Learning Networks*, 11(3), 69-93.
- Office for Standards in Education (Ofsted), 2006. *The logical chain*. London: Ofsted.

- Office of Special Education Programs Technical Assistance Center on Positive Behavioral Interventions and Supports (2017). Positive Behavioral Interventions & Supports [Website]. [www.pbis.org](http://www.pbis.org).
- Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes: Race and the disciplining of young students. *Psychological science, 26*(5), 617-624.
- Olivos, E. M., Gallagher, R. J., & Aguilar, J. (2010). Fostering collaboration with culturally and linguistically diverse families of children with moderate to severe disabilities. *Journal of Educational and Psychological Consultation, 20*(1), 28-40.
- Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy*. Retrieved June 1, 2021 from <https://www.uky.edu/~eushe2/Pajares/eff.html>.
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly, 19*(2), 139-158.
- Pajares, F., Hartley, J., & Valiante, G. (2001). Response format in writing self-efficacy assessment: Greater discrimination increases prediction. *Measurement and evaluation in counseling and development, 33*(4), 214.
- Palardy, G. J., & Rumberger, R. W. (2008). Teacher effectiveness in first grade: The importance of background qualifications, attitudes, and instructional practices for student learning. *Educational Evaluation and Policy Analysis, 30*(2), 111-140.
- Pas, E. T., Larson, K. E., Reinke, W. M., Herman, K. C., & Bradshaw, C. P. (2016). Implementation and acceptability of an adapted classroom check-up coaching

- model to promote culturally responsive classroom management. *Education and Treatment of Children*, 39(4), 467-491.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, Inc.
- Payne, D., & Wolfson, T. (2000). Teacher professional development—the principal's critical role. *Nassp Bulletin*, 84(618), 13-21.
- Pollock, M., Deckman, S., Mira, M., & Shalaby, C. (2010). “But what can I do?”: Three necessary tensions in teaching teachers about race. *Journal of Teacher Education*, 61(3), 211-224.
- Porter, A. C., & Brophy, J. (1988). Synthesis of research on good teaching: Insights from the work of the Institute for Research on Teaching. *Educational leadership*, 45(8), 74-85.
- Rausch, M. K., & Skiba, R. (2004). Disproportionality in School Discipline among Minority Students in Indiana: Description and Analysis. Children Left Behind Policy Briefs. Supplementary Analysis 2-A. *Center for Evaluation and Education Policy, Indiana University*.
- Reeves, T. D., & Pedulla, J. J. (2011). Predictors of teacher satisfaction with online professional development: evidence from the USA's e-Learning for Educators initiative. *Professional Development in Education*, 37(4), 591-611.

- Reglin, G., Akpo-Sanni, J., & Losike-Sedimo, N. (2012). The effect of a professional development classroom management model on at-risk elementary students' misbehaviors. *Education, 133*(1), 3-18.
- Riddle, T., & Sinclair, S. (2019). Racial disparities in school-based disciplinary actions are associated with county-level rates of racial bias. *Proceedings of the National Academy of Sciences, 116*(17), 8255-8260.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford University Press.
- Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of educational research, 81*(4), 493-529.
- Ross, J., & Bruce, C. (2007). Professional development effects on teacher efficacy: Results of randomized field trial. *The journal of educational research, 101*(1), 50-60.
- Salmona, M., Lieber, E., & Kaczynski, D. (2019). *Qualitative and mixed methods data analysis using Dedoose: A practical approach for research across the social sciences*. Sage Publications.
- Schunk, D. H. (1987). Peer models and children's behavioral change. *Review of educational research, 57*(2), 149-174.

- Schwehr, E. M. (2014). *The effects of intentional teacher professional development in response to intervention on teachers' knowledge and self-efficacy* (Doctoral dissertation, The University of Wisconsin-Milwaukee).
- Scott, V. C., & Wolfe, S. M. (Eds.). (2014). *Community psychology: Foundations for practice*. SAGE Publications.
- Showalter, D., Johnson, J., Klein, R., & Hartman, S. L. (2017). *Why rural matters 2015-2016: Understanding the changing landscape*. Rural School and Community Trust.
- Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and teacher education, 23*(7), 1086-1101.
- Siwatu, K. O., Putman, S. M., Starker-Glass, T. V., & Lewis, C. W. (2017). The culturally responsive classroom management self-efficacy scale: Development and initial validation. *Urban Education, 52*(7), 862-888.
- Siwatu, K. O., & Starker, T. V. (2010). Predicting preservice teachers' self-efficacy to resolve a cultural conflict involving an African American student. *Multicultural Perspectives, 12*(1), 10-17.
- Skiba, R. J., Chung, C. G., Trachok, M., Baker, T. L., Sheya, A., & Hughes, R. L. (2014). Parsing disciplinary disproportionality: Contributions of infraction, student, and school characteristics to out-of-school suspension and expulsion. *American Educational Research Journal, 51*(4), 640-670.

- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The urban review*, 34(4), 317-342.
- Skiba, R., & Peterson, R. (2003). Teaching the social curriculum: School discipline as instruction. *Preventing School Failure: Alternative Education for Children and Youth*, 47(2), 66-73.
- Skiba, R. J., Poloni-Staudinger, L., Simmons, A. B., Renae Feggins-Azziz, L., & Chung, C. G. (2005). Unproven links: Can poverty explain ethnic disproportionality in special education?. *The Journal of Special Education*, 39(3), 130-144.
- Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. G. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children*, 74(3), 264-288.
- Smith, E. J., & Harper, S. R. (2015). *Disproportionate impact of K-12 school suspension and expulsion on Black students in southern states*. Center for the Study of Race and Equity in Education. Philadelphia, PA: University of Pennsylvania.  
<http://www.gse.upenn.edu/equity/sites/gse.upenn.edu/equity/files/publications/SOUTHADVANCEDDRAFT24AUG15.pdf>.
- South Carolina Department of Education. (2021). *South Carolina Enrich IEP System*.  
<https://ed.sc.gov/districts-schools/special-education-services/oversight-and-assistance-o-a/south-carolina-enrich-iep-system/>.

South Carolina Exec. Order No. 2020-09 (March 15, 2020).

<https://governor.sc.gov/sites/default/files/Documents/Executive-Orders/2020-03-15%20FILED%20Executive%20Order%20No.%202020-09%20-%20Closing%20Schools%20Cancelling%20Elections%20Other%20Provisions%20Due%20to%20COVID-19.pdf>.

Steed, E. A., Pomerleau, T., Muscott, H., & Rohde, L. (2013). Program-wide positive behavioral interventions and supports in rural preschools. *Rural Special Education Quarterly*, 32(1), 38-46.

Stormont, M., Reinke, W. M., Newcomer, L., Marchese, D., & Lewis, C. (2015). Coaching teachers' use of social behavior interventions to improve children's outcomes: A review of the literature. *Journal of Positive Behavior Interventions*, 17(2), 69-82.

Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy*, 24(1-2), 23-50.

Sugai, G., & Horner, R. R. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School psychology review*, 35(2), 245.

Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., ... & Turnbull, A. P. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of positive behavior interventions*, 2(3), 131-143.

- Sugai, G., O’Keeffe, B. V., & Fallon, L. M. (2012). A contextual consideration of culture and school-wide positive behavior support. *Journal of Positive Behavior Interventions, 14*(4), 197-208.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education, 17*(7), 783-805.
- Toldson, I. A. (2011). Breaking barriers 2: Plotting the path away from juvenile detention and toward academic success for school-age African American males. *Washington, DC: Congressional Black Caucus Foundation.*
- Townsend, B. L. (2000). The disproportionate discipline of African American learners: Reducing school suspensions and expulsions. *Exceptional children, 66*(3), 381-391.
- Townsend, B. L. (2002). Leave no teacher behind: A bold proposal for teacher education. *International Journal of Qualitative Studies in Education, 15*(6), 727-738.
- Treacy, B., Kleiman, G., & Peterson, K. (2002). Successful online professional development. *Learning and Leading with Technology, 30*(1), 42-49.
- Trent, S. C., Kea, C. D., & Oh, K. (2008). Preparing preservice educators for cultural diversity: How far have we come?. *Exceptional Children, 74*(3), 328-350.
- Tucker, C. M., Porter, T., Reinke, W. M., Herman, K. C., Ivery, P. D., Mack, C. E., & Jackson, E. S. (2005). Promoting teacher efficacy for working with culturally diverse students. *Preventing School Failure: Alternative Education for Children and Youth, 50*(1), 29-34.

- U. S. Department of Education Office for Civil Rights. (2014). *Civil rights data collection data snapshot: School discipline*. [www.ocrdata.edu.gov](http://www.ocrdata.edu.gov)
- U. S. Department of Education Office for Civil Rights. (2019). *Civil rights data collection. School discipline*. [www.ocrdata.edu.gov](http://www.ocrdata.edu.gov)
- Van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher expectations and the ethnic achievement gap. *American Educational Research Journal*, 47(2), 497-527.
- Van de Ven, A. H., Polley, D. E., Garud, R., & Venkataraman, S. (1999). *The innovation journey*. Oxford: Oxford University Press.
- Vincent, C. G., Randall, C., Cartledge, G., Tobin, T. J., & Swain-Bradway, J. (2011). Toward a conceptual integration of cultural responsiveness and schoolwide positive behavior support. *Journal of Positive Behavior Interventions*, 13(4), 219-229.
- Vincent, C. G., Swain-Bradway, J., Tobin, T. J., & May, S. (2011). Disciplinary referrals for culturally and linguistically diverse students with and without disabilities: Patterns resulting from school-wide positive behavior support. *Exceptionality*, 19(3), 175-190.
- Vincent, C. G., & Tobin, T. J. (2011). The relationship between implementation of school-wide positive behavior support (SWPBS) and disciplinary exclusion of

- students from various ethnic backgrounds with and without disabilities. *Journal of Emotional and Behavioral Disorders*, 19(4), 217-232.
- Wallace Jr, J. M., Goodkind, S., Wallace, C. M., & Bachman, J. G. (2008). Racial, ethnic, and gender differences in school discipline among US high school students: 1991-2005. *The Negro educational review*, 59(1-2), 47.
- Watson, G. R. (2006). Technology professional development: Long-term effects on teacher self-efficacy. *Journal of Technology and Teacher Education*, 14(1), 151-165.
- Weinstein, R. S. (2002). *Reaching higher: The power of expectations in schooling*. Cambridge, MA: Harvard University Press.
- Weinstein, C. S., Tomlinson-Clarke, S., & Curran, M. (2004). Toward a conception of culturally responsive classroom management. *Journal of teacher education*, 55(1), 25-38.
- Whitford, D. K., Katsiyannis, A., & Counts, J. (2016). Discriminatory discipline: Trends and issues. *NASSP Bulletin*, 100(2), 117-135.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and teacher Education*, 6(2), 137-148.

## APPENDIX A

### TEACHER DEMOGRAPHIC/CLASSROOM QUESTIONNAIRE

**Instructions.** Please fill out the demographic information on the page below. The information requested is necessary for the research process. Please be assured that this information and all of your responses will be kept strictly confidential.

#### Demographic Information

Gender:

Male

Female

Other

Age: \_\_\_\_\_

Race/ethnicity:

Native American/Alaska Native

Asian/Pacific Islander

Black/African American

White/Caucasian

Hispanic/Latinx

Biracial/Multi-racial

Other

#### Teaching Information

Educational background:

Bachelor's degree (BA, BS)

Master's degree (MA, MAT)

MA + 30

Doctoral degree (PhD, EdD)

Other

What was your undergraduate major?

Current school:

*Note: This will be used to match your responses with your school's enrollment/demographic information and overall implementation of Schoolwide PBIS.*

How many years have you taught in an elementary school setting?

What best describes how you are currently interacting with your students?

In-person classroom learning

Hybrid (some in-person, some virtual/distance) learning

Virtual/distance learning

Have you previously received training on:

Implicit bias: yes/no

Classroom management practices: yes/no

Culturally responsive practices, culturally responsive teaching, or teaching diverse students: yes/no

Adverse childhood experiences (ACEs): yes/no

Trauma-informed school practices: yes/no

(If they respond yes) Where did you receive this training?

Undergraduate course

Graduate course

Professional development provided by my school/district

Materials provided by a fellow teacher

I sought out the information on my own.

**Classroom Information:**

In your current class, approximately what percentage of your students belong to a minority (i.e., not White)?

0-5%            6-10%            11-25%            26-50%            51-75%            76-100%

In your current class, approximately what percentage of your students speak English as a second language?

0-5%            6-10%            11-25%            26-50%            51-75%            76-100%

In your current class, approximately what percentage of your students qualify for free/reduced lunch?

0-5%            6-10%            11-25%            26-50%            51-75%            76-100%

## APPENDIX B

### TEACHER SENSE OF EFFICACY SCALE

#### Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001)

##### Classroom Management Subscale

**Directions.** The following questions will ask you to rate your confidence in accomplishing specific classroom management tasks. For each question, please rate your answer on a scale from 0 (nothing) to 9 (a great deal).

1. How much can you do to control disruptive behavior in the classroom?  
0 (nothing) ----- 9 (a great deal)
2. How much can you do to get children to follow classroom rules?  
0 (nothing) ----- 9 (a great deal)
3. How much can you do to calm a student who is disruptive or noisy?  
0 (nothing) ----- 9 (a great deal)
4. How well can you establish a classroom management system with each group of students?  
0 (nothing) ----- 9 (a great deal)
5. How well can you keep a few problem students from ruining an entire lesson?  
0 (nothing) ----- 9 (a great deal)
6. How well can you respond to defiant students?  
0 (nothing) ----- 9 (a great deal)
7. To what extent can you make your expectation clear about student behavior?  
0 (nothing) ----- 9 (a great deal)
8. How well can you establish routines to keep activities running smoothly?  
0 (nothing) ----- 9 (a great deal)

## APPENDIX C

### TRAINING-RELATED REFLECTION QUESTIONS AND QUALITATIVE FEEDBACK

**Directions.** The following questions correspond to self-reflection exercises described in the online training, *Culturally Responsive Practices to Reduce Implicit Bias, Disproportionality, Suspension & Expulsion*. As you complete the videos for each of the five parts of the training, please answer the corresponding questions. There are no right or wrong answers and your typed responses may be as short or as long as you like. However, as discussed during the training, note that self-reflection is an integral part of becoming culturally responsive in the classroom. Your responses will be kept confidential and anonymous.

#### **Part 1: Introduction**

1. In what ways do we avoid discussing race? Is it uncomfortable to discuss race? Does it go against what you were taught? Are you afraid of being offensive?
2. Are early childhood/elementary school practices “color blind” -- that is, do we implement instructional and discipline practices without regard to race or color? If they are “color blind,” why are there such disparities in discipline practices between racial groups? Why the achievement gap?

#### **Part 2: Implicit Bias**

1. In what ways have you witnessed or heard about disproportionality in education?
2. Why does disproportionate discipline happen? Why do some children stand out as troublemakers while others who might be engaged in the same behaviors may not be seen this way?

#### **Part 3: Hot Buttons**

1. What are three challenging behaviors that “push your buttons?”
2. Write the emotion word that describes the way each of those behaviors makes you feel.
3. What do you do in response to each of these behaviors? Write down how you act/react when a child displays each behavior.

4. How does your response impact the relationship you have with the child? With the family?
5. Where might there be cultural disconnects in your classroom (especially with Hot Button behaviors)?

**Part 4: What is culture?**

Think about some of the practices, beliefs, perspectives, and identities you learned from your own cultural upbringing. Select **at least two** elements of culture and complete the corresponding prompts below.

**Element of Culture: Discipline**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Education**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Attitude towards time**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Gender roles**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Attitude about food**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Status of age**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Dependence/Interdependence**

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Element of Culture: Pick your own!**

Chosen element of culture:

My values growing up:

My values now:

What my school/organization values:

How my students/families values differ:

How the difference might create cultural disconnects:

**Part 5: Culturally Responsive Practices**

1. Describe a cultural disconnect that might exist between your/your school's expectations and one of your students or their family. How can you address that gap?
2. The training reviewed seven principles of culturally responsive teaching. Were there any that stuck out as particularly useful, important, or easy to implement? Describe how you can incorporate culturally responsive practices into your classroom.

**Final Questions**

1. Approximately how much time did it take you to complete the online training and reflection questions?
2. What was the most important thing you learned as part of this training?
3. Now that you have completed the training, do you believe that you will think about student behavior and classroom management differently? If yes, describe the impact the training had on how you think of student behavior and classroom management. If no, describe why the training will not change how you think of student behavior and classroom management.
4. Now that you have completed the training, are there any areas in which you would like additional training or resources? If so, please describe.

5. Now that you have completed the training, do you have any questions that did not get answered? If so, please list.
6. How could this training be improved (e.g., content covered; length of training; opportunities for feedback, practice, or group discussion, etc.)?
7. Would you recommend this training to other elementary school teachers? Why or why not?
8. Please provide any other thoughts you have about the online training.
9. How does your school currently support implementing culturally responsive practices?
10. What barriers currently exist to implementing culturally responsive practices in your school?
11. What additional supports would help you implement and sustain culturally responsive practices in your school?

## APPENDIX D

### TEACHER OUTCOME MEASURES

#### **Culturally Responsive Classroom Management Self-Efficacy Scale (Siwatu et al., 2017)**

**Directions:** For each statement, please rate how confident you are in your ability to perform each task.

1. Assess students' behaviors with the knowledge that acceptable school behaviors may not match those that are acceptable within the student's home culture.  
0 (no confidence at all) ----- 100 (completely confident)
2. Use culturally responsive discipline practices to alter the behavior of a student who is being defiant.  
0 (no confidence at all) ----- 100 (completely confident)
3. Create a learning environment that conveys respect for the cultures of all students in my classroom.  
0 (no confidence at all) ----- 100 (completely confident)
4. Use my knowledge of students' backgrounds to create a culturally compatible learning environment.  
0 (no confidence at all) ----- 100 (completely confident)
5. Establish high behavioral expectations that encourage students to produce high-quality work.  
0 (no confidence at all) ----- 100 (completely confident)
6. Clearly communicate classroom policies.  
0 (no confidence at all) ----- 100 (completely confident)
7. Structure the learning environment so that all students feel like a valued member of the learning community.  
0 (no confidence at all) ----- 100 (completely confident)
8. Use what I know about my students' cultural background to develop an effective learning environment.  
0 (no confidence at all) ----- 100 (completely confident)

9. Design the classroom in a way that communicates respect for diversity.  
0 (no confidence at all) ----- 100 (completely confident)
10. Use strategies that will hold students accountable for producing high quality work.  
0 (no confidence at all) ----- 100 (completely confident)
11. Address inappropriate behavior without relying on traditional methods of discipline such as office referrals.  
0 (no confidence at all) ----- 100 (completely confident)
12. Critically analyze students' classroom behavior from a cross-cultural perspective.  
0 (no confidence at all) ----- 100 (completely confident)
13. Modify lesson plans so that students remain actively engaged throughout the entire class period or lesson.  
0 (no confidence at all) ----- 100 (completely confident)
14. Redirect students' behavior without the use of coercive means (i.e., consequences or verbal reprimand).  
0 (no confidence at all) ----- 100 (completely confident)
15. Communicate with students using expressions that are familiar to them.  
0 (no confidence at all) ----- 100 (completely confident)
16. Personalize the classroom so that it is reflective of the cultural background of my students.  
0 (no confidence at all) ----- 100 (completely confident)
17. Establish routines for carrying out specific classroom tasks.  
0 (no confidence at all) ----- 100 (completely confident)
18. Design activities that require students to work together toward a common academic goal.  
0 (no confidence at all) ----- 100 (completely confident)
19. Teach students how to work together.  
0 (no confidence at all) ----- 100 (completely confident)
20. Critically assess whether a particular behavior constitutes misbehavior.  
0 (no confidence at all) ----- 100 (completely confident)
21. Teach children self-management strategies that will assist them in regulating their classroom behavior.  
0 (no confidence at all) ----- 100 (completely confident)

22. Develop a partnership with parents from diverse cultural and linguistic backgrounds.  
0 (no confidence at all) ----- 100 (completely confident)
23. Use culturally appropriate methods to relate to parents from culturally and linguistically diverse backgrounds.  
0 (no confidence at all) ----- 100 (completely confident)
24. Model classroom routines for English Language Learners.  
0 (no confidence at all) ----- 100 (completely confident)
25. Explain classroom rules so that they are easily understood by English Language Learners.  
0 (no confidence at all) ----- 100 (completely confident)
26. Modify aspects of the classroom so that it matches aspects of students' home culture.  
0 (no confidence at all) ----- 100 (completely confident)
27. Implement an intervention that minimizes a conflict that occurs when a students' culturally based behavior is not consistent with school norms.  
0 (no confidence at all) ----- 100 (completely confident)
28. Develop an effective classroom management plan based on my understanding of students' family background.  
0 (no confidence at all) ----- 100 (completely confident)
29. Manage situations in which students are defiant.  
0 (no confidence at all) ----- 100 (completely confident)
30. Prevent disruptions by recognizing potential causes for misbehavior.  
0 (no confidence at all) ----- 100 (completely confident)

## Culturally Responsive Classroom Practices – Self-Assessment Checklist (Hershfeldt et al., 2009)

For the purpose of this self-assessment, the terms “code-switching”, “culture”, and “group membership” should be interpreted as defined below:

Term	Definition
Code-switching	The phenomenon of switching from one language or dialect to another in the same conversation
Culture	Collectively, the beliefs, customs, practices, and social behavior of a particular group of people
Group membership	Identifying social groups by particular qualities, such as age, gender, race, ethnicity, culture, or disability

**Directions:** Take a moment to review each element below. Rate yourself on each item, assessing how comfortable you are with understanding the element and the ease and effectiveness with which you apply it in your classroom and school.

### Ratings:

- 1: Never in my class and school
- 2: Rarely in my class and school
- 3: Most of the time in my class and school
- 4: Regularly in my class and school
- 99: This does not apply to my class and school

### Items

#### Reflective Thinking about the Children and Their “Group Membership”

- 1. I understand culture and why it is so important
- 2. I reflect on how my actions contribute to chains of behavior in my students.
- 3. I am aware of other groups and how histories and present circumstances contribute to my behavior interacting with others.
- 4. I make tangible efforts (e.g., reading, home visits, interviews, student inventories) to “reach out” and understand differences between my students and me
- 5. I have positive and constructive views of difference (i.e., “difference is not deficit”)

#### Efforts Made to Develop an Authentic Relationship

- 1. I display tangible evidence of warmth, care, and trust to my students.
- 2. I recognize special talents.
- 3. I encourage positive interactions.
- 4. I provide positive adult attention.

5. I take genuine interest in the activities and personal lives of my students.
6. I display a professional and personal orientation toward students.

### **Effective Communication**

1. I consistently communicate high expectations to my students.
2. I display professionalism, civility, and respect in all my communications.
3. I communicate with care and persistence of effort.
4. I communicate with credibility, dependability, and assertiveness.
5. I communicate without judging others.
6. I am aware and facile with “code-switching.”

### **Connection to Curriculum**

1. My instruction contains examples that reflect my students’ cultural background
2. I highlight cultural differences positively during instruction.
3. I use learning activities reflective of the background of my students, their families, and the community.

### **Sensitivity to Student’s Cultural and Situational Messages**

1. I am aware of how situations influence behavior (e.g., health, poverty, dress, neighborhood expectations).
2. I am aware of the students’ needs to meet expectations set by the school and their household, which may differ.
3. I emphasize resiliency, choice, and internal locus of control with my students.

### **Culturally Responsive Teaching Outcome Expectancy Scale (Siwatu, 2007)**

**Directions:** For each statement, please rate how certain you are that the behavior described will lead to the specified outcome.

1. A positive teacher-student relationship can be established by building a sense of trust in my students.  
0 (entirely uncertain) ----- 100 (entirely certain)
2. Developing a community of learners when my class consists of students from diverse cultural backgrounds will promote positive interactions between students.  
0 (entirely uncertain) ----- 100 (entirely certain)
3. Acknowledging the ways that the school culture is different from my students' home culture will minimize the likelihood of discipline problems.  
0 (entirely uncertain) ----- 100 (entirely certain)
4. Understanding the communication preferences of my students will decrease the likelihood of student-teacher communication problems.  
0 (entirely uncertain) ----- 100 (entirely certain)
5. Revising instructional material to include a better representation of the students' cultural group will foster positive self-images.  
0 (entirely uncertain) ----- 100 (entirely certain)
6. The likelihood of student-teacher misunderstandings decreases when my students' cultural background is understood.  
0 (entirely uncertain) ----- 100 (entirely certain)
7. Changing the structure of the classroom so that it is compatible with my students' home culture will increase their motivation to come to class.  
0 (entirely uncertain) ----- 100 (entirely certain)
8. Establishing positive home-school relations will increase parental involvement.  
0 (entirely uncertain) ----- 100 (entirely certain)
9. Student attendance will increase when a personal relationship between the teacher and students has been developed.  
0 (entirely uncertain) ----- 100 (entirely certain)
10. Using my students' interests when designing instruction will increase their motivation to learn.  
0 (entirely uncertain) ----- 100 (entirely certain)

11. Students' self-esteem can be enhanced when their cultural background is valued by the teacher.  
0 (entirely uncertain) ----- 100 (entirely certain)
  
12. Helping students from diverse cultural backgrounds succeed in school will increase their confidence in their academic ability.  
0 (entirely uncertain) ----- 100 (entirely certain)
  
13. Using culturally familiar examples will make learning new concepts easier.  
0 (entirely uncertain) ----- 100 (entirely certain)
  
14. When students see themselves in the pictures that are displayed in the classroom, they develop a positive self-identity.  
0 (entirely uncertain) ----- 100 (entirely certain)

## APPENDIX E

### CRP TRAINING AND STRATEGIES

#### SOCIAL VALIDITY/FEASIBILITY MEASURES

##### Usage Rating Profile – Intervention Revised (URP – IR) (Briesch et al., 2013)

**Directions.** The following questions refer to the information and classroom practices discussed in the online professional development training (*Culturally Responsive Practices to Reduce Implicit Bias, Disproportionality, Suspension, and Expulsion*) you recently completed. Please indicate the degree to which you agree or disagree with each statement on a scale from 1 (strongly disagree) to 6 (strongly agree).

##### Response Options:

1 (strongly disagree) 2(disagree) 3(slightly disagree) 4(slightly agree) 5(agree) 6 (strongly agree)

##### Items:

1. This training is an effective choice for addressing a variety of problems.
2. I would need additional resources to carry out the culturally responsive classroom practices discussed in the training.
3. I would be able to allocate my time to implement the culturally responsive classroom practices discussed in the training.
4. I understand how to use the culturally responsive classroom practices discussed in the training.
5. A positive home-school relationship is needed to implement the culturally responsive classroom practices discussed in the training.
6. I am knowledgeable about the culturally responsive classroom practices discussed in the training.
7. The culturally responsive classroom practices discussed in the training are a fair way to handle student behavior problems.
8. The total time required to implement the culturally responsive classroom practices discussed in the training would be manageable.
9. I would not be interested in implementing the culturally responsive classroom practices discussed in the training.
10. My administrator would be supportive of my use of the culturally responsive classroom practices discussed in the training.
11. I would have positive attitudes about implementing the culturally responsive classroom practices discussed in the training.

12. The culturally responsive classroom practices discussed in the training are a good way to handle student behavior problems.
13. Preparation of materials needed for the culturally responsive classroom practices discussed in the training would be minimal.
14. Use of the culturally responsive classroom practices discussed in the training would be consistent with the mission of my school.
15. Parental collaboration is required in order to use the culturally responsive classroom practices discussed in the training.
16. Implementation of the culturally responsive classroom practices discussed in the training is well-matched to what is expected in my job.
17. Material resources needed for the culturally responsive classroom practices discussed in the training are reasonable.
18. I would implement the culturally responsive classroom practices discussed in the training with a good deal of enthusiasm.
19. The culturally responsive classroom practices discussed in the training are too complex to carry out accurately.
20. The culturally responsive classroom practices discussed in the training are consistent with the way things are done in my school.
21. The culturally responsive classroom practices discussed in the training would not be disruptive to other students.
22. I would be committed to carrying out the culturally responsive classroom practices discussed in the training.
23. The culturally responsive classroom practices discussed in the training easily fit in with my current practices.
24. I would need consultative support or coaching to implement the culturally responsive classroom practices discussed in the training.
25. I understand the culturally responsive classroom practices discussed in the training.
26. My work environment is conducive to implementing the culturally responsive classroom practices discussed in the training.
27. Regular home-school communication is needed to implement the culturally responsive classroom practices discussed in the training.
28. I would require additional professional development in order to implement the culturally responsive classroom practices discussed in the training.

## **Teacher Attitudes and Beliefs about Culturally and Contextually Relevant SWPBIS Practices (Fallon et al., 2015)**

### **Classroom Practices**

**Directions.** The following questions will ask your opinion about certain practices that teachers may implement in their classrooms. For each practice, you will be asked to indicate the degree to which you feel it is 1. relevant and useful to your work as a teacher, 2. possible to implement given your current resources (e.g., time, knowledge, etc.) , and 3. likely to be effective at improving behavior for all of your students.

### **Response Options:**

1 (strongly disagree) 2 (disagree) 3 (slightly disagree) 4 (slightly agree) 5 (agree) 6 (strongly agree)

### *Classroom teachers should...*

#### **1. Define behavior from a local and setting-specific perspective.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

#### **2. Increase positive interactions with students, families, and staff members.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

#### **3. Decrease negative interactions with students, families, and staff members.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

#### **4. Engage in equitable interactions with students (e.g., provide equal amounts of praise and acknowledgement of all students, regardless of background).**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

#### **5. Set explicit, realistic, high, and challenging expectations for all students.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

#### **6. Teach social skills to all students.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

**7. Learn, include, and use students' culture and language in instruction and interactions.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

**8. Use effective instructional practices and curricula for all students.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

**Professional Development**

**Directions.** The following questions will ask your opinion about professional development topics that may improve the effectiveness of behavioral supports for all students in your school. For each professional development topic, you will be asked to indicate the degree to which you feel it represents a topic that is 1. relevant and useful to your work as a teacher, 2. possible to implement given your current resources (e.g., time, knowledge, etc.), 3. likely to be effective at improving behavior for all of your students, and 4. something for which you could access training and support.

**Response Options:**

1 (strongly disagree) 2 (disagree) 3 (slightly disagree) 4(slightly agree) 5(agree) 6 (strongly agree)

*Professional development opportunities should encourage all school personnel to...*

**1. Adopt the perspective that culture and context influence how and what students learn.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

I have access to professional development and training relevant to this suggested practice.

**2. Self-assess or self-reflect on the influence of cultural and contextual features on their instructional and behavioral decisions.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

I have access to professional development and training relevant to this suggested practice.

**3. Assess and consider their students' cultures.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

I have access to professional development and training relevant to this suggested practice.

**4. View and involve families as resources.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

I have access to professional development and training relevant to this suggested practice.

**5. Use data to set goals and evaluate outcomes.**

This practice is relevant and useful to the work I do.

I could implement this practice given the knowledge, time, and resources I have.

This practice would work to improve behavior for all my students.

I have access to professional development and training relevant to this suggested practice.