ABSTRACT

ALTEMOSE, MELISSA ANN. Teacher Efficacy and Classroom Management: A Quantitative Study of North Carolina Teachers' Openness to Receive Coaching as a Means to Reduce Reliance on Exclusionary Discipline. (Under the direction of Dr. Bonnie C. Fusarelli and Dr. Michael E. Ward).

Black students are suspended or expelled from school at much higher rates compared to their White peers, despite not engaging in more disruptive behaviors. McIntosh, Girvan, Horner, and Smolkowski's Vulnerable Decision Points model suggests that when people are not operating in their prime mental state, they are more likely to rely on implicit bias when making in-the-moment decisions. Teachers also cite student behaviors as a major cause of stress in the classroom. Coaching teachers to develop effective classroom management skills is one intervention that has been shown to not only effectively reduce the use of disproportionate discipline practices but has also been found to be successful in reducing or eliminating the disparities in discipline practices for White and Black students. The purpose of the current study was to examine whether there is a relationship between teachers' perceived self-efficacy in managing student behaviors in the classroom and their openness to participating in coaching to improve their classroom management skills that would help them become more confident in responding to behavior issues.

The data collected showed that status as a math teacher is associated with lower ratings for perceived self-efficacy in managing classroom behaviors. Consistent with the literature, the data from this study showed that the frequent writing of referrals is associated with lower ratings for perceived self-efficacy in managing classroom behaviors. One limitation to the study may have influenced the accuracy of the metric used in this study to determine teacher ability to manage a classroom; this metric is important to ensure that teachers who are most in need of coaching related to behavior management are actually willing to participate in the coaching. In

this study that metric was the mean perceived self-efficacy rating in managing classroom behaviors, and a statistically significant relationship was not observed between teachers' perceived self-efficacy ratings and their willingness to opt into coaching for classroom management. The perceived self-efficacy in managing classroom behaviors is a rating that may have been influenced by the social desirability of inflating self-efficacy ratings. Future study of this topic should examine alternative metrics for classroom management ability by pairing classroom observations and referral data analysis to further examine this relationship between intervention need (classroom management ability) and willingness to participate in coaching for classroom management.

Finally, the presentation of data on the effectiveness of instructional coaching for classroom management was associated with a statistically significant higher rating of willingness to opt into instructional coaching. This is a promising result as it provides an avenue to increase teacher interest in coaching for classroom management, even if those teachers most in need of the intervention are less willing to participate. The data collected in this study can be used to inform efforts to justify and design coaching for classroom management programs to optimally engage teachers to be willing to participate in such professional development. Such learning can help to ensure the successful implementation of instructional coaching for classroom management as an intervention to address disparities in school discipline practices.

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Teacher Efficacy and Classroom Management: A Quantitative Study of North Carolina Teachers' Openness to Receive Coaching as a Means to Reduce Reliance on Exclusionary Discipline.

by
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DEDICATION

I dedicate this work to the loving memory my grandparents, Wanda and Bob Altemose, who were the epitome of unconditional love and my favorite people in the world. Your unwavering belief in me, no matter what endeavors I undertook, provided me the confidence to pursue not only this doctorate, but many other things in my life. You saw in me a greatness that I never truly felt I deserved and I will hold that love with me forever. You did not get to see me finish this journey, but I will always be inspired by the confidence you instilled in me. I love you both dearly and will hold you in my heart forever.

BIOGRAPHY

Melissa Altemose is an educational leader committed to bringing high quality, equitable educational experiences to students from rural communities in North Carolina. Melissa holds a Bachelor of Science degree in cell and developmental biology, a Master's in Education degree for science K-12 curriculum and instruction, and a Master's in School Administration. She is a former middle school science teacher, serving in both northeastern North Carolina and Washington, DC. Melissa has served as a school administrator in the elementary, middle, and high school settings and currently serves as the principal of G.W. Bulluck Elementary School in Rocky Mount, North Carolina.

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CHAPTER 1: INTRODUCTION

Chapter Introduction

A large body of literature outlines the inequitable school discipline practices related to subjective offenses such as defiance, disruption, and disrespect among subgroups of students. The literature further describes the negative impact exclusionary discipline can have on students' later life trajectories (Forsyth et al., 2015; Simson, 2014; Skiba et al., 2011). In 2014, the U.S. Department of Justice and Department of Education released a Dear Colleague Letter addressing racial disparities in school discipline practices (U.S. Department of Justice Civil Rights Division & U.S. Department of Education Office of Civil Rights, 2014). After outlining the disparities in discipline rates for Black students compared to the overall population, the letter went on to state that their investigations found that Black students not only receive more suspensions and expulsions compared to White students, but also concluded that Black students were disciplined "more harshly and more frequently" for displaying behaviors similar to White students (U.S. Department of Justice Civil Rights Division & U.S. Department of Education Office of Civil Rights, 2014, para. 7). The letter firmly states, "In short, racial discrimination in school discipline is a real problem" (U.S. Department of Justice Civil Rights Division & U.S. Department of Education Office of Civil Rights, 2014, para. 7).

In light of the focused attention on the racial disparities in discipline practices, researchers have attempted to address the racial disparities in such practices through various interventions. While many interventions reduce discipline rates overall, few interventions are effective at reducing the gap in consequences for discipline between Black and White students (McIntosh et al., 2020; Okonofua et al., 2016; Yang et al., 2018). One emerging area of research with promising results is the use of instructional coaching to support teachers in the development

of the skills and capacity to deescalate student behaviors in the classroom that would otherwise escalate into a referral (Bradshaw et al., 2018; Gregory et al., 2016; McIntosh et al., 2021; Pas et al., 2016). While research on such coaching is limited, it is one of the few forms of intervention that have been found to not only reduce the rate of referrals overall, but to also narrow the racial disparities in discipline practices.

There are two conceptual frameworks that help outline how coaching for classroom management can be an effective intervention to address disparities in discipline practices. The vulnerable decision points model suggests that while all people have implicit biases, people do not rely on their implicit biases when making day-to-day decisions. Instead the model proposes that when people experience "vulnerable moments" or moments when they are emotionally or mentally tired, they are much more likely to make decisions that are influenced by implicit bias (McIntosh et al., 2014; Smolkowski et al., 2016). Studies also show that moments when teachers feel disrespected in the classroom, feel like they are losing control of the classroom, or feel like their authority is questioned, are moments when discipline decisions are made (Fenning & Rose, 2007; McIntosh et al., 2014; Skiba et al., 2011; Vavrus & Cole, 2002). This means that when teachers are struggling to manage their classroom and decide to issue a referral for subjective behaviors, they are more likely to be influenced by their implicit biases in making the discipline decision. Coaching is an avenue through which teachers can develop the skills to manage a classroom and increase their perceived self-efficacy in managing student behaviors, which according to the model, will reduce the instances when teachers are influenced by their implicit biases when making discipline decisions. Vygotsky's Zone of Proximal Development Theory explains why coaching can be an effective tool to help teachers develop classroom management

skills, as the theory proposes that individuals are able to reach their fullest potential through the help and collaborative effort of a coach (Vygotsky, 1978).

The purpose of this study was to examine whether there is a relationship between teachers' perceived self-efficacy in managing student behaviors in the classroom and their openness to participating in coaching to improve their classroom management skills that would help them become more confident in responding to behavior issues. Teacher perceptions of self-efficacy in managing student behaviors and openness to coaching for classroom management, along with teacher background and demographic information, were collected through a survey.

Problem Statement

America's schools do not provide all students equal access to quality educational experiences. Disproportionately applied school discipline practices represent a particularly pertinent issue that schools need to address to begin to create equitable learning environments. The United States government has put equity safeguards in place throughout history through the use of procedural guarantees and assurances. The 14th Amendment of the U.S. Constitution ensures "equal protection of law" for citizens, which applies to public education. This assurance of equity was the driving argument behind the 1954 Supreme Court decision that ruled that "separate but equal" provision of educational opportunity was unlawful (*Brown v. Board of Education of Topeka*, 1954). In addition to ensuring equity in educational inputs, there have also been examples of the government extending procedural guarantees to ensure equity of educational outputs. In North Carolina specific context, the 1997 Leandro case stated that it is a constitutional right for every child to be provided the opportunity for "a sound, basic education" (*Leandro v. State,* 1997).

While the government has put safeguards in place to ensure equity for students in terms of educational opportunities, the data show that schools are failing to provide equal opportunities for all students. Black students are 2.19 to 3.78 times more likely to be disciplined for problematic behavior compared to their White peers (Barnes & Motz, 2018; Skiba et al., 2011). Data also shows that Brown and American Indian students also experience disparities in discipline practices compared to White students, but the data is inconsistent and the gap is smaller than the gap between Black and White students (Gordon et al., 2000; Gregory et al., 2010). Black students are also more likely than White students to receive exclusionary discipline (suspensions and expulsions) for the same or similar behaviors (Barnes & Motz, 2018; Barrett et al., 2021; Skiba et al., 2011; Wald & Losen, 2003). The disproportionate representation of Black students in school discipline practices closely mirrors the disproportionate representation of Black adults in the criminal justice system (Federal Bureau of Prisons., 2022; U.S. Department of Education Office for Civil Rights, 2014). In *The New Jim Crow*, Alexander (2010) explains how mass incarceration, driven by systemic racism, is a new, subversive way of oppressing people of color. As *The New Jim Crow* shed light onto one area of systemic racism in the United States, it also led to a closer examination of systemic racism in other practices and policies in various systems, including education (Alexander, 2010). Racial disparities in exclusionary discipline practices in K-12 public schools closely mirror mass incarceration rates (U.S. Department of Education Office for Civil Rights, 2014). This parallel has served as an important catalyst to the study of a phenomenon referred to as the school-to-prison pipeline (U.S. Department of Education Office for Civil Rights, 2014).

The school-to-prison pipeline is a term used to describe the impact that experiencing exclusionary discipline can have on students' later life involvement in the criminal justice system

(U.S. Department of Education, 2014). The construct referred to as the school-to-prison pipeline outlines the ways in which the negative impacts that result from suspensions or expulsions set students on a trajectory to enter the criminal justice system. Students who are subjected to exclusionary discipline miss out on instruction, are more likely to fall behind in their courses, and are less likely to be engaged in school (Gregory et al., 2010). Students who are suspended and expelled are also more likely to feel less respected by their teachers, find it harder to develop close, positive relationships with their peers and teachers, and find it hard to shed the label of troublemaker (Barnes & Motz, 2018; Dutil, 2020; Okonofua et al., 2016). The progression of the pipeline contends that once a student feels disengaged from the school community both academically and socially, they are more likely to engage in delinquent social circles and activities and are less likely to prioritize success in school (Barnes & Motz, 2018; Skiba, Arredondo, et al., 2014).

Understanding root causes and eliminating racial disparities in school discipline practices is imperative if public education is to provide all students equal opportunity to achieve success in post-secondary life and eliminate the impact exclusionary discipline can have on students' later involvement in the criminal discipline system. In addition to the disparities in suspensions and expulsions that Black students receive, there are also disparities between Black and White students relative to the types of infractions for which they are referred to the office for discipline. Black students are more likely to receive a referral for a subjective offense such as defiance and disruption, while White students disproportionately receive referrals for objective offenses such as skipping class and smoking (Annamma et al., 2019; Forsyth et al., 2015; Girvan et al., 2017; Simson, 2014). Subjective offenses, by definition, are subject to the interpretation of and interaction with the event by the teacher (Forsyth et al., 2015; Girvan et al., 2017). The

disproportionality in subjective referrals of Black students is particularly relevant because it makes it harder to determine the influential root causes behind the systemic racism in school discipline practices.

While data clearly disclose the existence of disproportionate discipline practices, understanding the mechanisms through which the discipline practices occur is much less clear and concrete. Due to the subjective nature of referrals for Black students, it is hard for educators and researchers to accurately pinpoint the root causes that drive the disparity in referrals, leading schools and researchers to examine several different causes (Morrison & Skiba, 2001; Skiba, Chung, et al., 2014). Multiple studies have attempted to understand the origins of the disparities in discipline practices for Black and White students. Cultural mismatches between teachers and students, school system structures and practices, teacher biases, teacher classroom management skills, and unaddressed trauma have all been identified as various causes of the disparity (Girvan et al., 2017; Skiba, Chung, et al., 2014; Vavrus & Cole, 2002; Yang et al., 2018).

Several interventions have been implemented to attempt to eliminate the disproportionate use of exclusionary discipline on Black students for subjective offenses. Interventions have focused on addressing teacher mindsets, implicit biases, cultural misunderstandings, and interventions to support unaddressed student trauma (Gregory et al., 2016; McIntosh et al., 2020; Okonofua et al., 2016; Thomas et al., 2019; Welsh & Little, 2018; Yang et al., 2018). While many interventions have significantly reduced the use of exclusionary discipline practices in schools overall, few have had a significant impact on reducing the suspension/expulsion gap between Black and White students (McIntosh et al., 2020; Okonofua et al., 2016; Yang et al., 2018). This suggests that interventions are likely addressing symptoms of the problem but have not adequately addressed the root causes of the issue.

To better understand the root causes of inequitable discipline practices, it is useful to examine the mechanisms through which subjective discipline referrals occur. There is significant evidence about the number, nature, and kind of referrals written for subjective offenses such as defiance, disrespect, and disruption (Annamma et al., 2019; Forsyth et al., 2015; Simson, 2014), and about the inequitable levying of related consequences. What is less clear in the literature are the interactions that occur between students and teachers at the moment that discipline events occur. A more recent area of intervention to address disparities in discipline practices, is to support teachers to more consistently and equitably respond to student behaviors in the classroom (Bradshaw et al., 2018; Gion et al., 2022; McIntosh et al., 2021). While research in this area is still emerging, there are promising studies that indicate that providing teachers instructional coaching that includes the development of classroom management skills enables them to effectively deescalate student disruptions in the classroom and minimize teachers' feeling a loss of control over the classroom (Bradshaw et al., 2018; Fallon et al., 2019; Gion et al., 2022; Gregory et al., 2014, 2016; McIntosh et al., 2021; Pas et al., 2016). These studies, which focus on coaching teachers to develop classroom management skills, have not only found decreases in exclusionary discipline rates, but more specifically, a narrowing of the disproportionality of discipline rates between White and Black students (Bradshaw et al., 2018; Gregory et al., 2014, 2016; McIntosh et al., 2021).

Purpose

The purpose of this study was to determine if there are relationships among teachers' perceptions of their self-efficacy in managing student behaviors in the classroom, and their openness to receive instructional coaching that includes enhancement of their classroom management skills in order to reduce or eliminate instances of teachers feeling overwhelmed or

vulnerable in the classroom. Avoiding discipline moments in the classroom will minimize the likelihood that teachers will make decisions based on implicit biases when issuing referrals, according to the vulnerable decisions points model (Smolkowski et al., 2016; Vavrus & Cole, 2002). In this study, teachers responded to Likert scale questions regarding their perceived self-efficacy in responding to common disruptive student behaviors in the classroom. Additionally, data were collected to measure how open teachers are to receiving coaching to support their development of classroom management skills.

The methodology for this study was a quantitative research design. The main variables explored were teachers' perceptions of their self-efficacy in managing student behaviors in the classroom, as well as their willingness to participate in instructional coaching to develop classroom management skills. The study also examined teacher background and demographic variables such as race/ethnicity, age, gender, tenure in education, pathway to licensure, content taught, grade level taught, average use of referrals, implicit bias awareness, value of understanding implicit bias, and school level characteristics such as school size and setting (urban/rural/suburban) to determine if any of these variables are related to teachers' perceptions of their classroom management abilities or their openness to participating in coaching. The data was analyzed to see if there are relationships among teacher demographics, professional background, and perceptions of self-efficacy in managing student behaviors and their openness to receiving coaching for classroom management. Additionally, there was an experimental portion of the survey. Treatment group participants were presented data on the impact of instructional coaching to improve classroom management on student outcomes and classroom climate before answering questions regarding their willingness to receive instructional coaching for classroom management. Control group participants did not receive the data before answering

the coaching questions. For instructional coaching to be effective, it is important to understand the degree to which teachers are willing to participate in the coaching model, what impact receiving data on the effectiveness of coaching can have on willingness to opt into coaching, and whether teachers who have lower self-efficacy in responding to student behaviors in the classroom are interested in working with an instructional coach. Correlational and descriptive statistical analyses were utilized to examine the survey data.

The survey instrument was administered to middle and high school teachers in three county districts in northeastern North Carolina, with a focus on teachers serving in low-income communities. Middle and high school teachers were chosen to be surveyed, as students more frequently receive exclusionary discipline in the secondary setting (Losen et al., 2015). I chose northeastern North Carolina as the study location for several reasons. Northeastern counties in North Carolina consistently rank in the bottom quartile of the Public School Forum's *Roadmap of Need*. The Public School Forum of North Carolina, a nonpartisan organization which informs the public on education policy research and analysis, conducts an annual study that examines 20 indicators, which include educational rankings, health rankings, economic opportunity rankings, and youth behavior rankings (Public School Forum of North Carolina, 2020b). The youth behavior rankings include ratings for both short-term suspensions and juvenile detention admission rates. The three county districts in which the survey was administered fall into the bottom quartile in both the education rating and the short term-suspensions/juvenile detention youth behavior and safety specific rating (Public School Forum of North Carolina, 2020b).

The demographic profile of the region provides an additional rationale for its selection; counties in northeastern North Carolina have a higher percentage of Black residents compared to other counties in the state (U.S. Census Bureau, 2022). Black residents make up 22% of the state

population, but make up over 50% of the population in most counties in northeastern North Carolina (U.S. Census Bureau, 2022). Due to the higher percentage of Black students and the higher youth behavior ratings, the three county districts in northeastern North Carolina serve the purposes of this study. I chose these particular districts as the focus for this study because children in this area face significant challenges and have greater need of interventions to minimize racial disparities in discipline practices. Understanding teacher openness to coaching for classroom management in the highest need counties will be useful to inform policy and practice in areas where there is significant need.

More broadly speaking, North Carolina was chosen as the study location because this is where I have spent the majority of my professional career to date and where I am currently employed. I have seen evidence of the areas of need identified by the Public School Forum's report and have a personal and professional concern about the issues facing North Carolina schools. Based on these considerations I deemed it was appropriate and important to conduct the study in a state where I both reside and work.

Understanding the effectiveness of teacher instructional coaching is a relatively new area of research and the effectiveness of instructional coaching for classroom management is an even more nascent field (Kraft & Blazar, 2017). While the data are limited, instructional coaching for classroom management is one of the few interventions that has been able to help teachers successfully reduce the disparities in discipline practices for Black students (Bradshaw et al., 2018; Gregory et al., 2016; Pas et al., 2016). This study sought to add to the body of literature by examining if teachers who have varying levels of perceived self-efficacy in their ability to respond effectively to student behaviors are open and willing to participate in instructional coaching to improve their classroom management. A study of the relationship between teacher

self-efficacy in managing student classroom behaviors and their openness to coaching to improve their classroom management skills as a mechanism to prevent teachers from making discipline decisions at vulnerable discipline moments as a mechanism to reduce or eliminate disparities in discipline practices is not currently examined in the literature.

Research Questions

The relationships and variables discussed in this study were addressed using the following research questions:

1. What are teachers' perceptions of their self-efficacy in managing selected student behaviors?
2. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, implicit bias awareness, value of understanding implicit bias and average use of referrals)?
3. To what extent is the openness of teachers to participating in coaching for classroom management related to selected teacher demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, implicit bias awareness, value of understanding implicit bias, and average use of referrals)?

4. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to their openness to participating in coaching for classroom management?
5. What is the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the effectiveness of such coaching models and teachers who have not been presented such data?
6. To what extent does the openness of teachers to participating in coaching for classroom management differ between middle and high school level teachers?

Definition of Terms

Below are terms found throughout the following chapters. Some terms are technical terms related to the constructs driving this study or the variables associated with the study. Other terms are common terms that are defined specifically for their use in relationship to the topic of study.

1. *Childhood trauma:* "When a child feels threatened by an event he or she is involved in or witnesses" (Complex Trauma Treatment Network of the National Child Traumatic Stress Network, 2017, para. 1).
2. *Classroom management:* The routines, procedures, and practices a teacher uses to maintain an orderly classroom environment and appropriate student behaviors (Great Schools Partnership, 2014).
3. *Coaching for classroom management:* A type of instructional coaching that focuses specifically on teacher actions to prevent or respond to student behavior in the classroom and build relationships between teachers and students (Knight, 2018).

4. *Cultural mismatch:* Cultural mismatch in education refers to a circumstance in which a teacher comes from a different cultural background than the students they teach (Cultural Mismatch in Education, n.d.).
5. *Discipline referral*: A documented way for a teacher to inform school administration they need assistance in responding to a student's behavior.
6. *Disproportionate discipline rates/discipline gap:* The proportional overrepresentation of students of color receiving consequences in school for behavior compared to the total population of students.
7. *Exclusionary discipline:* Any form of school discipline that removes a student from their regular education setting (Smizer, 2021).
8. *Expulsion:* The permanent removal of a student from a public school system (Duke Law, n.d.) .
9. *Grade-span:* The grade-levels of the schools in which a teacher teaches as defined by the following ranges: middle (sixth – eighth grade), high (ninth – twelfth grade).
10. *Implicit bias:* "A form of bias that occurs automatically and unintentionally, that nevertheless affects judgments, decisions, and behaviors" (National Institutes of Health, 2022, para. 2).
11. *Self-efficacy:* A person's beliefs that they can succeed or be effective in a given situation (Bandura, 1977).
12. *School-to-prison pipeline:* A term used to describe how suspensions and expulsions impact students' later life involvement in the criminal justice system (U.S. Department of Education, 2014).
13. *School location type:* A description of the school as defined by rural, urban, suburban.

14. *Subjective offenses:* Behaviors in the classroom that are up to interpretation of the teacher. Subjective offences include disruption, defiance, and disrespect (Forsyth et al., 2015).
15. *Suspension:* The exclusion of a student from school attendance, which can be short or long term, for up to 365 days (Duke Law, n.d.).
16. *Teacher preparation pathway:* The learning progression that a teacher follows to be credentialed for the teaching profession, as defined by the following categories: traditional undergraduate teacher preparation degree, master's teacher preparation degree, alternative pathway through lateral entry (where a teacher already holds a bachelor's degree and earns their teaching license while teaching), alternative pathway through lateral entry via Teach for America (where a teacher already holds a bachelor's degree and earns their teaching license while teaching through the Teach for America program) (North Carolina Department of Public Instruction, n.d.).
17. *Title I School:* A school receiving federal funding provided to support low income students and schools (U.S. Department of Education, 2018)

Significance

There were several justifications for this study. While the prevalence of disproportionate exclusionary discipline in schools is well documented and several interventions have been studied, there is limited research into understanding the choices that teachers make as behavior incidents occur in their classrooms. The limited studies that have been conducted to address disproportionate discipline practices in schools by supporting teachers to develop classroom management skills have shown promising results in reducing the discipline gap between White and Black students (Bradshaw et al., 2018; Gregory et al., 2014; McIntosh et al., 2021). As this is

an emerging area of study, there does not currently appear to be any research in the literature that seeks to understand how open teachers are to engaging in a coaching for classroom management intervention related to their relative perceived self-efficacy in managing student behaviors in the classroom.

By better understanding teacher openness to coaching for classroom management, and how that openness relates to teacher background and perceived self-efficacy in managing student behaviors, school system-level leaders can be better informed on how to effectively support teachers in developing the skillsets necessary to manage student behaviors in the classroom before issuing a referral for subjective offenses. The results of this study can be used to support policy or district/school level interventions to support coaching initiatives to help teachers develop the skillsets needed to address certain behavioral incidents in the classroom before the interactions escalate into a referral. The findings of this study can provide rationale and inform continuing research on the impacts of coaching for classroom management as an intervention to address disparities in discipline practices based on the reported interest of teachers in receiving this intervention. In addition, this study contributes to the body of literature by focusing on teachers serving in high-poverty schools in northeastern North Carolina, a region in which such research is significantly limited.

Organization of the Study

The following chapters address the relationship between teachers' perceptions of their ability to manage student behavior in the classroom and their openness to receive coaching to improve classroom management. Chapter 2 includes a comprehensive literature review of different interventions that have been implemented to address the disparities in discipline practices, including the impact of coaching for classroom management. Although discipline gaps

exist for Black, Brown and American Indian students, the districts included in this study have a very small population of Brown and American Indian students, and therefore the disparities and discipline data for Black students were the focus of background research for this study. The literature review also covers the history of discipline practices in schools and studies that have been done to understand causes leading to the disparities. A conceptual framework to guide the study is described and literature related to the conceptual framework is summarized. The chapter concludes with a synthesis of additional pertinent research and the contemporary policy context.

Chapter 3 discusses the research design and procedures. The quantitative methods used to evaluate the relationship between teachers' perceptions of their ability to respond to student behaviors in the classroom and their openness to receiving coaching are described. The research questions and hypotheses are outlined. The study participants, procedures to recruit the participants, and methods to safeguard their anonymity are discussed. The survey tool and statistical methods used to analyze the data are outlined.

Chapter 4 outlines the results of the study. This chapter presents the results for each research question and related hypothesis. Chapter 5 provides a discussion of the study results. The implications for future research, policy, and practice are shared.

Summary

This chapter discussed the importance of understanding and improving the decisions teachers make at the moment a subjective discipline event occurs in the classroom. This chapter further explored how understanding teacher openness toward receiving coaching for behavior management and efficacy beliefs regarding student discipline for subjective offenses could better enable school leaders to support teachers to develop more equitable discipline practices. This chapter also reviewed the pertinent literature on the negative impact of exclusionary discipline

and the racial disparities that exist in exclusionary discipline practices for subjective offenses in schools. This chapter outlined how this study contributes to the body of literature by examining teacher perceptions of their ability to manage student behaviors in the classroom and their openness to receive coaching to improve their instructional skills in this area. Finally, this chapter also outlined the importance of this study in helping schools in northeastern North Carolina provide more equitable learning opportunities for all students.

CHAPTER 2: LITERATURE REVIEW

Chapter Introduction

Chapter 2 provides a review of literature that is important to the topic and purpose for this study. In the following sections, I examine literature that provides background information relevant to my topic, including past studies that have examined various aspects of the topic. I then describe the contemporary policy context in which this study was implemented. The theoretical frameworks that provide a foundation for the development of the study are also addressed. Chapter 2 concludes with a review of current studies related to various variables associated with the study. Studies that examine the impact of instructional coaching models on improving teacher practice in responding to student behaviors in the classroom are reviewed. Studies that specifically examine the impact of these types of coaching models on disparities in discipline are also discussed. Current research on teacher self-efficacy in managing student behaviors and the effectiveness of instructional coaching as a form of professional development are also discussed.

Background

On almost every metric, the data for Black students show that schools are failing to ensure equitable educational outcomes. Black students reach lower levels of achievement on standardized tests, are over-referred to special education, underrepresented in honors and advanced courses, and are disproportionately suspended and expelled from school compared to their White peers (Bal et al., 2019; Gordon et al., 2000; Mowen & Brent, 2016). There is substantial research documenting the prevalence of the inequitable opportunities provided to Black students in K-12 education, which has generated considerable attention in policy and schools to find solutions to address the way schools are systemically failing Black students. The

following sections and subsections address the history and research regarding disproportionate discipline practices in schools. The nature of disproportionate offenses will be examined, as well as the impact exclusionary discipline practices have on student outcomes. Research regarding current interventions to address discipline disparities will be outlined. Finally, this section closes with a description of the current policy context regarding disproportionate discipline practices.

The School-to-Prison Pipeline

The school-to-prison pipeline is a term used to describe how suspensions and expulsions impact students' later life involvement in the criminal justice system (U.S. Department of Education, 2014). The mechanisms proposed by the school-to-prison pipeline outline the ways in which the negative impacts that result from suspensions or expulsions set students on a trajectory to enter the criminal justice system. Students who receive exclusionary discipline miss out on instruction, are more likely to fall behind in their courses, and are less likely to be engaged in school (Gregory et al., 2010). Students who are suspended and expelled are also more likely to feel less respected by their teachers, find it harder to develop close, positive relationships with their peers and teachers, and find it hard to shed the label of a trouble maker (Barnes & Motz, 2018; Dutil, 2020; Okonofua et al., 2016). The progression of the pipeline proposes that once a student feels disengaged from the school community both academically and socially, they are more likely to engage in delinquent social circles and activities and are less likely to prioritize success in school (Barnes & Motz, 2018; Skiba, Arredondo, et al., 2014).

Public schools disproportionately utilize exclusionary discipline practices with Black students. Data from the National Longitudinal Study of Adolescent to Adult Health, spanning 14 years and 100 schools, found Black students to be 1.759 times more likely than White students to be suspended or expelled, after controlling for variables associated with problem behavior in

students (e.g., poor relationships with teachers, delinquency, substance abuse) (Barnes & Motz, 2018). This finding is consistent with national and state level data that finds Black students to be two to three times more likely to experience suspension or expulsion compared to their White peers (Bal et al., 2019; U.S. Department of Education Office for Civil Rights, 2014; Wald & Losen, 2003). Black students are also more likely to receive harsher punishments for the same behaviors compared to their White peers (Barnes & Motz, 2018; Barrett et al., 2021), and Black students are disproportionately referred to law enforcement for school-related incidents (U.S. Department of Education Office for Civil Rights, 2014). Not only do racial disparities in discipline practices exist for Black students overall, but schools with a higher percentage of Black students are associated with higher suspension rates (Christle et al., 2004). Data also shows that Brown and American Indian students also receive higher rates of suspension and expulsion compared to White students, but this discipline gap is lower than the gap between White and Black students (Gordon et al., 2000; Gregory et al., 2010).

Mowen and Brent (2016) identified the influence of suspensions and expulsions in the school-to-prison pipeline. In this study, students were asked questions about education, family, delinquency, crime and arrest. After controlling for all variables including gender, race, and family income, the data showed that if students were suspended during a school year, they were 157% more likely to be arrested compared to a year in which they did not receive exclusionary discipline (Mowen & Brent, 2016). Additionally, students who have received suspensions are 417% more likely to report being arrested compared to students who have not received suspensions.

Understanding root causes of disparities in school discipline practices and eliminating these disparities is imperative to provide all students equal opportunity to achieve success in

post-secondary life and eliminate the school-to-prison pipeline. A study by Barnes and Motz (2018) explored the mechanisms of the school-to-prison pipeline by examining the impact suspensions had on later life arrests through a racial lens. The study found that if disparities in exclusionary discipline practices were eliminated, the racial inequality of arrest would be reduced by 16% (Barnes & Motz, 2018). While eliminating disproportionate suspensions will not eliminate the racial disparities in arrest, it does show how disproportionate discipline practices in schools contribute to disproportionate involvement in the criminal justice system.

Disproportionality in Types of Infractions

In addition to the disparities in suspension and expulsions that Black students receive, there is also a disparity in the types of infractions for which Black students receive referrals for discipline compared to those for which their White peers are referred. Several studies using school level discipline data found that Black students are more likely to receive a referral for a subjective offense such as defiance and disruption, while White students disproportionately receive referrals for objective offenses such as skipping class and smoking (Annamma et al., 2019; Forsyth et al., 2015; Simson, 2014; Skiba et al., 2011). Subjective offenses, by definition, are subject to the interpretation and interaction with the event by the teacher (Forsyth et al., 2015). The disproportionality in subjective referrals Black students receive is particularly relevant because it makes it harder to determine the most influential root causes behind the disparities in school discipline practices. There are many factors that influence teacher decisions in the classroom and understanding the nature of referral events is essential to understanding the mechanisms that result in disproportionate discipline practices.

History of Disparities in Discipline Practices

The national discussion regarding exclusionary discipline began after a key policy shift which resulted in an increased use of exclusionary discipline practices in schools and the first observations of disparities in discipline practices. On March 31, 1994, the Gun-Free Schools Act was authorized requiring all states receiving federal funds to have a State law requiring schools to expel any student who brings a firearm to campus (Office of Elementary and Secondary Education, 2018). The Gun-Free Schools Act was created in response to the increase in school shootings occurring in the United States and was enacted as a way to help make schools safer (Browne-Dianis, 2011). Many states implemented zero tolerance policies as a response to the Gun-Free School Act (Dunbar & Villarruel, 2004). The ultimate result of this policy, however, was to increase the use of zero tolerance policies to include non-dangerous offenses such as defiance and disruption (Ayers et al., 2001; Browne-Dianis, 2011).

Prior to the Gun-Free Schools Act, the nation had been moving toward harsher punishment for minor offenses in law enforcement through acts including mandatory sentencing laws in the 1980s which required mandatory sentences for offenses, regardless of circumstances, "three strikes" laws with mandatory sentences following a third conviction, and the "broken windows" theory where minor offense are treated harshly to prevent more major offenses (Advancement Project, 2010; Families Against Mandatory Minimums, 2011; Mauer, 2018). As law enforcement made changes to more punitive, severe sentencing for minor offenses, schools also saw a marked increase in harsher consequences for minor offenses in school discipline (Advancement Project, 2010; Council on School Health et al., 2013).

The implementation of harsher punishments in law enforcement and of the Gun-Free Schools Act in schools marked a drastic increase in the use of exclusionary discipline in schools

(Advancement Project, 2010; Browne-Dianis, 2011). Despite their intentions, zero tolerance policies have not made discipline more consistent in schools, nor have they made schools safer (American Psychological Association Zero Tolerance Task Force, 2008; Winton, 2013). Additionally, studies have found that zero tolerance policies are not followed consistently, and students of color in urban schools have received a disproportionate number of expulsions consistently since the adoption of zero tolerance policies (Dunbar & Villarruel, 2004). The harmful impacts of exclusionary discipline practices on children, as well as the disproportionate manner in which exclusionary discipline are applied to students of color led the American Academy of Pediatrics to issue a policy statement urging schools to find alternatives to disproportionate use of exclusionary discipline and zero tolerance policies when managing student behavior (Council on School Health et al., 2013).

During the Obama administration, efforts were made to address the disparities in school discipline practices. In 2014, President Barack Obama established My Brother's Keeper (MKB) Task force to address disparities that exist for boys of color in the United States (The White House, Office of the Press Secretary, 2016). Two years after implementation, 40 school districts in the Miami-Dade School district agreed to eliminate out-of-school suspensions starting immediately (The White House, Office of the Press Secretary, 2016). The Department of Health and Human Services and Education released a federal policy statement recommending against the use of exclusionary discipline practices in the preschool setting (U.S. Department of Health and Human Services, 2016).

The Obama Administration also issued guidance in collaboration with the Department of Justice to address disparities in discipline practices. In addition to the guidance provided, the Office for Civil Rights also released Civil Rights Data Collection (CRDC) to help schools

identify inequitable current practices (U.S. Department of Education, 2016). These data have led to policy changes, as several states have developed discipline policies in response to the CRDC data, including policies to reform zero tolerance policies (U.S. Department of Education, 2016). As the shift toward equity-driven, trauma-informed approaches to school discipline emerged, a number of districts implemented strategies to reduce or eliminate the use of School Resource Officers (SROs). In 2017, a Minneapolis district that largely served high needs students, replaced SROs with Student Safety Coaches. These coaches focused on building relationships and implementing de-escalation techniques instead of exclusionary discipline (Jarret et al., 2022). Two years after implementation, school incidents with police involvement decreased by half and student arrests decreased from 75 annual arrests to fewer than 5 annual arrests across the district (Jarret et al., 2022). Despite the focus on reducing disparities in discipline practices and the shift away from zero tolerance policies under the Obama Administration, schools today continue to rely heavily on exclusionary discipline practices and disparities continue to exist (Annamma et al., 2019; Bal et al., 2019).

Contemporary Policy Context

On May 25, 2020 George Floyd, a Black man, was arrested for using a counterfeit $20 bill (Hill et al., 2020). Seventeen minutes after police arrived, George Floyd was dead, after repeatedly telling officers he could not breathe while he was pinned to the ground (Hill et al., 2020). The incident was caught on camera, released publicly, and led to national outrage and Black Lives Matter protests throughout the country. The police killing of George Floyd, as well as the killings of many other unarmed Black men and women by law enforcement officers, has led to national discussion about the ways institutions across the United States discriminate

against Black people (Fine, 2021). These institutions have included school systems (Sawchuk et al., 2021).

National outrage pushed policymakers to examine the recruitment of Black educators, to push for culturally relevant curriculum and pedagogy, to provide school staff antiracist training, and to question the use of school resource officers (SROs) in K-12 public schools (Forte, 2021; Sawchuk et al., 2021). Disparities that have existed for years for Black students in K-12 schools suddenly became the focus of national attention. The District of Columbia Public Schools, among many others, released guidance and resources for teachers to discuss race, racism, and police violence with students (Sturdivant, 2016). In the first year after George Floyd's death, 33 school districts removed SROs from their schools, and many other districts significantly reduced their budgets for school police (Sawchuk et al., 2021). Data have shown for years that zero tolerance policies and exclusionary discipline practices disproportionally impact Black students who engage in non-violent behaviors in schools (Dunbar & Villarruel, 2004). The killing of George Floyd, and the increased national outrage that followed, brought the disparities found in exclusionary discipline practices into the national spotlight.

As policy focus regarding school safety, discipline, curriculum, and teacher recruitment began to shift to address the disparities that Black students face in K-12 education, conservative groups began to push back against these changes (Lopez, 2022). Conservative groups argued that discussions of race and culturally relevant curriculum are racist and they have introduced bills to ban the discussion of race-related topics in schools (Lopez, 2022). The debate over curriculum has also led to confusion and heated opposition toward culturally relevant teaching (Najarro, 2022). Opposition toward culturally relevant teaching is often the result of conflating culturally relevant teaching with critical race theory (CRT). Critical race theory originated in the study of

law as a way to understand and analyze the stalling and reversal of gains made during the civil rights movement (Delgado & Stefancic, 2017). CRT is founded on the idea that racism is so pervasive within American culture that it is not something that is seen; it is an invisible and normal part of life (Delgado & Stefancic, 2017; Parker, 1998). In an effort to expose the deeply imbedded and internalized racism woven into American life, scholars utilize CRT as a lens through which to identify the influences of racism in our society (Ladson-Billings, 1998). Culturally relevant teaching, on the other hand, draws on diverse perspectives to drive classroom instruction and engages students in analyzing inequities that exist throughout society (Najarro, 2022).

Several bills were proposed in state legislatures to ban curriculum designed to teach U.S. History with an emphasis of the contributions of Black Americans to the development of our nation and a discussion of race in America (Dorman, 2022). Between 2021 and 2022, over 40 states introduced bills to restrict the teaching of CRT and over 15 states passed legislation placing restrictions on curriculum by the end of the 2021-2023 school year (Najarro, 2022). The rhetoric of opposition to discussions or race and diversity was supported by former President Donald Trump, who placed a ban on diversity trainings in 2021 (Schwartz, 2021). While the murder of George Floyd led to an increased focus on the disparities faced by Black students, the conservative backlash that followed has led to legal restrictions on the diverse perspectives teachers are able to introduce to their students.

In addition to a curricular backlash, the policy focus regarding police in schools has also shifted away from the movement to remove police presence in schools. This shift occurred following the Uvalde school shooting on May 24th, 2022. During the attack at Robb Elementary School in Uvalde, Texas, 400 police officers reported to the scene and it took officers 77 minutes

to confront the shooter (Goodman & Sandoval, 2022). A total of 19 children and 2 teachers were killed in the attack (Despart, 2022). Schools across the country sought to reexamine their security measures, including increasing police presence in schools (Despart, 2022). Madison County Schools, a district in western North Carolina, stared equipping schools with firearms to be kept on campus for the 2022-2023 school year (Downey, 2022; The Week Staff, 2023). These increased security and protection measures are opposed by Democratic lawmakers, who fear the risk that weapons on campus may pose to students and staff (Downey, 2022).

Outside of the political unrest resulting from the increased activism following the killing of George Floyd and the Uvalde school shooting, the country has also grappled with the impacts of the COVID-19 pandemic. Disparities in equitable outcomes for Black students have only continued to increase throughout the COVID-19 pandemic. During the period of school closure and remote learning, Black students attended schools that provided remote instruction for longer periods of time compared to White students (Goldhaber et al., 2022). Although all students achieved less than expected growth during the period of school closure and remote or hybrid learning, Black students achieved less growth compared to their White peers (Goldhaber et al., 2022). This growth gap was largely observed due to the type of school students attended. A study by Goldhaber et al. (2022), found that gaps between White and Black students within a school remained the same. Instead, the academic gaps existed because of the types of schools, and their mode of instruction during the pandemic. Not only were Black students more likely to attend schools that were remote, they were also twice as likely to not have synchronous classes or have access to a teacher, compared to their White peers (Dorn et al., 2020).

In addition to academic challenges, Black families also experienced greater negative health effects as a result of COVID-19. Black Americans were 4.6 times more likely to be

hospitalized and experienced higher mortality rates compared to White Americans after contracting COVID-19 (Novacek et al., 2020; Snowden & Snowden, 2021). Prior to the pandemic, Black Americans faced discrimination or lack of access to healthcare, and therefore, experience a lack of trust with doctors overall (Novacek et al., 2020). These issues were only compounded throughout the pandemic. Additionally, Black Americans disproportionately worked in jobs that required employees to either continue to go to work or worked in jobs that laid off employees during shutdown (Snowden & Snowden, 2021). Black Americans already experience increased levels of mental stress in the United States, and the COVID-19 pandemic only heightened the mental health needs experienced by Black students and their families (Novacek et al., 2020; Snowden & Snowden, 2021).

The events of the years immediately preceding my study greatly influenced policy throughout the country in many different ways. The Public School Forum named both social and emotional learning and inclusive, culturally responsive teaching as two of their top 10 education issues in 2021 (Public School Forum of North Carolina, 2021). In 2021, the state of North Carolina passed a bill to implement social and emotional learning curriculum in schools to address the mental health needs facing students. The state planned to use COIVD relief funds to invest 50 million dollars to support students' mental health needs (Rachmuth, 2021).

The events of the last two years have shown how policy context is largely influenced by the immediate events occurring in the country. The political landscape in the United States is currently very divisive and constantly evolving (Najarro, 2022; Schwartz, 2021). While there is deeper understanding and awareness regarding the disparities Black students face in schools, there is also opposition facing many policy measures aimed to combat solutions to address the disparities. Understanding the political climate is important to frame any solution to address

interventions to combat disproportionate discipline practices, to allow for widespread support and implementation.

Conceptual Framework

The conceptual framework that guided this study ties together two different conceptual models that aid in the explanation of the factors that influence a teacher when addressing student discipline in the classroom. The first framework, the vulnerable decision points model, examines the role that implicit bias plays in decision making when people are under stress. The second framework, Vygotsky's Zone of Proximal Development Theory, describes the impact a teacher or coach can have on helping individuals reach their highest potentials of learning. Each of these theories guide the development of the research questions for this study.

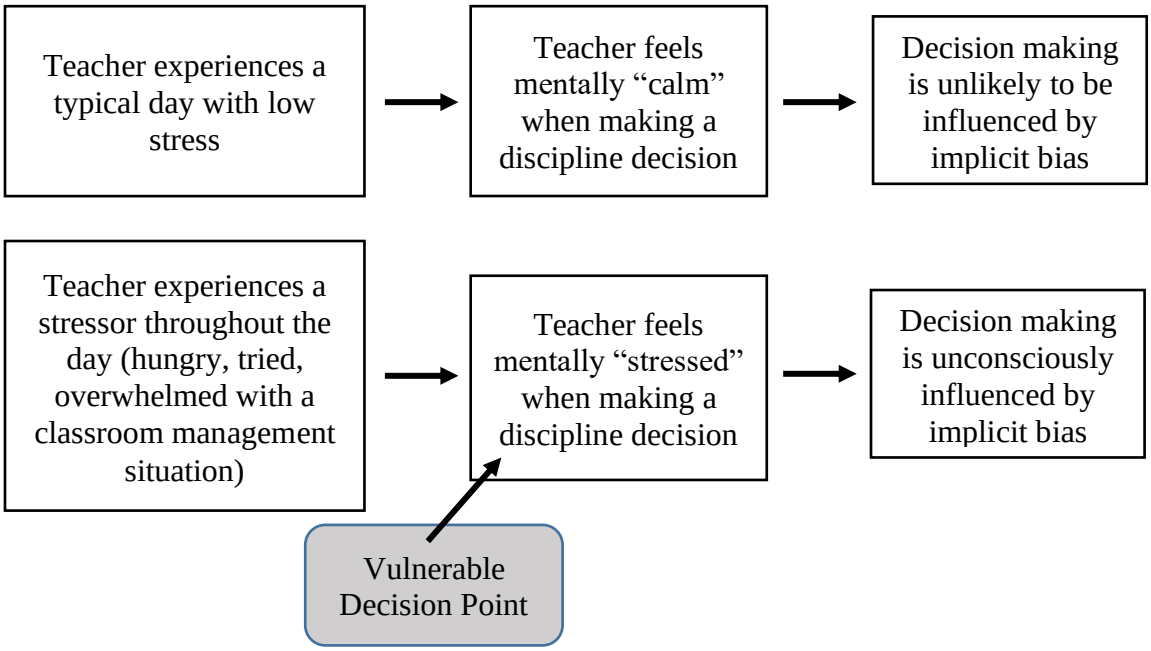
Research has shown that Black students are 2.19 to 3.78 times more likely to receive a discipline referral and the majority of these referrals are for subjective offenses that occur in the classroom (Annamma et al., 2019; Bal et al., 2019; Forsyth et al., 2015; Skiba et al., 2011). Studies have shown that controlling for extraneous impacting factors, such as low socioeconomic status and other demographic features, does not account for the disparities in discipline practices (Annamma et al., 2019; Skiba et al., 2002; Welsh & Little, 2018). It is also well documented that Black students do not engage more frequently in undesired behaviors compared to their White peers (Skiba et al., 2002). One argument is that the disproportionality results, in significant part, from the racial biases of teachers and school officials. However, studies have shown that implicit bias training to combat racially biased mindsets has not reduced disparities in school discipline rates (Okonofua et al., 2016; Yang et al., 2018).

The vulnerable decision points model proposes an alternative understanding of the mechanisms leading to disproportionate discipline practices for subjective offenses. The model

proposes that “the interaction between individual biases and the situation leads to biased decision making” (McIntosh et al., 2014, p. 5). This model suggests that not all decisions are influenced by an individual’s biases. Instead, this model proposes that biased decision making only occurs in certain situations. The model goes on to explain that people typically make unbiased decisions when they are in a healthy and calm mental and emotional state but are unintentionally and unconsciously influenced by their biases when they are feeling mentally or emotionally stressed (McIntosh et al., 2014). This framework can be used to understand the data regarding school discipline practices. As the research shows, Black students are more likely to receive referrals for subjective offenses, where the teacher needs to make a decision or judgment call about the situation in the classroom (Annamma et al., 2019; Forsyth et al., 2015; Girvan et al., 2017; Skiba et al., 2002, 2011). The vulnerable decision points model provides an explanation of the role implicit bias plays on decision making (McIntosh et al., 2014). Implicit bias, as defined by the Nation Institutes of Health (2022, para. 2), “is a form of bias that occurs automatically and unintentionally, that nevertheless affects judgments, decisions, and behaviors.” Implicit bias unknowingly influences one’s decision making, especially when a person is stressed, overwhelmed, or otherwise not at full cognitive capacity (Kouchaki & Smith, 2014; Macrae & Bodenhausen, 2000). When teachers are overwhelmed or stressed when managing a classroom, the vulnerable decision points model suggests that implicit bias plays a larger role in their decision making, leading to disproportionality in subjective discipline offenses (Fenning & Rose, 2007; McIntosh et al., 2014; Skiba et al., 2011; Vavrus & Cole, 2002). The vulnerable decision points model is represented in Figure 2.1.

Figure 2.1

Vulnerable Decision Points Model Conceptual Framework



Understanding the vulnerable decision points model is important to addressing disparities in discipline practices, because implicitly biased decisions occur without an individual's knowledge of how their biases are influencing their response to a situation (McIntosh et al., 2014; National Institutes of Health, 2022). According to the model, in order to combat the role implicit bias plays in decision making, schools should "provide guidance in making unbiased discipline decisions in ambiguous or snap-decision situations" (McIntosh et al., 2014, p. 9). The model suggests that teachers need training on vulnerable decision points, or moments when a teacher is going to react to a situation from a biased space, such as when tired, hungry, stressed or otherwise not at their optimal cognitive level (McIntosh et al., 2014). In order for schools to eliminate the disproportionality in discipline practices, they should work to not only address both implicit and explicit bias but also support teachers to develop the skills to prevent situations that can lead to subjective behavioral moments in the classroom.

An ethnographic study by Vavrus and Cole (2002), explored the concept of the vulnerable decision points framework by examining the interactions between students and teachers at the moment a discipline event occurs in the classroom, a moment they refer to as a disciplinary moment. Their study found that teachers employ exclusionary discipline when they feel their authority in the classroom is being threatened or at moments when they feel they are losing control over the classroom (Fenning & Rose, 2007; McIntosh et al., 2014; Vavrus & Cole, 2002). Disciplinary moments are an example of a vulnerable decision point where implicit bias is likely to influence decision making.

This study sought to examine whether teachers would be open and willing to receive coaching as a mechanism to change their classroom practices based on the understandings provided by the vulnerable decisions points model. Coaching was chosen as a mechanism to develop teacher skill and dispositions when interacting with students based on Vygotsky's Zone of Proximal Development Theory (Vygotsky, 1978). According to Vygotsky's theory, under the influence of a coach, learners reach their fullest potential through collaborative problem solving (Vygotsky, 1978). The study used the vulnerable decisions point model to support elements of the protocol that explore the use of coaching as a means of supporting teachers' behavior management skills to both prevent and respond to situations that would result in a vulnerable decision point. This study used Vygotsky's Zone of Proximal Development Theory to support elements of the protocol that explore teachers' openness to receiving coaching to improve their practice. Providing teachers with strategies for preventing and responding to undesired student behaviors and avoiding potentially and, in many cases, implicitly biased snap decision making is a potential mechanism for eliminating the disparities in school discipline outcomes.

Pertinent Research and Professional Perspectives

The research questions for this study were guided by the hypothesis that disparities in student discipline can be addressed by supporting teachers to deescalate student behaviors in the classroom before a disciple event occurs. The research questions also placed an emphasis on using individualized instructional coaching that focuses on supporting teachers to develop behavior management skills as an avenue through which to support teachers. Finally, the research questions addressed the importance of teacher perceptions of their ability to manage student behaviors in the classroom and their openness to receiving coaching as an important component to effective implementation of an intervention.

The following sections address the current research into understanding the mechanisms that are occurring in schools which lead to disproportionate discipline practices. Current research on the effectiveness of different models to address discipline disparities is reviewed. This section then reviews the research on teacher self-efficacy related to classroom management and one-on-one coaching models as an effective professional development tool to support teacher development of classroom skills (Kraft et al., 2018). Research on barriers to implementation of coaching models is be addressed. Finally, the following sections cover the existing research on coaching models that focus on classroom management and their impact on reducing student behaviors.

Current Understanding of the Mechanisms Causing Discipline Disparities

While data on the existence of disproportionate discipline practices is very clear, understanding the mechanisms through which the discipline practices occur is much less clear and concrete. Due to the subjective nature of referrals for Black students, it is hard for schools and researchers to pinpoint the exact root cause driving the disparity in referrals, leading schools

and researchers to examine several different causes. In order to inform the development of interventions, researchers have explored several different causes to try to gain a clearer understanding of the drivers leading to the disproportionality.

In a qualitative study by Yang et al. (2018), 36 school administrators and school-based service providers from a large urban district with significant discipline issues were interviewed to determine their beliefs about the causes of disproportionate discipline practices. The school administrators and service providers consistently articulated that the cause of the disparities in discipline was due to factors external to the student themselves (Yang et al., 2018). The interviewees shared that school systems, practices, and culture mismatches between staff and students were the main causes of disparities in discipline practices (Yang et al., 2018). A particularly poignant quote from a participant illustrated that subjective interpretations of an interaction are often caused by a cultural mismatch between teachers and students. The participant stated that teachers misunderstand how students are trying to communicate and that what teachers may interpret as a disrespectful interaction is just the student talking in the way that they learned to communicate (Yang et al., 2018). Participants in this study also noted the unaddressed trauma students experience as an influential factor contributing to the disparity of discipline practices. Educators in this study suggested providing mental health support to students, instead of exclusionary discipline consequences, as an avenue to pursue to eliminate the disparity in discipline practices (Yang et al., 2018).

Yang et al. (2018) concluded that another area to consider when examining the root causes of the disparity in discipline practices is to look at how schools fail to support students with unaddressed trauma in the classroom. There is a lack of literature examining the link between the disruptive, subjective behaviors displayed by students in the classroom and

manifestations of the coping mechanisms students who have experienced trauma exhibit (Dutil, 2020). Students who have experienced trauma from adverse childhood experiences (ACEs) have a harder time self-regulating (Felitti et al., 1998); this difficulty is often misidentified in the classroom as disruptive or defiant behavior (Dutil, 2020). Black students are more likely to experience ACEs than any other subgroup and there is evidence that the impact of experiencing racism is an ACE itself (Balistreri & Alvira-Hammond, 2016; Complex Trauma Treatment Network of the National Child Traumatic Stress Network, 2017). In order to fully understand the disparity in exclusionary discipline practices, it is important for schools to also consider the role that unaddressed trauma plays in teacher-student interactions to ensure effective interventions are targeting the root cause of the problem.

Another frequently identified cause contributing to disparities in school discipline practices is teacher bias toward students. A study by Smolkowski et al. (2016), attempted to examine the influence of racial bias in subjective discipline referrals through the lens of the vulnerable decision points (VDP) model. The VDP model describes moments that lead to increased disproportionality (Smolkowski et al., 2016), such as those that occur when teachers issue a discipline referral for a subjective offense; or in other words, when a teacher decides a student behavior is defiant or disrespectful. After examining office discipline referral (ODR) discipline data for 1,666 elementary schools, researchers found that Black students were more likely to receive subjective but not objective ODR referrals, more likely to receive ODRs in the classroom setting compared to common spaces such as the hallway and cafeteria, and were more likely to receive severe ODRs compared to minor ODRs (Smolkowski et al., 2016). Each of these findings (disproportionality in type, location, and severity of referrals) indicate moments

where teachers have the opportunity to make a subjective decision. Subjective decision junctures allow for implicit bias to influence the discipline process in schools.

Many of the causes outlined in the previous subsections identify teacher mindsets or unmet student needs as factors that contribute to disproportionate discipline practices. Factors external to teacher mindset or even student actions that impact whether a referral is written in response to a behavior are also important; these include the classroom management skills of the teacher in the classroom. In an ethnographic, longitudinal study at a multiethnic high school, Vavrus and Cole (2002) examined the classroom factors that influenced a teacher's decision to issue a referral or not – a moment they called the discipline moment. The study found that many different factors, at the moment a student behavior occurred, influenced a teacher's response to the behavior (Vavrus & Cole, 2002). These authors found that it was not specific student behaviors that led to referrals; instead, the causes included a wide range of behaviors that occurred at a moment when teachers felt their authority was questioned or when they felt they were losing control of the classroom. Skiba et al. (2014) also found teacher tolerance levels and behavior management skills to be influential factors in teachers' decisions to issue a discipline referral at the moment a behavior occurs in the classroom.

Understanding the discipline moment is essential to understanding how to effectively close the disproportionally in school discipline practices. Addressing the influence of teacher bias, teacher-student cultural mismatch, or developing trauma informed practices can help change teacher mindset and approaches to their classrooms but it will not eliminate moments when teachers feel like they are losing control of their classroom. Teacher skill in classroom management and tolerance for behaviors are influential factors that impact school discipline practices. How a teacher responds at the discipline moment is influenced by many factors

identified above, as well as their tolerance and effectiveness at managing their classroom (Skiba et al., 1997; Vavrus & Cole, 2002).

Research on Interventions to Address Disproportionate Practices

Several interventions have attempted to eliminate disparities in exclusionary discipline practices by addressing some of the causes identified in the literature. Most interventions are effective at reducing the use of exclusionary discipline practices overall but interventions do not consistently reduce the disparity in discipline practices between White and Black students (Welsh & Little, 2018). This finding indicates that many of the interventions may be addressing the symptoms, rather than the root cause of the disparity.

Several studies have attempted to address cultural misunderstandings, implicit bias, and unaddressed student trauma by working to help teachers shift from a punitive to empathic mindset toward discipline (Okonofua et al., 2016; Yang et al., 2018). In a study by Okonofua et al. (2016), 31 middle school teachers were given explicit instruction on the benefits and importance of having an empathic mindset in the classroom (Okonofua et al., 2016). Study results found that experimental group teachers, compared to a control group teachers suspended students less and created a classroom environment where at-risk students felt more respected by their teacher (Okonofua et al., 2016). In a different study, researchers interviewed teachers from a large, urban school district that had spent ten years engaging staff in discussions regarding the school-to-prison pipeline and emphasized the importance of empathic approaches to discipline (Yang et al., 2018). These studies both found that teachers are able to shift to more empathic approaches to discipline, which reduced the use of exclusionary discipline practices overall in each district. However, the gap between White and Black students receiving exclusionary discipline was not closed (Okonofua et al., 2016; Yang et al., 2018).

A different approach to addressing the disparity of exclusionary discipline has been to bring the data highlighting the disparity to the forefront of school leadership work (McIntosh et al., 2020). In a study by McIntosh et al. (2020), school leaders were provided a monthly equity report that included data on disproportionate discipline practices, to inform their work. Although the educators participating in this study engaged in analyzing the data, the intervention did not have an impact on reducing exclusionary discipline practices (McIntosh et al., 2020).

Another approach to addressing the racial disparities in discipline practices has been to target the unaddressed trauma students bring to school, which is often triggered in discipline incidents. Research on interventions in this domain is limited and no dominant framework for a trauma informed approach exists in the studies that have occurred (Thomas et al., 2019). Although research in this area is still emerging, one study in an elementary school in San Francisco found promising results. The school in the study implemented a system of support at three levels: for students, for the adults supporting students, and for the school system overall. Each year after implementation, discipline incidents and out of school suspensions decreased at an exponential rate, culminating to a 95% decrease in exclusionary discipline after five years of implementation (Dorado et al., 2016). The limitation of this study is that the data is not disaggregated by race to determine if this intervention is effective at closing the gap that exists in exclusionary discipline practices.

One of the more effective approaches to reducing the racial disparity in exclusionary discipline practices has been the implementation of a comprehensive coaching program (Gregory et al., 2016). This model focused on helping teachers develop the skills to enable them to provide students emotional and instructional supports in the classroom (Okonofua et al., 2016). After two years of coaching, and one year after coaching concluded, coached teachers had no racial

disparity in their referral rates, while the control group referred Black students twice as often as White students (Gregory et al., 2016). While the scope of this study is limited, data from this intervention indicates that targeting teacher skill in the classroom – where the majority of subjective discipline offenses occur (Skiba et al., 1997) can be an effective avenue for intervention to eliminate racial disparities in discipline practices.

Research on Coaching

Teacher coaching models are a relatively new model of professional development now being utilized in schools and research has shown different coaching models led to different outcomes for teachers (Kraft & Blazar, 2017; Yoon et al., 2007). Effective coaching programs include several key components; coaching is individualized to the teacher, the coach and teacher meet regularly throughout the entire year, coaching is focused on helping teachers make improvements in their own classroom and coaching is focused on specific teaching skills (Chung et al., 2009; Garet et al., 2001; Kraft et al., 2018). Understanding the key components of effective coaching and barriers to implementation is important when examining models to implement to support teachers in developing the skills and dispositions to manage student behaviors in the classroom. The following section discusses the current research on key components of effective coaching models and barriers to implementation.

A foundational study on effective professional development for teachers by Garet et al. (2001) surveyed teachers to assess their perceptions of their change in skills, knowledge, and practice as a result of different professional development features. Study results found that teachers found professional development sessions more helpful when they were sustained over a longer period of time and had a higher number of contact hours (Garet et al., 2001). Additionally, the survey results showed that when professional development allowed teachers to be active

participants in the learning process, teachers reported higher levels of knowledge and skill growth (Garet et al., 2001). Teachers also reported that when they felt they gained knowledge and skills from professional development activities, they were more likely to implement changes in their classroom practice (Garet et al., 2001). Several studies have built upon the findings from the Garet et al. (2001) study and were supported by a comprehensive review of best practices for professional development implemented in schools across the United States (Desimone & Garet, 2015). Based on these studies, practitioners should design professional development and support models to be consistent, engaging, and to span throughout the school year to ensure changes occur in classroom practice. A review of the existing literature on professional development found coaching, as a professional development model, meets all the criteria (extended duration, active learning, coherence, collaboration) of high quality professional development (Desimone & Pak, 2017).

While several studies look at teacher perception of the impact of professional development models, a study by Kraft et al. (2018), measured the actual impact of teacher coaching on changes to classroom practice. Kraft et al. (2018) conducted a meta-analysis of 60 causal studies on teacher coaching to determine the impact of teaching coaching on both instructional changes and student achievement. Coaching was found to have a positive effect on improving student achievement and improving teachers' instructional practice (Kraft et al., 2018).

Coaching has also been found to be effective at helping teachers implement classroom best practices with fidelity. In a comprehensive literature review, spanning 20 years of research, Kretlow and Bartholomew (2010) found that studies consistently show that coaching does improve a teacher's ability to implement specific strategies in the classroom (Kretlow &

Bartholomew, 2010). The authors also noted that small group or one-to-one coaching, with observation and feedback and modeling are the most effective forms of coaching to support teacher growth in the classroom (Kretlow & Bartholomew, 2010).

While coaching, as a professional development model, meets the core characteristics identified in high quality professional development, not all coaching models have been found to be effective (Garet et al., 2008). In addition to using an effective professional development model, how the model is implemented is also an important component to successful teacher development. A study by Shaha and Ellsworth (2013) examined an online professional development platform and found that schools where there were higher levels of teacher and leadership engagement with the platform, student achievement growth was higher, student dropout rates were lower, and student discipline occurrences were lower (Shaha & Ellsworth, 2013). The causal nature of these results cannot be concluded from this study alone; however, this study does show the overall positive impact a culture of coaching can have on a school when teachers and leaders consistently participate in the model.

While inconsistent implementation by teachers and school leaders is one potential barrier that can prevent a coaching program from being effective, a study by Buczynski and Hansen (2010), identified additional barriers to implementation of instructional changes following teacher professional development. Those barriers included access to resources, curriculum pacing, class period length constraints, and classroom management concerns (Buczynski & Hansen, 2010). This study further highlights the important role effective classroom management plays in schools. Teachers are limited in their ability to implement instructional changes from content focused professional development when they are unable to effectively address student behavioral challenges. This study highlights the need to understand how coaching models can

improve teacher skill and practice in addressing student behavioral concerns, which will improve instruction and reduce the need for teachers to discipline students by sending them out of the classroom.

While there is ample literature regarding professional development and content coaching models for elementary schools, the research is limited on secondary and non-content focused coaching programs (Kraft & Blazar, 2017). One of the few experimental studies on non-content focused coaching models examined a specific behavior management and instructional techniques coaching program called MATCH teacher coaching (MTC) (Kraft & Blazar, 2017). Teachers in the coaching group participated in a workshop training focusing on classroom management skills, instructional design, and objective driven lessons (Kraft & Blazar, 2017). Teachers in the treatment group also received ongoing, individual coaching throughout the year. Coached teachers grew, on average, 1.26 to 1.47 points more than non-coached teachers on a rubric for classroom management measures (Kraft & Blazar, 2017). Coached teachers also scored higher and improved more on observation scores, principal evaluations, and student surveys compared to non-coached teachers (Kraft & Blazar, 2017). Specifically, coached teachers had higher data on achieving lesson goals, classroom climate measures, and providing rigorous work. This data was also consistent in the year following the study, after coaching had ended (Kraft & Blazar, 2017). This study shows the impact that instructional coaching can have on improving classroom management, which is a key component necessary to help teachers deescalate or prevent student behavioral issues in the classroom.

Coaching Interventions to Reduce Disparities in Discipline

As identified in the previous section, there has been ample study on the impact of teacher professional develop and coaching models in general. The research is limited on studies that

examine coaching models focused on classroom management. Studies are even more limited when it comes to examining the impact of structured coaching programs on reducing disproportionate discipline practices. In a comprehensive literature review of culturally responsive (CR) interventions, a model used to create more inclusive and supportive classroom cultures, only ten studies were found to be empirical studies addressing the impact the interventions (Bottiani et al., 2018). Of those ten studies, only three studies examined the impact of the interventions on disparities in discipline referrals; the other studies examined the impact on individual teacher and student mindsets and actions (Bottiani et al., 2018). An examination of coaching programs specifically reveals only a few studies of coaching programs in the literature that specially target improving teacher classroom management to disrupt racial discipline gaps. An overview and summary of the impact of each of these programs is described in the following paragraphs.

In a single case study research design, Fallon et al. (2019) implemented an all-inclusive classroom management plan with teachers where teachers were coached to implement the plan with fidelity. The classroom management plan addressed six domains: "classroom structure, behavioral expectations, instructional management, interacting positively, responding to appropriate behaviors and responding to inappropriate behaviors" (Fallon et al., 2019, p. 7). Each teacher in the study had an individualized coaching plan that targeted the biggest areas for growth for that teacher from the management plan (Fallon et al., 2019). Results from the case study showed that when coaching was implemented with fidelity and teachers implemented the plan with fidelity, classroom disruptions decreased (Fallon et al., 2019). Although this case study only examined three teachers' classrooms, the results indicate that teachers are able to grow in their ability to lead and manage a classroom. Improved teacher ability to lead and manage a

classroom will result in fewer classroom disruptions that might otherwise result in a referral for a student. The next few studies examine the connection more explicitly to see if coaching interventions targeted to classroom management have an impact on the number of referrals for Black students.

Gion et al. (2022) examined the impact of a coaching intervention on two schools in the northwestern part of the United States. Prior to the study, Black students at the study schools were two and a half times more likely to receive exclusionary discipline compared to other students. The authors of the study theorized that if Black students receive exclusionary discipline more frequently, teachers are also more likely to reprimand Black students more often and offer less praise. In the study, four teachers who taught racially diverse classrooms and who needed assistance in addressing subjective classroom behaviors were selected as participants in the study. Selected teachers were observed in their classrooms before interventions began. Teacher praise, reprimands, and student expectations throughout the lesson were measured outcomes. Teachers in the study received one-on-one coaching, through a self-reflection, action planning meeting, observation, and debrief model (Gion et al., 2022). Prior to the intervention, all four teachers praised Black students less than other students. After the intervention, three of the four teachers consistently increased their praise rates for Black students and all four teachers decreased their reprimand rates for Black students (Gion et al., 2022).

A study by McIntosh et al. (2021) evaluated the implementation of a PBIS program in eight elementary public schools in the southeastern part of the United States. Half of the schools in the study received professional development on building positive relationships between teachers in students, teaching students how to demonstrative desired behaviors, and supporting teachers to better respond to classroom disruptions with opportunities for practice, feedback, and

discussion. School based leaders also received coaching to ensure implementation of the model. After two years of intervention, the rate of ODRs for Black students decreased significantly for intervention schools compared to control schools, where no change was observed (McIntosh et al., 2021).

The My Teaching Partner-Secondary (MTP-S) professional development program is another model that supports teacher development of effective classroom management skills. MTP-S was one of the first coaching programs to be assessed for its ability to reduce exclusionary discipline practices from teachers participating in the program (Gregory et al., 2014). The MTP-S program is a video-based, bi-weekly coaching program. In the study, nine teachers, from five middle and high schools in the southeastern part of the United States were assigned to an MTP-S intervention group or a control group. After two years of implementation, results showed racial disparities in exclusionary discipline to be reduced for the intervention group compared to the control group. Intervention group classrooms had no disparities in referral rates between Black students and other student groups, while Black students in control group classrooms were 2.69 times as likely to receive a referral (Gregory et al., 2014). These results indicate that the MTP-S coaching program was effective at eliminating the disparities in exclusionary discipline practices for Black students in the classrooms studied.

Classroom Check-Up is another coaching program aimed at coaching teachers to improve their student interaction skills, with the goal of improving classroom management and reducing disparities in discipline practices (Pas et al., 2016). In the Classroom Check-Up model, teachers identify their areas for growth and the coach-teacher team creates a plan for action and implementation (Pas et al., 2016). In an accessibility and fidelity study of this model, over 80% of teachers responded favorably that their coaches helped them increase their knowledge of how

to respond in a culturally responsive way to classroom behaviors (Pas et al., 2016). These results indicate that this coaching model was positively received by teachers, which is one of the main barriers to overcome for implementation.

Another professional development program called Double Check was tested to determine the impact of the Classroom Check-Up model on equitable discipline practices (Bradshaw et al., 2018). All the schools in this study implemented the full Double Check Model, which consists of a schoolwide PBIS model, five professional development sessions, and implementation of the Classroom Check-Up coaching model for certain teachers. This study consisted of 12 Maryland schools and specifically examined the impact of the Check-Up Coaching Model on reducing referral gaps and improving classroom management skills. Results found that coached teachers had less referrals for Black students compared to non-coached teachers (Bradshaw et al., 2018). In addition to referral data, observational data was also collected. Coached teachers were rated significantly higher for classroom management practices, including proactiveness, positive praise, and appropriate responsiveness to classroom behaviors (Bradshaw et al., 2018).

While studies are limited on teacher coaching models that address classroom management and support teachers in developing the skills needed to maintain control of a classroom and avoid vulnerable decision points, the studies that do exist offer promising results. Several studies outlined above show that teacher coaching specifically targeting classroom management and student relationship building skills lead to not only improved teacher practice, but also have a direct impact on reducing disparities in discipline practices (Bradshaw et al., 2018; Gregory et al., 2014; McIntosh et al., 2014; Pas et al., 2016). Research from other forms of interventions to address disparities in discipline practices do not show targeted results that not

only reduce the reliance on exclusionary discipline but also reduce the disparities in discipline practices (Okonofua et al., 2016; Welsh & Little, 2018; Yang et al., 2018).

Teacher Self-Efficacy Related to Classroom Management

The vulnerable decision points model outlines the influence of implicit bias on decision making when individuals are stressed (McIntosh et al., 2014). The following paragraphs outline the ways that a teacher's belief in their own ability to manage classroom behaviors influences their decision making in the classroom. Studies have shown that teachers with lower self-efficacy in classroom management report more emotional exhaustion and higher levels of stress when confronted with classroom disruptions (Dicke et al., 2014; Klassen, 2010; Klassen & Chiu, 2010; Phillips, 2018). When people have higher levels of self-efficacy, in that they believe they can master a skill, they will persist longer, and respond more positively in the face of challenges (Bandura, 1977). Additionally, when individuals continue to face challenges, they develop the skills needed to address challenges, and correspondingly increase their levels of self-efficacy (Bandura, 1977).

Recognizing which teachers experience lower levels of self-efficacy in classroom management is especially important when considering the vulnerable decisions points model. Teachers who are less confident in their skills to address student behaviors are more likely to experience vulnerable decision points in the classroom and according to the model, are then more likely to be influenced by their implicit biases when addressing student behaviors (McIntosh et al., 2014). Teachers need support to develop higher levels of self-efficacy when it comes to classroom management (Gibbs & Powell, 2012) and according to the research outlined above, coaching is a strong tool to help teachers develop their skills and increase their levels of self-efficacy.

It is also important to understand teachers' willingness to receive coaching, as it relates to their perceptions regarding their ability to manage student behaviors in the classroom. Teachers with lower self-efficacy for classroom management are most likely to become stressed in the classroom and therefore, most likely to experience a vulnerable decision point (Dicke et al., 2014; Klassen, 2010; Klassen & Chiu, 2010). Teachers who perceptive they are unable to manage student behaviors are most in need of coaching to support the development of their classroom management skills. Therefore, it is important to gain an understanding of the relationship between teachers' willingness to receive support through coaching and their self-efficacy regarding classroom management.

Summary

After the implementation of zero tolerance policies following the Gun-Free Schools Act, school reliance on exclusionary discipline practices for non-violent behavior increased (Advancement Project, 2010; Browne-Dianis, 2011). Black students disproportionately receive exclusionary discipline for subjective behaviors, even though studies show Black students do not engage in different behaviors compared to their White peers (Annamma et al., 2019; Barnes & Motz, 2018; Dunbar & Villarruel, 2004; Forsyth et al., 2015; U.S. Department of Education Office for Civil Rights, 2014). Studies on the negative impact that exclusionary discipline has on later life outcomes for students has led to recent attention to find interventions to reduce disparities in school discipline practices (Council on School Health et al., 2013; The White House, Office of the Press Secretary, 2016; U.S. Department of Health and Human Services, 2016). While many interventions that address proposed causes of the disparities (teacher mindset, cultural mismatch, etc.) reduce the reliance on exclusionary discipline, few

interventions effectively reduce the disparity in discipline use for Black students (Okonofua et al., 2016; Welsh & Little, 2018; Yang et al., 2018).

The above section outlined the effectiveness of coaching on improving teacher practice in general and the success certain programs have found on reducing or eliminating disproportionate discipline practices when coaching programs target teacher development of classroom management skills (Bradshaw et al., 2018; Gregory et al., 2014; Pas et al., 2016). The importance of teacher perceptions regarding effectiveness of professional development models were also identified in the literature (Garet et al., 2001). Positive teacher perception and active participation in coaching is an integral component for effective implementation of action steps from coaching models (Shaha & Ellsworth, 2013).

CHAPTER 3: METHODOLOGY

Chapter Introduction

This study focused on research related to teacher decision making during subjective discipline moments and the impact of implicit bias on decision making at stressful cognitive events. Research shows that Black students disproportionality receive discipline referrals for subjective classroom behaviors, despite not engaging in more frequent or more disruptive behaviors compared to other students (Skiba et al., 2002, 2011). Research has also shown instructional coaching for classroom management to be an effective mechanism to help teachers prevent and consistently address student behavioral concerns and reduce reliance on sending students out of the classroom (Bradshaw et al., 2018; Gregory et al., 2014; McIntosh et al., 2021; Pas et al., 2016). Teacher engagement and openness to coaching are important components of the effective implementation of instructional coaching programs (Shaha & Ellsworth, 2013).

This chapter provides details on the quantitative research design for this study. In this study, I sought to understand middle and high school teachers' openness to receiving instructional coaching for classroom management related to their perceived self-efficacy in managing student behaviors in the classroom and their openness to participating in instructional coaching. The study design, research questions, participant sampling, data collection and analysis methods, and study delimitations are included in the following sections.

Research Design

In this study, I used a quantitative, cross-sectional survey research design. The primary goal of my survey was to understand teachers' willingness to participate in instructional coaching for classroom management in order to reduce the need to send students out of the classroom. A Likert scale survey instrument was used to determine participants' perceptions of

their self-efficacy in managing student behaviors in the classroom and their openness to receiving coaching. In addition to classroom management perceptions of self-efficacy and openness to receiving instructional coaching, teacher and school demographic data also influenced the usefulness of the survey tool. The design of the survey tool allowed for data to be collected and analyzed to examine how teacher perceptions of their self-efficacy in managing classroom behaviors and their openness to coaching relate to teacher age, race/ethnicity, gender, years of experience, teacher preparation pathway, grade-span taught, the urban/rural setting of their school, school size, content taught, the teacher's acknowledgement of the existence of implicit bias, their value of understanding implicit bias, and their average use of referrals. Finally, the survey tool included an experimental component to determine the level of teachers' reported willingness to opt into coaching for classroom management if presented with data outlining the impact that instructional coaching for classroom management can have on student outcomes and classroom culture. Treatment group participants were presented data on the effectiveness of instructional coaching for classroom management before they answered the questions regarding their willingness to opt into participating in coaching.

I chose a quantitative survey design for two purposes: 1) to fit a regression of teacher perceptions of their self-efficacy in managing student behaviors in the classroom and their openness to receiving instructional coaching when administering to a broad sample of teachers in three rural county districts in northeastern North Carolina and 2) to examine the perception and openness to coaching data based on participant subgroups. Being able to inform future policy or school level decisions, through generalized findings of this study, was an important goal of this study, which is why three districts, with a combined total of 445 secondary teachers, were

included to reach a sample size with enough power and why a quantitative design was chosen for this study.

I selected a convenience sample of teachers in middle and high schools in three low-income counties in northeastern North Carolina. Northeastern North Carolina was chosen as the study location due to the rankings of counties in this area on the Public School Forum's *Roadmap of Need*. The counties in which the survey was administered fall into the bottom quartile in each category of need (Public School Forum of North Carolina, 2020b). Additionally, counties in northeastern North Carolina have a higher percentage of Black residents compared to other counties in the state (U.S. Census Bureau, 2022).

Research Questions and Hypotheses

In an effort to explore teachers' perceptions of their ability the manage a classroom and their openness to receiving coaching for classroom management, six research questions were explored. Vygotsky's Zone of Proximal Development Theory and the vulnerable decision points model was used to design the research questions to inform this study. Perceived self-efficacy in managing classroom behaviors was used in the research questions as a way to measure how well a teacher can manage a classroom and thus avoid vulnerable discipline moments when a teacher may be more likely to be influence by implicit bias when issuing referrals. The background characteristics collected (gender, age, race/ethnicity, years of experience, grade level, school size and location, teacher acknowledgement of the existence implicit bias, teacher value of understanding implicit bias and preparation pathway) were used to identify other variables that may be related to a teacher's perceived self-efficacy in managing student behaviors or their willingness to be coached.

Research Questions

The relationships and variables discussed in this study were addressed using the following research questions:

1. What are teachers' perceptions of their self-efficacy in managing selected student behaviors?
2. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals)?
3. To what extent is the openness of teachers to participating in coaching for classroom management related to selected teacher demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals)?
4. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to their openness to participating in coaching for classroom management?
5. What is the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the

effectiveness of such coaching models and teachers who have not been presented such data?

6. To what extent does the openness of teachers to participating in coaching for classroom management differ between middle and high school level teachers?

Hypotheses

1. Hypothesis A: When comparing subgroup means for most teacher background characteristics (race, gender, grade span, teacher preparation pathway) and all school level background characteristics (school size, district, school setting) for the self-efficacy subscale using a two-tailed *t*-test: The inter-subgroup means will be equal. Hypothesis B: When comparing inter-subgroup means for referral frequency, years of experience and age for the self-efficacy subscale using a one-tailed *t*-test: Younger teachers, beginning teachers, and teachers who frequently write referrals will have a lower self-efficacy subscale rating compared to other teachers for each subgroup.
2. There is a relationship between teachers' perceptions of their self-efficacy in managing student behaviors and selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals).
3. There is a relationship between the openness of teachers to participating in coaching for classroom management and selected teacher demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size,

content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals).

4. There is a relationship between teachers' perceptions of their self-efficacy in managing student behaviors and their openness to participating in coaching for classroom management.
5. There is a relationship in the openness of teachers to participating in coaching for classroom management for teachers who are presented with data supporting the effectiveness of such coaching models and teachers who have not been presented such data.
6. There is a difference in the openness of teachers to participating in coaching for classroom management between middle and high school level teachers.

Participants

The participants in this study were middle and high school teachers serving in three low-income county districts in northeastern North Carolina. These school districts each serve between 2,100 and 14,400 students, where 30-45% of students identify as White, 45-60% of students identify as Black, and 2-5% of students identify Hispanic or Latino (U.S. Department of Education et al., 2022). I chose these three school districts as the focus for this study because they are located in northeastern North Carolina, where children in this area face significant challenges and have greater need of interventions to minimize racial disparities in discipline practices. Not only do counties in northeastern North Carolina consistently rank in the bottom quartile on the Public School Forum's *Roadmap of Need,* including bottom tier rankings for suspensions and juvenile detention admission rates, but they also have a high percentage of Black students compared to the state average (Public School Forum of North Carolina, 2020b;

U.S. Census Bureau, 2022). The selected districts were identified as a low-income districts, and each district ranked in the bottom quartile of counties in North Carolina for property value rank (Public School Forum of North Carolina, 2020a). The majority schools in the districts surveyed in this study received a C, D, or F rating on the North Carolina School Report Card. I selected such schools purposefully; if survey results showed that teachers, especially those with low perception of their ability to manage student behaviors in the classroom, are open to receiving instructional coaching on classroom management, then findings could guide policy recommendations or resource allocations to target schools that particularly need to find ways to better support their teachers to keep students learning in the classroom and not remove them for discipline events.

There were 1,462 teachers employed between the three selected school districts, 445 of whom were middle and high school teachers (U.S. Department of Education et al., 2022). My survey completion goal was to have at minimum of 100 participants complete the survey and this metric was met. All middle and high school teachers within in the selected districts were invited to participate in the survey. Prior to questions regarding teacher openness to receiving instructional coaching, participants were randomly assigned to an experimental or control group for an experimental question portion of the survey. In order to safeguard confidentiality, a pseudonym was used in place of the actual names of the districts.

Participants received an email from an employee in their county (the person who sent the link varied by county, survey links were sent by school counselors in one district, the district Technology Director in another district, and the district Communications Director in the third district) containing the link to participate in the survey. The survey was constructed and administered in Qualtrics to collect responses from participants. The use of the online survey

ensured anonymous participation, easy participation, and relatively fast response time. The internet survey design also allowed respondents to complete the survey at a time and location that is convenient for them. Permissions to send the survey was obtained at different times in each district and the survey remained open for two weeks after it was sent to the final district. A minimum two-week window was chosen to allow time to obtain the appropriate number of responses. I did not have a supervisory relationship with any of the participants. Participation in the study was completely voluntary.

Research Variables

There were a number of variables identified in my research questions. The dependent variable found in Research Question 2 was teachers' perceptions of their self-efficacy in managing student behaviors in the classroom. The dependent variable found in Research Questions 3, 4, 5, and 6 was teacher openness to participating in coaching for classroom management.

The independent variables found in Research Questions 2, 3, and 6 were teacher demographic (e.g., age, gender, race, ethnicity) and background (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, current district, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals). Age of participants was operationalized in 10-year spans (20-29, 30-39, 40-49, 50-59, 60+). Gender was operationalized as sex assigned at birth (male, female) and current identification (male, female, or transgender). Race/ethnicity was operationalized as American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander, Hispanic/Latino, and White. Years of experience was operationalized into three-year spans (1-3, 4-6, 7-9, 10+). Grade-span taught was operationalized

as middle or high school (6th-8th grade, 9th-12th grade). School setting was operationalized as rural, suburban, or urban. Teacher preparation pathway was operationalized as traditional undergraduate teacher education program, Masters education program, lateral entry, or lateral entry through Teach for America. School size was operationalized in number of student ranges (0-200, 201-400, 401-700, 701-1,000, 1,001-1,600 and over 1,600). Content taught was operationalized into the major content areas (English, Math, Science, History, Art, Physical Education, Music, CTE, and other). Acknowledgement of the existence of implicit bias and the value of understanding implicit bias was operationalized through a series of questions where participants are asked to rate their level of agreement on a 4-point Likert scale (strongly disagree, disagree, agree, strongly agree). Finally average referral use was operationalized into time frames (daily, weekly, monthly, rarely). For Research Question 5, the experimental question, the independent variable was operationalized as whether or not participants received the treatment condition of being presented research data on the effectiveness of coaching prior to answering questions regarding their openness to receiving coaching for classroom management.

Teacher perceptions of their self-efficacy in managing student behaviors in the classroom was the dependent variable for Research Questions 1 and 2. The variable of teacher perceptions of their self-efficacy in managing student behaviors in the classroom was operationalized through 11 items adapted from a pre-existing survey that employed a 4-point Likert scale ranging from not capable or not effective to capable or effective (Tschannen-Moran & Woolfolk Hoy, 2001).

Teacher openness to participating in instructional coaching for classroom management was the dependent variable for Research Questions 3, 4, 5, and 6. This variable was operationalized in two different ways depending on the survey question. For two of the three

survey questions related to openness to coaching, teachers were asked to rate their willingness to opt into coaching through a Likert scale ranging from not likely to very likely. The third question operationalized openness to coaching as the number of hours they would be willing to commit a month to participating in coaching meetings, ranging from zero hours to four plus hours. Each hour rating was compared to its partner Likert scale rating on the other openness to coaching questions (e.g., 0 hours = not likely to opt in, 4+ hours = very likely to opt in). All three openness to coaching for classroom management questions were original questions created for this survey.

For research question 4, openness to coaching served as the dependent variable and teacher perceptions of their self-efficacy in managing student behaviors in the classroom served as the independent variable in the regression analysis. For research question 5, openness to coaching was the dependent variable and assignment to the treatment group (receiving data on the effectiveness of coaching models prior to answering coaching interest questions) served as the independent variable.

Research Instrument

Survey Instrument

I was able to locate a survey, developed by Anita Woolfolk Hoy at the Ohio State University and Megan Tschannen-Moran at the College of Williams and Mary, that related to my research questions and would enable me to measure teacher perception of their self-efficacy in managing student behaviors in the classroom. The survey, entitled Teachers' Sense of Efficacy Scale, is located in Appendix A (Tschannen-Moran & Woolfolk Hoy, 2001). The survey developed by Tschannen-Moran and Woolfolk Hoy included questions addressing teachers' perceptions of their self-efficacy in three categories: engagement, instruction, and management. Only the management questions were utilized in the creation of the survey tool for my study. In

the original Tschannen-Moran and Woolfolk Hoy survey tool, Items 3, 5, 8, 13, 15, 16, 19, and 21 measured efficacy in classroom management. The survey authors allow open permission for use of the *Teachers' Sense of Self Efficacy Scale* and the permission letter is provided in Appendix B. I added three additional questions related to teachers' self-efficacy in managing student behaviors to the survey tool. Although the Tschannen-Moran and Woolfolk Hoy survey asks teachers several perception questions about their self-efficacy in managing student behaviors in the classroom, the survey does not include any questions regarding openness to coaching.

I added items to the survey so that it could also be used to generate data about teachers' openness to receiving instructional coaching for classroom management related to their perceived capacity to manage student behaviors in the classroom. I created items to address teachers' openness to receiving instructional coaching for classroom management and included an experimental component that employed random participant assignment to determine if the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the effectiveness of such coaching models and teachers who have not been presented such data.

The survey also asked teachers questions regarding their acknowledgement of the existence of implicit bias and value of understanding implicit bias as a construct. These survey questions were developed by Gonzalez, Grochowalski, Garba, Bonner, and Marantz (Gonzalez et al., 2021). The survey authors allow open access for use of the *Implicit Bias Attitude Scale.* The original *Implicit Bias Attitude Scale* contains 23 questions, only seven questions were utilized in this survey.

My survey, which is entitled Teacher Self Efficacy Survey and located in Appendix C, was administered in Qualtrics and was available to all middle and high school teachers in Oak County Public Schools, Pine County Public Schools, and Spruce County Public Schools. The survey included 11 questions related to teacher self-efficacy in managing student behaviors in the classroom. The survey randomly assigned participants to the experimental or control group to receive information regarding the effectiveness of coaching for classroom management. Experimental group participants were presented research outlining the impact instructional coaching for classroom management can have on student learning and classroom climate. Control group participants were not presented this research. All participants were then presented the questions measuring teacher openness to receiving instructional coaching for classroom management. The survey contained three questions measuring teacher openness to receiving instructional coaching for classroom management. Demographic questions were found at the end of the survey.

A four-point Likert scale was used to measure teachers' perceptions of their self-efficacy in managing student classroom behavior. The response options for questions regarding teachers' perceived effectiveness/capability at managing classroom behaviors included the following: not effective/capable, a little effective/capable, mostly effective/capable, effective/capable. Participants' response options for indicating the likelihood that they would opt into receiving coaching for classroom management included the following: not likely, a little likely, likely, very likely.

Survey components to determine teacher background characteristics included teacher background (age, race, gender, years of experience, grade-span, teacher preparation pathway, content taught, and average use of referrals), school background characteristics (school type

(urban, rural, suburban) and school size), and acknowledgement of the existence of implicit bias and the value of understanding implicit bias measures. The survey also asked participants to identify which school district they currently work in. This survey question allowed me to account for district fixed effects to account for unobservable differences by district when analyzing the survey data. The survey was projected to take participants fifteen minutes to complete. Table 3.1 outlines which survey questions provided data for each research question.

Table 3.1
Survey Questions to Provide Data to Answer Research Questions

Research Question	Survey Questions
Question 1	1-11
Question 2	1-11, 15-32
Question 3	12-32
Question 4	1-14
Question 5	12-14
Question 6	12-14, 22

Instrument Validity and Reliability

In order to ensure the results from a survey could be used to draw meaningful conclusions, the validity for the survey tool was established (Creswell & Creswell, 2018). To ensure validity and reliability, measures were taken to produce an appropriate survey instrument to measure the intended content.

The tool used in this study underwent a content validity review. An expert panel consisting of teachers, school administrators, and a statistics advisor reviewed the tool and provided feedback to strengthen the content validity. The panel was asked to provide feedback regarding the wording of questions and answer choices to ensure that each question was easy to

understand by teachers who would take the survey (Appendix D). Once feedback was received, the tool was revised as appropriate. The survey tool for the expert panel can be found in Appendix D.

In the original form of the *Teachers' Sense of Self Efficacy Scale*, reliabilities were measured as found in Table 3.2 (Tschannen-Moran & Woolfolk Hoy, 2001). Only the management questions found in the long form of the tool were used in the adapted tool for this study. The implicit bias questions used from the *Implicit Bias Attitude Scale* had a reliabilities measure of $\alpha = 0.90$.

Table 3.2

Reliability Measures for the Teachers' Sense of Efficacy Scale (TSES)

	Long Form		
	Mean	SD	alpha
TSES (OSTES)	7.1	.94	.94
Management	6.7	1.1	.90

Note. Only the management questions on the original TSES tool were included in the survey tool for this study. Reliability measures for instructional and engagement questions were removed from this table.

Data Collection Procedures

After I secured the approval of North Carolina State University's Institutional Review Board, I contacted the superintendent of Oak County Public Schools, Pine County Public Schools, and Spruce County Public Schools to secure permission to conduct my study in the district. The superintendents from each county were shared the Superintendent Permission Letter and Study Consent Form (Appendix E), but each county provided written permission according to their district policies. One county required School Board approval, which was obtained prior to administering the survey. Once approval was granted, I implemented the data collection

process as outlined in this section. Each district requested a different distribution process for sharing the survey with teachers. I reached out to district personnel for contact information for teachers within the county. Two of the districts requested that they directly send the survey email out to teachers so that they could utilize pre-existing listservs for quick distribution. In one county, the Director of Technology sent the survey email and in the second county, the Director of Communications sent the email. In the third county, the Director of Human Resources gave me permission to send the survey email to school counselors to have them send out the survey email to teachers in their building. Following the directions provided by each district, I reached out via email to each district contact person requesting their support in sending out the survey email to their teachers. I sent each district contact person an email template to send to the middle and high school teachers in their building/district. The district contact person then emailed prospective participants an email inviting them to participate in the survey (Appendix F). I followed up via email with any contact person who did not respond to my initial request email. One week after the contact person shared my email template with teachers, I emailed them again, requesting they send a reminder email to teachers indicating the closing date of the survey.

The template email that each district contact person sent to teachers outlined the purpose of the study, informed consent information, the right of participants to decline participation in the study, and the approximate time to complete the survey. The email included a link taking interested participants to the Qualtrics survey platform. The first page of the survey provided participants informed consent information and their right to choose not to answer certain questions or end the survey at any time. Participants were prompted to confirm their consent to participate before beginning the survey. If, after reviewing the informed consent information, participants choose to participate, they then clicked a link to move on to the survey itself.

Participants completed the survey at their own pace. Participants were randomly assigned at a 1:1 ratio to the treatment or control group for the experimental portion of the survey. Treatment group participants were presented research data on the impact of coaching for behavior management before answering the set of questions related to openness to coaching. Control group participants saw the same questions as the treatment group, without the research on the impact of coaching. The survey took approximately fifteen minutes to complete. Participants were not asked to provide any personally identifiable information.

Data Analysis

Quantitative analysis tools were used to analyze the data collected in this study. Descriptive statistics, including frequency, mean, standard deviation, and percentages, were calculated to report participant demographics and their ratings on teacher perceptions of their self-efficacy in managing student behaviors questions and their openness to coaching questions. Inferential statistics were used to compare participant ratings of openness to coaching in the treatment group with ratings from the control group to determine if there was a difference in rating when provided research on the impact of coaching research. Ordinary least squares (OLS) regression analysis was utilized to determine if there were relationships among teachers' perceptions of their self-efficacy in managing classroom behavior and teacher background characteristics. Regression analysis was also utilized to determine if there were relationships among openness to receive coaching for classroom management and teacher background characteristics. The following model was used:

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i$$

In this model, Y_i is the respondent's answer to their perceived self-efficacy in classroom management or their openness to coaching, and X_i is the respondents' answers to teacher background characteristics.

Regression analysis was used to determine if there was a relationship between teachers' perceptions of their ability to manage classroom behavior and their openness to participating in instructional coaching for classroom management. The following model was used:

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i$$

In this model, Y_i is the respondent's answer to their openness to coaching, and X_i is the respondent's answer to their perceived self-efficacy in classroom management. Finally, OLS regression was also used to examine results from the experiment question, where treatment group teachers were presented research behind the effectiveness of coaching with an experimentally-generated control serving as the comparison group. To examine the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the effectiveness of such coaching models and teachers who have not been presented such data, I used an ordinary least squares (OLS) regression. I regressed the likelihood to opt into coaching on indicators of experimental group status. The following model was used:

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i$$

In this model, Y_i is the respondent's answer to the experimental survey question five, and X_i is a binary indicator variable that describes whether a respondent was assigned to the treatment or control group.

All dependent variables were a function of independent variables, including district context. I accounted for variables for district fixed effect to account for unobservable differences

by district. All data analysis was completed using Stata software. Qualtrics survey data was secured through a login access to the website. Survey data used in Stata was stored on a password protected computer.

Study Delimitations

The delimitations of this study limit the generalizability of the results found in this study. The following delimitations were identified:

1. The participants in this study were limited to teachers in three public school districts. The districts were selected because of their low youth behavior ratings (higher levels of suspensions), low-income status, and higher percentage of Black students. These are all factors that make the district an important location for which to find interventions to disrupt disproportionate disciplinary practices. Generalizing these finding to districts with different contexts should be approached with caution.
2. Another delimitation was that only teachers who opted into completing the survey were included in this study. This may have skewed the data, as the most stressed or overwhelmed teachers may be less likely to take the time to complete an optional survey.
3. There were only 445 middle and high school teachers in the selected districts. My sample size of eligible participants was limited, providing limited generalizability of my study results.
4. There may have been a social desirability for participants to answer that they are able to handle discipline issues in their classroom, which may influence participant responses.

Researcher Assumptions

During the completion of this study, I made the following assumptions:

1. I assumed that all participants had a consistent understanding of the instrument items.
2. I assumed that all participants responded to the instrument items honestly.
3. I assumed that all participants did not fear penalty for responding.
4. I assumed that participant responses were representative of the perspectives of the district population.

Summary

This study sought to examine teachers' openness to receiving instructional coaching for classroom management and whether there was a relationship between their openness to coaching and their perceived self-efficacy in managing student behavior in the classroom. To address the research questions, teachers were asked to complete a survey and both regression analysis and descriptive statistics were utilized to analyze the data. The results of this study are useful to help drive policy and allocate resources to support the incorporation of coaching for classroom management in schools as a mechanism to address disproportionate discipline practices.

CHAPTER 4: RESULTS

Chapter Introduction

Chapter 4 provides the results from the survey that I administered to teacher participants. The survey, which was entitled Teacher Self Efficacy Survey, assessed teacher self-efficacy in managing student behaviors in the classroom and willingness to opt into coaching for classroom management. The following sections cover a summary of participants who completed the survey tool, followed by the results for each research question posed in this study.

The purpose of this study was to determine if there are relationships among teachers' perceptions of their self-efficacy in managing student behaviors in the classroom, and their openness to receive instructional coaching that includes enhancement of their classroom management skills in order to reduce or eliminate instances of teachers feeling overwhelmed or vulnerable in the classroom. Descriptive statistics were used to analyze the data collected and regression analysis was then used to analyze the data set for various relationships consistent with the elements of the research questions. Regression analysis was used to determine relationships between teachers' perceptions of their self-efficacy in managing a classroom and various teacher and school background characteristics, as well as relationships between the background characteristics and a teachers' willingness to opt into coaching to improve classroom management skills. Regression analysis was also used to determine if there is a relationship between teachers perceptions of their self-efficacy in managing classroom behaviors and their willingness to opt into coaching. Finally, regression analysis was used to see if there is a relationship between being provided research on the effectiveness of instructional coaching for classroom management and willingness to opt into coaching. This chapter shares the data from each research question posed in this study.

Survey Data Results

The survey was delivered electronically to secondary teachers in three districts in eastern North Carolina. The survey is located in Appendix C.

Demographic Data Results

The survey collected two categories of demographic data from each teacher participant: teacher background characteristics and school background characteristics. The teacher background characteristics included gender, age, race, teacher preparation pathway, years of experience, content taught, and how often a teacher writes a student discipline referral. The school background characteristics included school size, school setting (rural, urban, or suburban), and which district the teacher currently teaches in. The purpose of collecting this information was to assess the degree to which perceptions of self-efficacy in managing classroom behaviors and willingness to opt into coaching were related to demographic data.

The survey was sent to all secondary teachers in the three selected districts. Of the approximately 445 teachers to whom this survey was sent, 227 teachers opened the survey and agreed to consent to participate in study. Of those teachers, 40 (17.62%) did not progress to any questions beyond agreeing to participate in the study. A total of 151 teachers answered 100% of the survey questions for a final response rate of 34%. The survey took participants, an average, approximately 12.5 minutes to complete; this average did not include extreme outliers nor incomplete responses to the survey.

Teachers were asked to answer eight questions related to their personal and professional background characteristics. Between 153 and 155 participants answered each teacher background characteristic question. Of the participants who completed the survey, 57.5% identified their race as White and 37.3% of respondents identified their race as Black. All other

subgroups had an n of less than 10. In response to the age demographic question, 14.2% of respondents were between 20 and 29 years old, 21.3% were between 30 and 39 years old, 32.3% were between 40 and 49 years old, 22.6% were between 50 and 59 years old and 9.7% were at or above 60 years old. Approximately two-thirds (68.4%) of participants identified their gender as female and 27.1% identified as male. All other subgroups had an n of less than 10. Teacher personal background characteristics (race, age, and gender) can be found in Table 4.1.

Table 4.1

Personal Background Characteristics of Teacher Participants

Background Characteristic

Race	n	Percentage
White	88	57.5%
Black	57	37.3%
American Indian of Alaska Native	1	0.7%
Asian	5	3.2%
Hispanic or Latino	2	1.3%
TOTAL	153	100.0%
Age	n	Percentage
20-29	22	14.2%
30-39	33	21.3%
40-49	50	32.3%
50-59	35	22.6%
60+	15	9.7%
TOTAL	155	100.0%
Gender	n	Percentage
Female	106	68.4%
Male	42	27.1%
Genderqueer	2	1.3%
Do not wish to disclose	4	2.6%

Table 4.1 (continued)

Other	1	0.7%
TOTAL	155	100.0%

Teachers were also asked questions about their professional background. When asked about how they entered the teaching profession, 22.6% of respondents indicated that they entered through a traditional undergraduate education program, while 20% entered through a Masters education program, 38.1% entered through the lateral entry pathway, 5.2% entered teaching through Teach for America, and 14.2% entered education through another avenue. When asked about which content they taught, 18.1% of participants responded that they taught English, 13.5% taught math, 11.0% taught science, 8.4% taught history, 3.2% taught art, 5.8% taught an elective course (art, music, or physical education), 14.2% taught a Career Technical Education (CTE) course, and 29.0% selected the response option "Other" to designate their content subject. Of the teachers who completed the survey, 39% were middle school teachers and 61% were high school teachers. When asked about their years of experience, 18.3% of respondents indicated that they were beginning teachers with one to three years of experience, 15.6% of respondents indicated they had four to six years of experience, 9.5% of respondents had seven to nine years of experience and 57.1% of respondents had ten or more years of experience. Teacher professional background characteristics of survey respondents are recorded in Table 4.2.

Table 4.2

Professional Background Characteristics of Teacher Participants

Background Characteristic

Education Preparation Pathway	n	Percentage
Traditional undergraduate teacher education program	35	22.6%

Table 4.2 (continued)

Masters education program	31	20.0%
Lateral Entry	59	38.1%
Lateral Entry with Teach for America	8	5.2%
Other	22	14.2%
TOTAL	155	100.0%
Content Taught	n	Percentage
English	28	18.1%
Math	21	13.6%
Science	17	11.0%
History	13	8.4%
Art	5	3.2%
Music (Band/Chorus)	1	0.7%
Physical Education	3	1.9%
CTE	22	14.2%
Other	45	29.0%
TOTAL	155	100.0%
Grade Level Taught	n	Percentage
6-8	60	39.0%
9-12	94	61.0%
TOTAL	154	100.0%
Years of Experience	n	Percentage
1-3 years	28	18.2%
4-6 years	24	15.6%
7-9 years	14	9.1%
10+ years	88	57.1%
TOTAL	154	100.0%

Finally, respondents shared the frequency with which they write a referral for a student to be disciplined for misconduct. Less than one percent (0.7%) of respondents reported writing a

referral daily, 18.1% of respondents reported writing a referral weekly, 17.4% of respondents reported writing a referral monthly, and 63.9% of respondents reported writing a referral rarely. The referral frequency background characteristic of survey respondents is recorded in Table 4.3.

Table 4.3

Referral Frequency Background Characteristic of Teacher Participants

Background Characteristic

Referral Frequency	n	Percentage
Daily	1	0.7%
Weekly	28	18.1%
Monthly	27	17.4%
Rarely	99	63.9%
TOTAL	155	100.0%

In addition to the teacher background questions, teachers were also asked to answer three questions about the characteristics of their schools. Of the respondents that answered survey questions, 12.9% of respondents worked in schools with 0 to 200 students, 26.5% of respondents worked in schools with 201 to 400 students, 20.0% of respondents worked in schools with 401 to 700 students, 24.5% of respondents worked in schools with 701 to 1,000 students, and 16.3% of respondents worked in schools with 1,001 to 1,600 students. When asked about their school setting, 70.1% of respondents reported working in a rural setting, 13.0% of respondents reported working in a suburban school setting, and 16.9% of respondents reported working in an urban school setting. Slightly less than half of the survey respondents (49.7% or 77 teachers) worked in Spruce County Public Schools, 34.8% of respondents (54 teachers) worked in Oak County Public Schools, and 15.5% of respondents (24 teachers) worked in Pine County Public Schools.

All background characteristics of the schools in which survey respondents worked are recorded in Table 4.4.

Table 4.4

Background Characteristics of Participants' Schools

School Background Characteristic

Size	n	Percentage
0-200 students	20	12.9%
201-400 students	41	26.5%
401-700 students	31	20.0%
701-1,000 students	38	24.5%
1,001-1,600 students	25	16.3%
TOTAL	155	100.0%
Setting	n	Percentage
Rural	108	70.1%
Suburban	20	13.0%
Urban	26	16.9%
TOTAL	154	100.0%
District	n	Percentage
Oak County Public Schools	54	34.8%
Pine County Public Schools	24	15.5%
Spruce County Public Schools	77	49.7%
TOTAL	155	100.0%

Participants in the study were randomly assigned to either a treatment or control group during the survey. Treatment group participants were shown data on the effectiveness of instructional coaching for classroom management before seeing the set of questions regarding their willingness to opt into coaching. Control group participants were shown the willingness to opt into coaching questions without being shown data on the effectiveness of instructional

coaching for classroom management. Of the 227 participants who began the survey, 140 (61.7%) were assigned to the control group and 87 (38.3%) were assigned to the treatment group. Of the participants who completed the entire survey, 76 (49.0%) were assigned to the control group and 79 (51.0%) were assigned to the treatment group. Assignment to the treatment or control group by teacher is displayed in Table 4.5; the depiction of assignment of participants is further stratified by personal background characteristics. The assignment of participants to the treatment or control group displayed in Table 4.6 is stratified by teacher professional background characteristics and the assignment of participants to the treatment or control group displayed in Table 4.7 is further stratified by teacher referral frequency.

Table 4.5

Personal Background Characteristics of Teachers in the Treatment and Control Groups

Background Characteristic

	Treatment Group (n)	Control Group (n)
Overall	79	76
Race	Treatment Group (n)	Control Group (n)
White	47	41
Black	27	30
American Indian of Alaska Native	1	0
Asian	3	2
Hispanic of Latino	1	1
TOTAL	79	74
Age	Treatment Group (n)	Control Group (n)
20-29	13	9
30-39	11	22
40-49	31	19
50-59	18	17
60+	9	9

Table 4.5 (continued)

TOTAL	79	76
Gender	Treatment Group (n)	Control Group (n)
Female	56	50
Male	18	24
Genderqueer	2	0
Do not wish to disclose	2	2
Other	1	0
TOTAL	79	76

Table 4.6

Professional Background Characteristics of Teachers in the Treatment and Control Groups

Background Characteristic

Education Preparation Pathway	Treatment Group (n)	Control Group (n)
Traditional undergraduate teacher education program	21	14
Masters education program	10	21
Lateral Entry	31	28
Lateral Entry with Teach for America	4	4
Other	13	9
TOTAL	79	76
Content Taught	Treatment Group (n)	Control Group (n)
English	14	14
Math	15	6
Science	9	8
History	4	9
Art	2	3
Music (Band/Chorus)	0	1
Physical Education	2	1
CTE	8	14

Table 4.6 (continued)

Other	25	20
TOTAL	79	76
Grade Level Taught	Treatment Group (n)	Control Group (n)
6-8	35	25
9-12	44	50
TOTAL	79	75
Years of Experience	Treatment Group (n)	Control Group (n)
1-3 years	14	14
4-6 years	14	10
7-9 years	9	5
10+ years	42	46
TOTAL	79	75

Table 4.7

Referral Frequency of Teachers in the Treatment and Control Groups

Background Characteristic

Referral Frequency	Treatment Group (n)	Control Group (n)
Daily	1	0
Weekly	18	10
Monthly	12	15
Rarely	48	51
TOTAL	79	76

Assignment to the treatment or control group by school background characteristics is displayed in Table 4.8.

Table 4.8

Characteristics of the Schools of Participants in the Treatment and Control Groups

School Background Characteristic

Size	Treatment Group (n)	Control Group (n)
0-200 students	10	10
201-400 students	21	20
401-700 students	19	12
701-1,000 students	15	15
1,001-1,600 students	19	19
TOTAL	79	76
Setting	**Treatment Group (n)**	**Control Group (n)**
Rural	57	51
Suburban	9	11
Urban	12	14
TOTAL	78	76
District	**Treatment Group (n)**	**Control Group (n)**
Oak County Public Schools	27	27
Pine County Public Schools	12	12
Spruce County Public Schools	40	37
TOTAL	79	76

As shown in Tables 4.5, 4.6, 4.7 and 4.8 there were a few instances where there were differences between the treatment and control groups. In the treatment group comparison to the control group, there were more older teachers, more teachers who entered teaching through a traditional undergraduate program, fewer teachers with a Masters' degree, more math teachers, fewer CTE teachers, and more teachers who weekly write referrals. Each of these categories had a slight difference between the treatment and control group and all other categories had a relatively equal randomization by characteristics.

Survey Section Results

The survey consisted of four sections of questions for participants to answer; the third of these sections consisted of two thematic subparts. The first section included questions that asked teachers to indicate how confident they were in their ability to handle various discipline issues in the classroom to measure respondents' perceived level of self-efficacy in managing classroom behaviors. The second section asked teachers to indicate how willing they would be to participate in instructional coaching for classroom management. The third section contained questions measuring participants' perspectives on implicit bias. This section was divided into two subparts: questions regarding participant awareness of the existence of implicit bias and participant perspectives on the importance or value of understanding implicit bias and the role it plays in day-to-day life. The fourth and final section of the survey contained demographic questions.

Teachers' Perceived Self-Efficacy in Managing Classroom Behaviors Section of Survey

The first section contained eleven questions that were designed to measure teachers' perceived self-efficacy in managing behaviors in the classroom. This section asked participants to answer ten Likert scale questions about their perceived level of self-efficacy in responding to different behavioral issues in the classroom and a final eleventh question in the section asked participants to rate their level of tiredness at the end of a day of teaching. For data analysis purposes, these eleven survey question responses were treated as a subscale and averaged to produce an overall self-efficacy in managing classroom behaviors measure for each respondent. The overall mean self-efficacy in managing classroom behaviors subscale was found to be 3.14 with a standard deviation of 0.48.

Cronbach's alpha for statistical reliability was calculated for the eleven survey questions related to teacher perceived self-efficacy in managing student behaviors. Cronbach's alpha for these questions was calculated to be 0.883, which is above the acceptable value of 0.70. This demonstrated internal consistency and reliability for these questions and, therefore, allowed the data for these responses to be combined into a single measure of reported self-efficacy in managing classroom behaviors. The individual question means and overall mean for reported self-efficacy in managing classroom behaviors questions can be found in Table 4.9.

Table 4.9

Mean Responses to Self-Efficacy in Managing Classroom Behaviors Questions

	Mean	Standard Deviation	n
Question 1: Building relationships	3.17	0.75	183
Question 2: Redirecting disruptive behavior	3.22	0.62	183
Question 3: Refocusing noisy students	3.06	0.69	181
Question 4: Getting students to follow rules	3.35	0.63	181
Question 5: Redirecting students who argue back	3.01	0.74	181
Question 6: Getting through to difficult students	2.98	0.74	180
Question 7: Making expectations clear	3.5	0.63	182
Question 8: Establishing classroom routines	3.39	0.69	181
Question 9: Establishing a classroom management system	3.44	0.64	180
Question 10: Keeping disrupters from ruining the lesson	3.26	0.66	180
Question 11: How emotionally tired are you daily	2.20	0.97	182
Overall Self-Efficacy in Managing Behaviors Rating	3.14	0.48	183

As shown in Table 4.9, averaged responses to each question in the perceived self-efficacy in managing behaviors in the classroom section of the survey ranged from 2.20 to 3.5 with a mean rating of 3.14. Teachers rated the questions related to their ability to establish routines.

Procedures, and expectations in their classroom higher compared to other questions in this section. The questions that had the lowest mean scores were those related to the teacher's ability to reach difficult students and a rating of how emotionally tired teachers are at the end of the school day.

Teacher Willingness to Opt into Coaching for Classroom Management Section of Survey

The second set of questions in the survey asked all participants to answer a set of three Likert scale questions about their willingness to opt into coaching to improve their classroom management skills. Participants were divided into a treatment or control group for the analyses related to this set of items. Participants in the control group were immediately presented with the willingness to opt into coaching questions following their completion of the perceived self-efficacy in managing classroom behaviors questions. However, before proceeding to the willingness to opt into coaching questions, participants in the treatment group were provided data showing the positive impact that instructional coaching for classroom management can have on teacher effectiveness. Participants' responses to the willingness to opt into coaching questions were averaged into an overall subscale mean that provided a measure of their willingness to opt into coaching. The overall mean willingness to opt into coaching subscale was found to be 2.41 with a standard deviation of 0.80.

Cronbach's alpha for statistical reliability was calculated for the three survey questions related to teacher's willingness to opt into coaching. Cronbach's alpha for these questions for participants in the control group was calculated to be 0.771 and was calculated to be 0.751 for participants in the treatment group. Both values are above the acceptable value of 0.70. This demonstrated internal consistency and reliability for these questions and, therefore, allowed the data for these responses to be combined into a single measure of participant willingness to opt

into coaching. The individual question means and overall mean for reported willingness to opt into coaching questions can be found in Table 4.10.

Table 4.10

Mean Responses to Willingness to Opt into Coaching for Classroom Management Questions

	Treatment Group n	Control Group n
	87	89
	Treatment Group Mean (Standard Deviation)	Control Group Mean (Standard Deviation)
Question 12: How likely to opt into coaching	2.57 (1.01)	2.24 (1.01)
Question 13: How many hours willing to meet with a coach for classroom management monthly	2.43 (0.86)	2.10 (0.88)
Question 14: How likely to opt into observation and feedback with a coach	2.70 (0.95)	2.40 (0.97)
Overall Willingness to Opt into Coaching for Classroom Management Rating	2.57 (0.77)	2.25 (0.79)

As shown in Table 4.10, the mean rating for each question in the openness to opt into coaching for classroom management ranged from 2.43 to 2.70 for the treatment group, with an average rating of 2.57. The mean rating for each question in the openness to opt into coaching for classroom management for the control group ranged from 2.10 to 2.40, with an average rating of 2.25. The mean willingness to opt into coaching for classroom management rating for each question was higher for the treatment group compared to the control group.

Teacher Perceptions Regarding Implicit Bias Section of Survey

The third section of questions asked participants to answer Likert scale questions measuring how much they acknowledge that implicit bias exists and their perspectives on the

importance of understanding implicit bias and the role it plays in day-to-day life. Participants were asked four questions measuring their acknowledgement that implicit bias exists and participant responses for these questions were combined into an overall acknowledgement of the existence of implicit bias measure. The overall mean acknowledgement of implicit bias subscale was found to be 3.14 with a standard deviation of 0.60. As shown in Table 4.11, the mean ratings for acknowledgement of implicit bias questions ranged from 2.84 to 3.33.

Cronbach's alpha for statistical reliability was calculated for the four survey questions related to teacher acknowledgement of the existence of implicit bias. Cronbach's alpha for these questions was calculated to be 0.779, which is above the acceptable value of 0.70. This demonstrates internal consistency and reliability for these questions and, therefore, allows for the data for these responses to be combined into a single measure of acknowledgement that implicit bias exists. The individual question means and overall mean for the subscale related to acknowledgement that implicit bias exists can be found in Table 4.11.

Table 4.11

Mean Responses to Acknowledgement of Implicit Bias Questions

	Mean	Standard Deviation	n
Question 15: Individuals carry assumptions in their subconscious	3.18	0.69	158
Question 16: Racial and ethnic groups are treated in different ways	2.84	0.87	157
Question 18: Teacher's implicit biases may affect the quality of education they provide	3.20	0.78	158
Question 20: Implicit bias can affect a person's behavior	3.33	0.67	156
Overall Acknowledgement of Implicit Bias	3.14	0.60	--

Participants were also asked three questions in this third section regarding their perspectives on the importance or value of understanding implicit bias and the role it plays in day-to-day life. Participant responses to these questions were combined into a single measure of the overall value of understanding implicit bias. The overall mean value of understanding implicit bias subscale was found to be 3.30 with a standard deviation of 0.62. As shown in Table 4.12, the mean ratings for value of understanding of implicit bias questions ranged from 3.27 to 3.34.

Cronbach's alpha for statistical reliability was calculated for the three survey questions related to teacher's perspectives on the importance of understanding implicit bias. Cronbach's alpha for these questions was calculated to be 0.823, which is above the acceptable value of 0.70. This demonstrates internal consistency and reliability for these questions and, therefore, allows for the data for these responses to be combined into a single measure of teacher perspectives on the importance of understanding implicit bias. The individual question means and overall mean for teacher value of understanding implicit bias questions can be found in Table 4.12.

Table 4.12

Mean Responses to Questions regarding the Value of Understanding Implicit Bias

	Mean	Standard Deviation	n
Question 17: It is important to learn to recognize implicit biases	3.34	0.70	158
Question 19: It is important to minimize the effects of my implicit biases decision making in classroom management	3.27	0.74	157
Question 21: It is important to discuss race, ethnicity, and culture in schools	3.30	0.73	157
Overall Value of Understanding Implicit Bias	3.30	0.62	--

Results for the Research Questions

Research Question 1

Research Question 1 reads as follows: What are teachers' perceptions of their self-efficacy in managing selected student behaviors? The first 11 survey questions on the survey posed questions for participants to rate how capable or how effective they felt they are at addressing common student behaviors in the classroom. The first ten questions provided participants four Likert scale ratings from which to choose their answer. The ratings were assigned a corresponding number to indicate the level of self-efficacy in managing student behaviors as follows: Not effective/capable = 1, a little effective/capable = 2, mostly effective/capable = 3, and effective/capable = 4. The last question in this section asked participants to rate how emotionally tired they feel at the end of a day and ratings were assigned a corresponding number to indicate the level of emotional weariness as follows: very emotionally tired = 1, mostly emotionally tired = 2, a little emotionally tired = 3, not emotionally tired = 4. As described in the previous section, the responses for all 11 questions addressing teachers' perceptions of their self-efficacy in managing classroom behaviors were combined into one overall self-efficacy rating for each participant (see Table 4.9).

The mean overall self-efficacy in managing classroom behaviors rating for all teachers who participated in the survey was 3.15, with a standard deviation of 0.48. Responses ranged from 2 to 4 on a scale of 1-4. In the data for the research questions, teacher and school background characteristics subcategories were condensed into groups of like categories. The subgroup means for teacher background characteristics were: White (m=3.06), non-White (m=3.2), young adult (m=2.91), adult (3.16), female (m=3.10), non-female (m=3.15), education degree pathway to teaching (m=3.07), non-traditional pathway to teaching (m=3.15), English

teachers (m=3.10), math teachers (m=2.84), history, science, art, music, P.E., CTE, and other teachers (m=3.18), 6th-8th teachers (m=3.09), 9th-12th grade teachers (m=3.14), beginning teachers (m=2.92), established teachers (m=3.17), teachers who frequently write referrals (m=2.92), and teachers who infrequently write referrals (m=3.17). The subgroup means for school background characteristics were small school (m=2.97), medium school (m=3.14), large school (m=3.14), rural school (m=3.13), non-rural school (m=3.11), Oak County Public schools (m=3.03), Pine County Public schools (m=3.04), and Spruce County Public schools (m=3.21).

In addition to calculating the subgroup mean self-efficacy in managing classroom behaviors ratings for teacher and school background characteristics, I used a *t*-test for independent samples that assumes equal variance to identify any statistical difference between the subgroup mean to all other subgroups for that participant background characteristic. A *t*-test of equal variance for independent samples was selected because the sample populations for each subgroup was sufficiently large (n>30). A test for equality of variance was performed for each group and data showed that equal variance could be assumed.

For most background characteristics, the null hypothesis was that the subgroup means would be equal, with the alternative hypothesis being that the means would be different, and a two-tailed *t*-test was performed. For the teacher background characteristic of referral frequency, years of experience, and age, a one-tailed *t*-test was performed, as I conjectured that younger teachers, inexperienced teachers, or teachers who frequently write referrals would have a lower self-efficacy rating of their ability to manage classroom behaviors. For these subgroups, a one-tailed *t*-test was performed, with the null hypothesis that the subgroup means would be equal, and with the alternative hypothesis that the mean for young teachers, beginning teachers, and teachers who write referrals frequently would be less than the mean for the alternative subgroups

in that category. Table 4.13 shows the means for each subgroup of teacher personal background characteristics, as well as the difference in means between a specific subgroup and all other subgroups for that background characteristic. Table 4.14 shows the means for each subgroup of teacher professional background characteristics, as well as the difference in means between a specific subgroup and all other subgroups for that background characteristic. Table 4.17 shows the means for each subgroup of teacher referral frequency, as well as the difference in means between a specific subgroup and all other subgroups for that background characteristic. Table 4.16 shows the means for each subgroup of school background characteristics, as well as the difference in means between a specific subgroup and all other subgroups for that background characteristic.

Table 4.13

Average Reported Self-Efficacy in Managing Classroom Behaviors by Teacher Personal Background Characteristics

Teacher Personal Background Characteristic		
	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Overall	3.15 (0.48)	--
Race	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
White	3.06 (0.48)	0.15 {0.08}
Non-White	3.2 (0.50)	
Age	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Young Adult (20-29)	**2.91** (0.54)	**0.25*** {0.11}

Table 4.13 (continued)

Adult (30+)	**3.16** (0.48)	
Gender	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Female	3.10 (0.49)	0.054 {0.085}
Non-Female (Male or other)	3.15 (0.50)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.14

Average Reported Self-Efficacy in Managing Classroom Behaviors by Teacher Professional Background Characteristics

Teacher Professional Background Characteristic		
Education Preparation Pathway	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Education Degree (Undergrad or Masters)	3.07 (0.49)	0.09 {0.8}
Non-Traditional (Lateral Entry, Teach for America, or Other)	3.15 (0.51)	
Content Taught	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
English	3.10 (0.43)	0.30 {0.10}
Math	**2.84** (0.46)	**0.32**** {0.11}
Other (science, history, CTE, art, music, P.E, or other)	**3.18** (0.50)	**-0.19*** {0.08}
Grade Level Taught	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}

Table 4.14 (continued)

6-8	3.09 (0.52)	0.06 {0.08}
9-12	3.14 (0.48)	
Years of Experience	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Beginning Teacher (1-3 years)	**2.92** (0.49)	**0.24**** {0.10}
Established Teacher (4+ years)	**3.17** (0.49)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.15

Average Reported Self-Efficacy in Managing Classroom Behaviors by Teacher Referral Frequency

Referral Frequency	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Frequent Referrals (daily or weekly)	**2.92** (0.43)	**0.24**** {0.11}
Infrequent Referrals (monthly or rarely)	**3.17** (0.50)	

Note: Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.16

Average Reported Teacher Self-Efficacy in Managing Classroom Behaviors by School Characteristics

School Background Characteristic		
Size	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Small School (0-200 students)	2.97 (0.56)	0.18 {0.12}
Medium School (201-700 students)	3.14 (0.50)	-0.04 {0.08}
Large School (701-1,600 students)	3.14 (0.46)	-0.04 {0.08}
Setting	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Rural	3.13 (0.49)	-0.02 {0.09}
Non-Rural (Urban, Suburban)	3.11 (0.50)	
District	Mean Reported Self-Efficacy (Standard Deviation)	Difference in Means {Standard Error}
Oak County Public Schools	3.03 (0.51)	0.14 {0.08}
Pine County Public Schools	3.04 (0.45)	0.10 {0.11}
Spruce County Public Schools	**3.21** (0.49)	**-0.18*** {0.08}

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

At the $p < 0.05$ level, there was a statistically significant difference in mean ratings between young teachers (20-29 years old) and older teachers (30+ years old), with younger teachers reporting, on average, a 0.25 point lower rating of their perceived self-efficacy in managing behaviors in the classroom. At the $p < 0.01$ level, there was a statistically significant

difference in mean ratings between math teachers and the other two content groups (English teachers and all other content teachers), with math teachers reporting, on average, a 0.32 point lower rating of their perceived self-efficacy in managing behaviors in the classroom. There was also a statistically significant difference in mean ratings between the other content group (history, science, music, art, P.E. and other contents) and the math and English content group; with "other" teachers reporting, on average, a 0.19 point higher rating of their perceived self-efficacy in managing behaviors in the classroom. This finding was significant at the $p < 0.05$ level. At the $p < 0.01$ level, there was a statistically significant difference in mean ratings between beginning teachers (1-3 years of experience) and established teachers (4+ years of experience), with beginning teachers reporting, on average, a 0.24 point lower rating of their perceived self-efficacy in managing behaviors in the classroom. There was also a statistically significant difference in mean ratings between teachers who frequently write referrals (daily or weekly) and teachers who infrequently write referrals (monthly or rarely) with teachers who frequently write referrals reporting, on average, a 0.24 point lower rating of their perceived self-efficacy in managing behaviors in the classroom. This finding was significant at the $p < 0.01$ level. Finally, there was a statistically significant difference in mean ratings between teachers from Spruce County Public Schools and teachers from Oak and Pine County Public Schools, with Spruce County Public Schools reporting, on average, a 0.18 point higher rating of their perceived self-efficacy in managing behaviors in the classroom. This finding was significant at the $p < 0.05$ level.

The self-efficacy in managing behaviors in the classroom subscale overall mean rating was 3.15. This mean rating suggests that participants generally believed that they were mostly effective/capable relative to their efficacy in managing student behaviors, as the midpoint rating

for this measure was 2.5. In addition, all subgroup mean ratings were above the 2.5 mark, indicating that the participants generally responded toward the positive in rating their effectiveness/capability in responding to classroom management events.

I had two hypotheses for Research Question 1. Hypothesis A stated, when comparing subgroup means for most teacher background characteristics (race, gender, grade span, teacher preparation pathway) and all school level background characteristics (school size, district, school setting) for the self-efficacy in managing behaviors in the classroom subscale using a two-tailed *t*-test: The inter-subgroup means would not be equal. This hypothesis was supported for the following subgroups: math teachers compared to all other teachers, history, science, music, art, P.E., CTE, and other teachers compared to math and English teachers, and for teachers working in Spruce County Public Schools compared to teachers in Oak and Pine Counties. Math teachers reported a statistically significant lower average self-efficacy in managing behaviors in the classroom rating compared to all other teachers, while history, science, music, art, P.E., CTE, and other teachers reported a statistically significant higher average self-efficacy in managing behaviors in the classroom rating compared to math and English teachers. Spruce County Public School teachers reported a statistically significant higher average self-efficacy in managing behaviors in the classroom rating compared to teachers in Oak and Pine County Public Schools. Hypothesis A was not supported for all other subgroups in this hypothesis as a statistically significant difference in means was not observed in the data.

Hypothesis B for Research Question 1 stated, when comparing inter-subgroup means for referral frequency, years of experience and age for the self-efficacy in managing behaviors in the classroom subscale using a one-tailed *t*-test: Younger teachers, beginning teachers, and teachers who frequently write referrals would have a lower self-efficacy in managing behaviors in the

classroom subscale rating compared to other teachers for each subgroup. This hypothesis was supported for all three subgroups of teacher background characteristics. Younger teachers, inexperienced teachers, and teachers who frequently write referrals were found to report a statistically significant lower self-efficacy mean rating for their ability to manage student behaviors in the classroom. The average for each subgroup was around 2.91, indicating that teachers responded between "a little effective/capable" and "mostly effective/capable." It should be noted that when running several *t*-tests, the chance of Type 1 error increases. As there were several *t*-tests run to answer Research Question 1, it is possible that significant results were found that were not actually significant.

Research Question 2

Research Question 2 reads as follows: To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of implicit bias, and average use of referrals)? In order to answer this research question, I used regression analysis to determine if there were relationships among teacher's reported self-efficacy in managing classroom behaviors and various teacher and school background characteristics. Four different regression models were used to answer Research Question 2.

In regression model one (M1), the overall reported self-efficacy in managing behaviors in the classroom variable was standardized and this standardized variable was utilized as the dependent variable in the regression model and all subcategories of teacher background characteristics were run as the independent variables, while holding all other teacher background

characteristics constant. The breakdown of teacher demographic variables was as follows: non-White participants were compared against White participants, non-female identifying participants were compared against female identifying participants, young participants (20-29 years old) were compared against older participants, math teachers and English teachers, were compared against all other teachers (history, science, art, music, P.E., CTE, and other), middle school teachers (6^{th}-8^{th} grade) were compared against high school (9^{th}-12^{th} grade) teachers, and teachers who reported infrequently writing referrals (monthly or rarely) were compared against teaches who reported frequently writing referrals (daily or weekly). Table 4.17 shows the results of this regression analysis.

The regression analysis for model one yielded two statistically significant results. Teaching math, while holding all other teacher background characteristics constant, was found to be, on average, associated with a 0.43 SD lower overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.05$ level. The infrequent writing of referrals, while holding all other teacher background characteristics constant, was found to be, on average, associated with a 0.31 SD higher overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.05$ level. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

In regression analysis model two (M2), the overall reported self-efficacy in managing behaviors in the classroom standardized variable was utilized as the dependent variable and all subcategories of school background characteristics were run as the independent variables, while holding all other school demographic characteristics constant. The breakdown of school demographic variables was as follows: small schools (0-200 students) and medium-sized schools

(201-700 students) were compared against large schools (701-1,600 students), non-rural schools (urban and suburban) were compared against rural schools, and Pine County Public Schools and Spruce County Public Schools were compared against Oak County Public Schools. Table 4.17 shows the results of this regression analysis.

The regression analysis for model two produced one statistically significant result. Teaching in Spruce County Public Schools, while holding all other school background characteristics constant, was found to be, on average, associated with a 0.43 SD higher overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.01$ level. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

In regression analysis model three (M3), the overall reported self-efficacy in managing behaviors in the classroom standardized variable was utilized as the dependent variable and the overall implicit bias variables were run as independent variables, while holding the other implicit bias variables constant. To create the overall acknowledgement of implicit bias variable and overall value of understanding implicit bias variable, the following values were assigned to the responses for each subset of questions: strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4. The responses for all four questions addressing teachers' acknowledgement of the existence of implicit bias and the three questions addressing the degree to which teachers value of understanding implicit bias were combined into one overall acknowledgement of implicit bias rating for each participant and one overall value of understanding implicit bias rating for each participant.

Participants' subscale mean ratings of their acknowledgement of the existence of implicit bias and participant subscale mean ratings of how much they value understanding implicit bias

were standardized and the standardized variables were used in the regression analysis for model three. The results for regression model three can be found in Table 4.17. No statistically significant results were produced in regression model three. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

Regression model four (M4) was a combination of regression models one, two, and three. In regression analysis model four, the overall reported self-efficacy in managing behaviors in the classroom standardized variable was utilized as the dependent variable and all subcategories of teacher background characteristics, school background characteristics, and implicit bias measures were run as the independent variables, while holding all other variables constant. Table 4.17 shows the results of this regression analysis.

The regression analysis for model four produced four statistically significant results. Non-White participants, while holding all other variables constant, were found to be, on average, associated with a 0.26 SD higher overall self-efficacy in managing behaviors in the classroom ratings. This finding was significant at the $p < 0.05$ level. Teaching math, while holding all other variables constant were found to be, on average, associated with a 0.37 SD lower overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.05$ level. The infrequent writing of referrals, while holding all other variables constant, was found to be, on average, to be associated with 0.32 SD higher overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.05$ level. Participants who taught in Spruce County Public Schools, while holding all other variables constant was found to be, on average, associated with 0.41 SD higher overall self-efficacy in managing behaviors in the classroom rating. This finding was significant at the $p < 0.05$ level. The regression was rerun using only those responses with full survey data. No statistically significant

different results were observed.

Table 4.17

Relationship Between Reported Self-Efficacy in Managing Classroom Behaviors and Background Characteristics

	M1	M2	M3	M4
Non-White	0.20 (0.12)	--	--	**0.26*** (0.12)
Young Adult (20-29)	-0.18 (0.19)	--	--	-0.19 (0.19)
Non-Female (Male or other)	0.16 (0.13)	--	--	0.16 (0.13)
Education Degree (Undergrad or Masters)	-0.03 (0.12)	--	--	-0.08 (0.12)
English Teacher	-0.05 (0.15)	--	--	-0.03 (0.15)
Math Teacher	**-0.43*** (0.17)	--	--	**-0.37*** (0.17)
Middle-School Teacher (Grades 6-8)	0.001 (0.12)	--	--	-0.08 (0.13)
Beginning Teacher (1-3 years)	-0.25 (0.176)	--	--	-0.15 (0.18)
Infrequently Writes Referrals (monthly or rarely)	**0.31*** (0.15)	--	--	**0.32*** (0.14)
Small School	--	-0.048 (0.20)	--	-0.005 (0.19)
Medium Size School	--	0.201 (0.145)	--	0.14 (0.16)

Table 4.17 (continued)

Non-Rural School	--	-0.24 (0.14)	--	-0.27 (0.14)
Pine County Public Schools	--	-0.067 (0.18)	--	-0.17 (0.18)
Spruce County Public Schools	--	**0.43**** (0.149)	--	**0.41*** (0.16)
Acknowledge Implicit Bias	--	--	-0.10 (0.11)	-0.10 (0.11)
Value of Understanding Implicit Bias	--	--	0.07 (0.14)	0.08 (0.13)
Constant	-0.26 (0.18)	-0.24 (0.14)	-0.25 (0.45)	-0.68 (0.48)
Observations	152	154	158	151
R-squared	0.15	0.07	0.01	0.23

Note. Standard error in parenthesis. Bold font denotes statistically significant result.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The hypothesis for Research Question 2 reads as follows: There is a relationship between teachers' perceptions of their self-efficacy in managing student behaviors and selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals). There was a statistically significant relationship between four subgroup categories and their self-efficacy in managing behaviors in the classroom rating and therefore, the hypothesis for this research question was supported. Teachers who infrequently write referrals, teachers in Spruce County Public Schools and non-White teachers were associated with reporting, on average, with a statistically significant higher

overall self-efficacy in managing behaviors in the classroom rating, when holding all other variables constant. This result held true with holding only inter-group variables constant (school or teacher background characteristics for Spruce County Public School teachers and for teachers who infrequently write referrals). The final statistically significant result was that teachers who teach math were associated, on average, with a statistically significant lower overall self-efficacy in managing behaviors in the classroom rating, when holding all other variables constant. This result held true when holding only inter-group variables (teacher background characteristics) constant.

Research Question 3

Research Question 3 reads as follows: To what extent is the openness of teachers to participating in coaching for classroom management related to selected teacher demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, implicit bias acknowledgement, and average use of referrals)? There were three questions on the survey that asked participants to rate how likely they were to opt into instructional coaching for behavior management. Two of the three questions provided participants four Likert scale ratings to choose. The ratings were assigned a corresponding number to indicate how likely they would be to opt into coaching: Not likely = 1, a little likely = 2, likely = 3, and very likely = 4. The third question in this set asked participants to indicate how many hours they would be willing to meet with a coach each month and the responses were assigned a corresponding number to indicate how likely they would be to opt into coaching: 0 hours = 1, 1 hour = 2, 2 hours = 3, 3+ hours = 4. As described in the previous section, the responses for all three questions addressing how likely participants were to opt into instructional

coaching for behavior management were combined into one overall willingness to opt into coaching rating for each participant.

The mean overall willingness to opt into coaching rating for all teachers who participated in the survey was 2.41, with a standard deviation of 0.80. Responses ranged from 1 to 4 on a scale of 1-4. When looking at data for the research questions, I condensed teacher and school background characteristics subcategories into the same groups of like categories as used in the analysis for Research Question 1.

In order to see if there was a relationship between teachers' reported willingness to opt into coaching and teacher and school background characteristics, a *t*-test for independent samples with equal variance was run for each teacher and school background characteristic to see if willingness to opt into coaching varied by teacher and school background characteristics. The results from these *t*-tests are found in Table 4.18, Table 4.19, Table 4.20, and Table 4.21.

Table 4.18

Average Reported Willingness to Opt into Coaching by Teacher Personal Background Characteristics

Teacher Personal Background Characteristic		
	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Overall	2.41 (0.80)	--
Race	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
White	**2.35** (0.81)	**0.26*** {0.13}
Non-White	**2.62** (0.70)	

Table 4.18 (continued)

Age	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Young Adult (20-29)	2.70	-0.29
	(0.64)	{0.18}
Adult (30+)	2.41	
	(0.81)	
Gender	**Mean Reported Willingness to Opt into Coaching (Standard Deviation)**	**Difference in Means {Standard Error}**
Female	**2.55**	**-0.31***
	(0.76)	{0.13}
Non-Female (Male or other)	**2.24**	
	(0.82)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.19

Average Reported Willingness to Opt into Coaching by Teacher Professional Background Characteristics

Teacher Professional Background Characteristic		
Education Preparation Pathway	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Education Degree (Undergrad or Masters)	**2.30**	**0.25***
	(0.78)	{0.13}
Non-Traditional (Lateral Entry, Teach for America, or Other)	**2.56**	
	(0.78)	
Content Taught	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
English	2.64	-0.24
	(0.73)	{0.16}
Math	2.59	-0.16
	(0.84)	{0.19}

Table 4.19 (continued)

Other (science, history, CTE, art, music, P.E, or other)	**2.37** (0.79)	**0.25*** {0.14}
Grade Level Taught	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
6-8	**2.61** (0.69)	**-0.27*** {0.13}
9-12	**2.35** (0.84)	
Years of Experience	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Beginning Teacher (1-3 years)	2.63 (0.72)	-0.22 {0.16}
Established Teacher (4+ years)	2.41 (0.80)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.20

Average Reported Willingness to Opt into Coaching by Teacher Referral Frequency

Referral Frequency	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Frequent Referrals (daily or weekly)	2.61 (0.79)	-0.20 {0.16}
Infrequent Referrals (monthly or rarely)	2.41 (0.79)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.21

Average Reported Willingness to Opt into Coaching by School Characteristics

School Background Characteristic		
Size	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Small School (0-200 students)	2.67 (0.60)	-0.25 {0.19}
Medium School (201-700 students)	2.47 (0.83)	-0.03 {0.13}
Large School (701-1,600 students)	2.36 (0.79)	0.15 {0.13}
Setting	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Rural	2.51 (0.76)	-0.20 {0.14}
Non-Rural (Urban, Suburban)	2.30 (0.84)	
District	Mean Reported Willingness to Opt into Coaching (Standard Deviation)	Difference in Means {Standard Error}
Oak County Public Schools	**2.62** (0.79)	**-0.26*** {0.13}
Pine County Public Schools	2.65 (0.66)	-0.24 {0.17}
Spruce County Public Schools	**2.27** (0.19)	**0.36**** {0.12}

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

There were seven statistically significance differences in means for subgroup ratings of participants' willingness to opt into coaching for classroom management. At the $p < 0.05$ level,

there was a statistically significant difference between the mean for White teachers and that of non-White teachers, with White teachers reporting, on average, a 0.26 point lower rating of their willingness to opt into coaching. At the $p < 0.05$ level, there was a statistically significant difference between the mean for female identifying teachers and that of non-female identifying teachers, with female teachers reporting, on average, a 0.31 point higher rating of their willingness to opt into coaching. There was also a statistically significant difference in between the mean for teachers who entered education through a traditional education degree program (undergraduate or masters) and that of teachers who entered the profession through a non-traditional pathway (lateral entry, Teach for America, or other), with non-traditional reporting, on average, a 0.25 point higher rating of their willingness to opt into coaching. This finding was significant at the $p < 0.05$ level. At the $p < 0.05$ level, there was a statistically significant difference between the mean for the group made up of history, science, art, music, P.E., CTE, and other teachers and that of math and English teachers, with the history, science, art, music, P.E., CTE, and other teachers reporting, on average, a 0.25 point lower rating of their willingness to opt into coaching. There was also a statistically significant difference between the mean for middle school teachers (6^{th}-8^{th} grade) and that of high school teachers (9^{th}-12^{th} grade), with middle school teachers reporting, on average, a 0.27 point higher rating of their willingness to opt into coaching. This finding was significant at the $p < 0.05$ level. Teachers in Oak County Public Schools reported, on average, a 0.26 point higher rating for their willingness to opt into coaching compared to teachers from the other two school districts. The result was significant at the $p < 0.05$ level. Teachers in Spruce County Public Schools reported, on average, a 0.36 point lower rating for willingness to opt into coaching compared to teachers from the other two school districts. The result was significant at the $p < 0.01$ level.

In order to answer Research Question 3, I also used regression analysis to determine if there is a relationship teacher's reported willingness to opt into instructional coaching for classroom management and various teacher and school background characteristics. Four different regression models were used to answer this research question.

In model one (M1), the overall reported willingness to opt into coaching variable was standardized and this standardized variable was utilized as the dependent variable in the regression model and all subcategories of teacher background characteristics were run as the independent variables, while holding all other teacher demographic characteristics constant. The breakdown of teacher demographic variables were as follows: non-White participants were compared against White participants, non-female identifying participants were compared against female identifying participants, young participants (20-29 years old) were compared against older participants, math and English teachers were compared against all other teachers (history, science, art, music, P.E., CTE, and other teachers), middle school teachers (6^{th}-8^{th} grade) were compared against high school (9^{th}-12^{th} grade) teachers, and teachers who reported infrequently writing referrals (monthly or rarely) were compared against teaches who reported frequently writing referrals (daily or weekly). Table 4.22 shows the results of this regression analysis.

The regression analysis for model one produced one statistically significant result. Non-female teachers, while holding all other teacher background characteristics constant were found to be, on average, associated with a 0.31 SD lower overall willingness to opt into coaching rating. This finding was significant at the $p < 0.05$ level. The regression was rerun using only the those responses with full survey data. No statistically significant different results were observed.

In regression analysis model two (M2), the overall reported willingness to opt into coaching standardized variable was utilized as the dependent variable and all subcategories of

school background characteristics were run as the independent variables, while holding all other school demographic characteristics constant. The breakdown of school demographic variables were as follows: small schools (0-200 students) and medium-sized schools (201-700 students) were compared against large schools (701-1,600 students), non-rural schools (urban and suburban) were compared against rural schools, and Pine County Public Schools and Spruce County Public Schools were compared against Pine County Public Schools. Table 4.22 shows the results of this regression analysis.

The regression analysis for model two yielded one statistically significant result. Participants who taught in Spruce County Public Schools, while holding all other school background characteristics constant was found to be, on average, associated with a 0.45 SD lower overall willingness to opt into coaching rating. This finding was significant at the $p < 0.05$ level. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

In regression analysis model three (M3), the overall reported willingness to opt into coaching standardized variable was utilized as the dependent variable and overall acknowledgement of the existence of implicit bias and overall value of understanding implicit bias standardized variables were run as independent variables, while holding the other implicit bias variable constant. The results from regression model three can be found in Table 4.22. The regression analysis for model three produced one statistically significant result. On average, a one-standard deviation increase in a teachers' reported acknowledgement of implicit bias rating was associated with a 0.29 SD increase in teachers' reported willingness to opt into coaching. This finding was significant at the $p < 0.05$ level. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

Regression model four (M4) was a combination of regression models one, two, and three. In regression analysis model four, the overall reported willingness to opt into coaching standardized variable was utilized as the dependent variable and all subcategories of teacher school background characteristics, school background characteristics, and implicit bias measures were run as the independent variables, while holding all other variables constant. Table 4.22 shows the results of this regression analysis. There were no statistically significant results from the model four regression analysis. The regression was rerun using only those responses with full survey data. No statistically significant different results were observed.

Table 4.22

Relationship Between Willingness to Opt into Coaching and Background Characteristics

	M1	M2	M3	M4
Non-White	0.26 (0.16)	--	--	0.31 (0.17)
Young Adult (20-29)	0.28 (0.26)	--	--	0.24 (0.26)
Non-Female (Male or other)	**-0.31*** (0.17)	--	--	-0.24 (0.18)
Education Degree (Undergrad or Masters)	-0.29 (0.16)	--	--	-0.12 (0.17)
English Teacher	0.19 (0.21)	--	--	0.12 (0.20)
Math Teacher	0.20 (0.23)	--	--	0.15 (0.23)
Middle-School Teacher (Grades 6-8)	0.19 (0.16)	--	--	0.29 (0.17)
Beginning Teacher (1-3 years)	0.073 (0.24)	--	--	-0.07 (0.25)

Table 4.22 (continued)

Infrequently Writes Referrals (monthly or rarely)	-0.36 (0.20)	--	--	-0.39 (0.20)
Small School	--	0.17 (0.28)	--	-0.07 (0.27)
Medium Size School	--	-0.08 (0.21)	--	-0.32 (0.22)
Non-Rural School	--	-0.05 (0.20)	--	0.056 (0.20)
Pine County Public Schools	--	0.05 (0.25)	--	0.021 (0.25)
Spruce County Public Schools	--	**-0.45*** (0.21)	--	-0.37 (0.22)
Acknowledge Implicit Bias	--	--	**0.29*** (0.14)	0.17 (0.15)
Value Understanding Implicit Bias	--	--	0.20 (0.18)	0.21 (0.18)
Constant	0.32 (0.25)	0.30 (0.20)	-0.63 (0.59)	-0.18 (0.69)
Observations	152	154	158	151
R-squared	0.13	0.06	0.11	0.23

Note. Standard error in parenthesis. Bold font denotes statistically significant result.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The willingness to opt into coaching for classroom management subscale overall mean rating was 2.41. The midpoint for this subscale is 2.5, indicating that an overall mean rating of 2.41 suggests that participants generally were between “a little likely” and “likely” in their willingness to opt into coaching rating, skewing closer toward the “a little likely” side of the scale.

The hypothesis for Research Question 3 reads, there is a relationship between the openness of teachers to participating in coaching for classroom management and selected teacher

demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, acknowledgement of the existence of implicit bias, value of understanding implicit bias, and average use of referrals). As the statistically significant results for this question were only significant on the models holding similar variables constant and were not significant when holding all variables constant, I concluded that there is not adequate evidence that my hypothesis for Research Question 3 was supported. I was unable to tell from the data whether the results were not significant in the full model due to the size of the sample or if these relationships were not significant due to the influence of the other factors held constant in the full model.

Teaching in Spruce County Public Schools were associated with a 0.45 SD less likelihood of willingness to opt into coaching rating compared to teaching in the other two school districts, when holding all school level characteristic variables constant. Non-female teachers were found to be, on average, associated with a lower overall willingness to opt into coaching rating. Participants who were associated with a higher acknowledgement of the existence of implicit bias were associated with a statistically significant higher rating of willingness to opt into coaching. Although these relationships were statistically significant when the regression was run holding other like variables constant, the relationship was not significant when holding every characteristic collected on the survey constant.

Research Question 4

Research Question 4 reads as follows: To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to their openness to participating in coaching for classroom management? In order to answer this research question, regression analysis was utilized to determine if there is a relationship between teachers' reported willingness to opt into

instructional coaching for classroom management and teachers' reported self-efficacy in managing classroom behaviors. The same four regression models from Research Questions 2 and 3 were used to answer Research Question 4. The standardized variables for willingness to opt into coaching and reported self-efficacy in managing behaviors in the classroom ratings were used in each regression analysis. Overall willingness to opt into coaching was the dependent variable in each regression analysis, and overall reported self-efficacy in managing behaviors in the classroom rating was the independent variable. Regression model one (M1) held all teacher background characteristics constant, regression model two (M2) held all school background characteristics constant, regression model three (M3) held overall acknowledgement of implicit bias and overall value of understanding implicit bias standardized variables constant, and regression model four (M4) held all variables constant. The results for these regression models can be found in Table 4.23. No statistically significant results were found in any of the regression analysis models. The regressions were rerun using only those responses with full survey data. No statistically significant different results were observed.

Table 4.23

Relationship Between Willingness to Opt into Coaching and Self-Efficacy in Managing Classroom Behaviors Ratings

	Overall	Model 1	Model 2	Model 3	Model 4
No controls	-0.03				
	(0.11)				
Controlling for Teacher Background Characteristics		0.05			
		(0.12)			
Controlling for School Background Characteristics			0.06		
			(0.12)		
Controlling for Implicit Bias Variables				-0.02	
				(0.11)	

Table 4.23 (continued)

Controlling All Variables					0.16 (0.12)
Observations	176	152	154	158	151
R-squared	0.00	0.13	0.06	0.11	0.24

Note. Standard error in parenthesis. Bold font denotes statistically significant result.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

My hypothesis for Research Question 4 reads as follows: there is a relationship between teachers' perceptions of their self-efficacy in managing student behaviors and their openness to participating in coaching for classroom management. The hypothesis for this research question was not accepted; there was not a statistically significant relationship between teachers' perceptions of their self-efficacy in managing student behaviors and their openness to participating in coaching for classroom management.

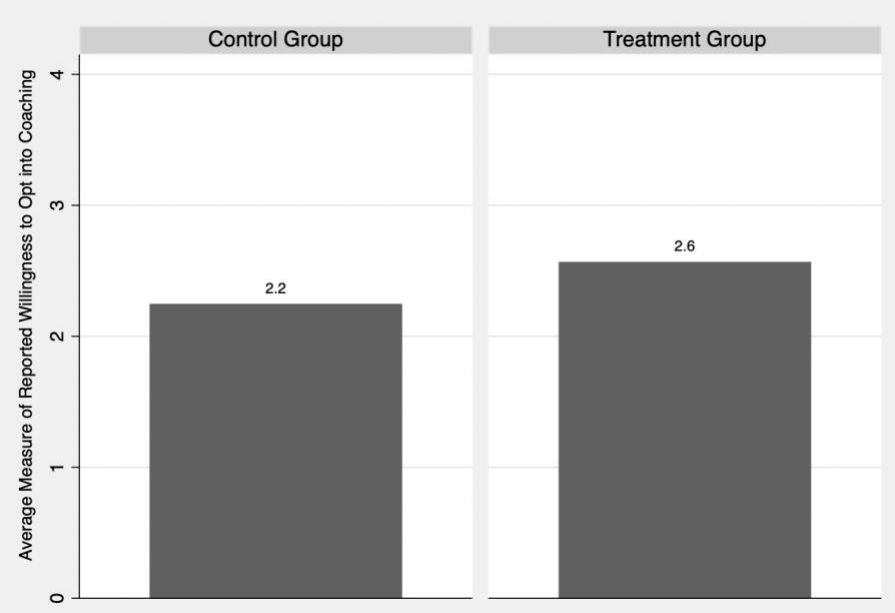
Research Question 5

Research Question 5 reads as follows: What is the relationship between openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the effectiveness of such coaching models and teachers who have not been presented such data? In order to answer this question, participants were randomly assigned to a treatment or a control group. Prior to answering the questions related to their willingness to opt into coaching, treatment group participants were shown data in the form of a bar chart that depicted the positive impact instructional coaching for classroom management can have on teacher effectiveness. Control group participants did not see the impact of coaching data prior to answering the willingness to opt into coaching questions. All participants were shown the same three questions measuring their willingness to opt into coaching. Of the 151 participants who answered all questions in the survey, 73 participants were assigned to the control group and 78

participants were assigned to the treatment group. In order to answer Research Question 5, I regressed the overall average measure for participants' willingness to opt into coaching on treatment group responses. After running an OLS regression, I found that being assigned to the treatment group was, on average, associated with a 0.4 SD higher reported willingness to opt into coaching, with a standard error of 0.15. This coefficient is statistically significant at $p < 0.01$. Figure 4.1 displays the mean ratings for participants' average reported willingness to opt into coaching by treatment and control group. The regression was rerun using only the those responses with full survey data. No meaningful different results were observed.

Figure 4.1

Participants' Average Reported Willingness to Opt into Coaching by Treatment or Control Group



Note. There were 78 participants in the treatment group and 73 participants in the control group.

My hypothesis for Research Question 5 reads as follows there is a relationship in the openness of teachers to participating in coaching for classroom management for teachers who are presented with data supporting the effectiveness of such coaching models and teachers who have

not been presented such data. The hypothesis for this research question was accepted; there was a statistically significant relationship in openness to coaching for teachers who were presented with data supporting the effectiveness of such coaching models and teachers who were not presented such data. Teachers who were presented coaching effectiveness data were, on average, associated with a higher willingness to opt into coaching rating compared to teachers who were not presented data by a 0.4 SD higher willingness rating. This higher willingness to opt into coaching measure for teachers who were presented coaching effectiveness data was also shown in the overall average willingness measure for each group, as displayed in Figure 4.1.

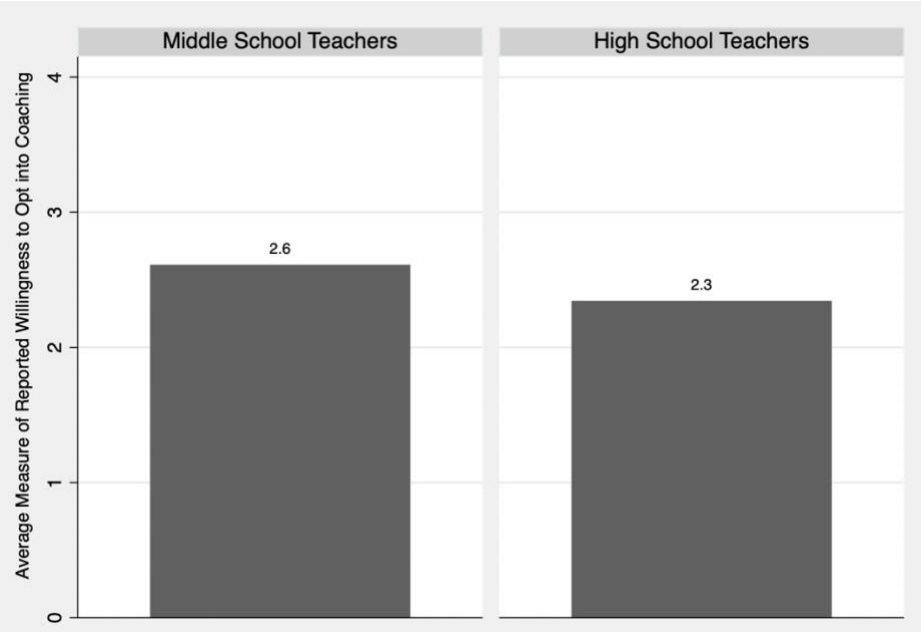
Research Question 6

Research Question 6 reads as follows: To what extent does the openness of teachers to participating in coaching for classroom management differ between middle and high school level teachers? Of the 154 participants who answered all willingness to opt into coaching questions and indicated which grade level they taught, 60 indicated that they taught middle school and 94 indicated that they taught high school. In order to answer this research question, an OLS regression analysis was used to compare participants' averaged responses to willingness to opt into coaching questions with teachers' reported grade span taught. After running an OLS regression, being a middle school teacher was found, on average, to be associated with a 0.34 SD higher reported increase in willingness to opt into coaching with a standard error of 0.16. This coefficient is statistically significant at $p < 0.05$. Figure 4.2 displays the mean ratings for participants' average reported willingness to opt into coaching by grade level grouping. The regression was rerun using only those responses with full survey data (151 responses compared to 154). When the regression was run with the additional constraint of only including responses with full survey data, the average difference in willingness to opt into coaching was no longer

significant at the $p < 0.05$ level ($p = 0.059$). The overall average willingness measure for middle and high school teachers is displayed in Figure 4.2.

Figure 4.2

Participants' Average Reported Willingness to Opt into Coaching by Grade Span Taught



Note. There were 60 participants in the study who taught middle school and 94 participants in the study who taught high school.

My hypothesis for Research Question 6 reads as follows, there is a difference in the openness of teachers to participating in coaching for classroom management between middle and high school level teachers. While the means were different for these two groups of teachers and in this regression, a statistically relationships was found, with middle school teachers, on average, being associated with an increased willingness to in coaching compared to high school teachers by a 0.34 SD higher willingness rating, the hypothesis for this research question cannot be accepted. When regression model 4 was run in the regression analysis for Research Question 3, where all variables were held constant, there was not a statistically significant relationship found between middle and high school teachers willingness to opt into coaching ratings.

Additionally, when the regression analysis for Research Question 6 was run with the additional constraint of only including responses with full survey data, a difference of three responses, the relationships was no longer statistically significant. Based on these two analyses, I cannot conclude that there is adequate evidence that the hypothesis was supported.

Ancillary Findings

In addition to running the regression models to see if there was a relationship between teacher perceived self-efficacy in managing behaviors in the classroom, teacher openness to coaching, and teachers' acknowledgement of the existence of implicit bias and rating of the value understanding implicit bias, I also ran a *t*-test for independent samples with equal variance for each implicit bias variable to see if these measures varied by teacher and school background characteristics. There were five statistically significance differences in means for subgroup ratings of their acknowledgement of the existence of implicit bias. The results for all *t*-tests for the value of understanding implicit bias can be found in Table 4.24, Table 4.25, Table 4.26 and Table 4.27. At the $p < 0.05$ level, there was a statistically significant difference in means between the ratings of young teachers (20-29 years old) and those of older teachers (30+ years old), with younger teachers reporting, on average, a 0.23 point higher rating of their acknowledgement of the existence of implicit bias. At the $p < 0.05$ level, there was a statistically significant difference in means between female identifying teachers and non-female identifying teachers with female identifying teachers reporting, on average, a 0.19 point higher rating of their acknowledgement of implicit bias. There was also a statistically significant difference in means between teachers who entered education through a traditional education degree program (undergraduate or masters) and teachers who entered the profession through a non-traditional pathway (lateral entry, Teach for America, or other), with non-traditionally prepared teachers reporting, on

average, a 0.39 higher rating of their acknowledgement of implicit bias. This finding was significant at the $p < 0.001$ level. Teachers in Oak County Public Schools reported, on average, a 0.25 point higher rating for their acknowledgement of implicit bias compared to teachers from the other two school districts. The result was significant at the $p < 0.001$ level. Teachers in Spruce County Public Schools reported, on average, a 0.27 point lower rating for their acknowledgement of implicit bias compared to teachers from the other two school districts. The result was significant at the $p < 0.01$ level.

Table 4.24

Average Reported Acknowledgement of the Existence of Implicit Bias by Teacher Personal Background Characteristics

Teacher Personal Background Characteristic		
	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Overall	3.13 (0.60)	--
Race	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
White	3.13 (0.61)	0.05 {0.10}
Non-White	3.18 (0.55)	
Age	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Young Adult (20-29)	**3.34** (0.62)	**-0.23*** {0.14}
Adult (30+)	**3.11** (0.59)	
Gender	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Female	**3.20** (0.58)	**-0.19*** {0.10}

Table 4.24 (continued)

Non-Female (Male or other)	**3.01** (0.63)

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.25

Average Reported Acknowledgement of the Existence of Implicit Bias by Teacher Professional Background Characteristics

Teacher Professional Background Characteristic		
Education Preparation Pathway	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Education Degree (Undergrad or Masters)	**2.92** (0.65)	**0.39*** ** {0.09}
Non-Traditional (Lateral Entry, Teach for America, or Other)	**3.31** (0.50)	
Content Taught	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
English	3.30 (0.62)	-0.20 {-.12}
Math	3.10 (0.80)	0.09 {0.14}
Other (science, history, CTE, art, music, P.E, or other)	3.11 (0.54)	0.09 {0.10}
Grade Level Taught	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
6-8	3.20 (0.55)	-0.11 {0.10}
9-12	3.10 (0.63)	

Table 4.25 (continued)

Years of Experience	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Beginning Teacher (1-3 years)	3.18 (0.55)	-0.16 {0.13}
Established Teacher (4+ years)	3.11 (0.61)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.26

Average Reported Acknowledgement of the Existence of Implicit Bias by Teacher Referral Frequency

Referral Frequency	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Frequent Referrals (daily or weekly)	3.07 (0.64)	0.09 {0.12}
Infrequent Referrals (monthly or rarely)	3.16 (0.59)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.27

Average Reported Acknowledgement of the Existence of Implicit Bias by School Characteristics

School Background Characteristic		
Size	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}

Table 4.27 (continued)

Small School (0-200 students)	3.24 (0.59)	-0.11 {0.14}
Medium School (201-700 students)	3.19 (0.49)	-0.09 {0.10}
Large School (701-1,600 students)	3.06 (0.70)	0.14 {0.10}
Setting	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Rural	3.16 (0.55)	-0.06 {0.11}
Non-Rural (Urban, Suburban)	3.10 (0.71)	
District	Mean Reported Acknowledgement of Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Oak County Public Schools	**3.31** (0.51)	**-0.25**** {0.10}
Pine County Public Schools	3.20 (0.52)	-0.07 {0.13}
Spruce County Public Schools	**3.01** (0.65)	**0.27**** {0.09}

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

There were four statistically significant differences in means for subgroup ratings of their perspectives on value of understanding implicit bias. The results for all *t*-tests for value of understanding implicit bias can be found in Table 4.28, Table 4.29, Table 4.30, and Table 4.31. At the $p < 0.01$ level, there was a statistically significant difference in between the means of female and non-female teachers, with female teachers reporting, on average, a 0.27 point higher rating of value of understanding implicit bias. At the $p < 0.01$ level, there was a statistically

significant difference in between the means of teachers who entered education through a traditional degree (undergraduate or masters) and those of teachers who entered through non-traditional pathways (lateral entry, Teacher for America, or other), with non-traditional pathway teachers reporting, on average, a 0.28 point higher rating of their value of understanding implicit bias. Finally, there were statistically significant differences in means for value of understanding implicit bias between two of the districts surveyed. Teachers in Oak County Public Schools reported, on average, a 0.32 point higher rating for their value of understanding implicit bias compared to teachers from the other two school districts. The result was significant at the $p < 0.001$ level. Teachers in Spruce County Public Schools reported, on average, a 0.24 point lower rating for their value of value of understanding implicit bias compared to teachers from the other two school districts. The result was significant at the $p < 0.01$ level.

Table 4.28

Average Reported Value of Understanding Implicit Bias by Teacher Personal Background Characteristics

Teacher Personal Background Characteristic		
	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Overall	3.30 (0.62)	--
Race	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
White	3.33 (0.64)	-0.41 {0.10}
Non-White	3.29 (0.58)	

Table 4.28 (continued)

Age	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Young Adult (20-29)	3.39 (0.82)	-0.10 {0.14}
Adult (30+)	3.29 (0.59)	
Gender	**Mean Reported Value of Understanding Implicit Bias (Standard Deviation)**	**Difference in Means {Standard Error}**
Female	**3.39** (0.52)	**-0.27**** {0.11}
Non-Female (Male or other)	**3.12** (0.78)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.29

Average Reported Value of Understanding Implicit Bias by Teacher Professional Background Characteristics

Teacher Professional Background Characteristic		
Education Preparation Pathway	**Mean Reported Value of Understanding Implicit Bias (Standard Deviation)**	**Difference in Means {Standard Error}**
Education Degree (Undergrad or Masters)	**3.15** (0.69)	**0.28**** {0.10}
Non-Traditional (Lateral Entry, Teach for America, or Other)	**3.43** (0.55)	
Content Taught	**Mean Reported Value of Understanding Implicit Bias (Standard Deviation)**	**Difference in Means {Standard Error}**

Table 4.29 (continued)

English	3.46 (0.57)	-0.19 {0.13}
Math	3.19 (0.79)	0.14 {0.15}
Other (science, history, CTE, art, music, P.E, or other)	3.29 (0.60)	0.58 {0.11}
Grade Level Taught	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
6-8	3.39 (0.57)	-0.14 {0.10}
9-12	3.26 (0.66)	
Years of Experience	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Beginning Teacher (1-3 years)	3.39 (0.65)	-0.10 {0.13}
Established Teacher (4+ years)	3.29 (0.62)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.30

Average Reported Value of Understanding Implicit Bias by Referral Frequency

Referral Frequency	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Frequent Referrals (daily or weekly)	3.24 (0.64)	0.08 {0.13}
Infrequent Referrals (monthly or rarely)	3.32 (0.62)	

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.31

Average Reported Value of Understanding Implicit Bias by School Characteristics

School Background Characteristic		
Size	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Small School (0-200 students)	3.33 (0.54)	-0.03 {0.15}
Medium School (201-700 students)	3.36 (0.60)	-0.11 {0.10}
Large School (701-1,600 students)	3.23 (0.68)	0.13 {0.10}
Setting	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Rural	3.34 (0.58)	-0.11 {0.11}
Non-Rural (Urban, Suburban)	3.23 (0.73)	

Table 4.31 (continued)

District	Mean Reported Value of Understanding Implicit Bias (Standard Deviation)	Difference in Means {Standard Error}
Oak County Public Schools	**3.51** (0.51)	**-0.32*** {0.10}
Pine County Public Schools	3.22 (0.67)	0.10 {0.14}
Spruce County Public Schools	**3.18** (0.65)	**0.24** {0.10}

Note. Difference in means is comparing each subgroup to all other subgroups for that teacher background variable. Bold font denotes a statistically significant difference in means and the means associated with the difference.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Chapter Summary

A quantitative analysis using descriptive statistics and OLS regression analysis was used to determine the relationship between teachers' reported levels of self-efficacy in managing classroom behaviors and their willingness to opt into coaching to improve classroom management skills. Each of these variables was also analyzed to determine if there were relationships among these variables and teacher and school background characteristics. Finally, regression analysis was also used to determine if there is an impact on teachers' reported willingness to opt into coaching if they are shown data regarding the effectiveness of instructional coaching prior to answering questions about their willingness to be coached.

The results from the regression analysis showed that there were statistically significant relationships among some teacher subgroup identities and school background characteristics and overall reported self-efficacy in managing classroom behaviors. Math teachers reported a lower self-efficacy in managing behaviors in the classroom rating compared to teachers of other contents, whereas teachers who infrequently write referrals, non-White teachers, and teachers

from Spruce County Public Schools were found to have a statistically significant higher reported self-efficacy in managing behaviors in the classroom rating compared to their subgroup counterparts.

Regression analysis also showed statistically significant relationships among some teacher subgroup identities and school background characteristics and teacher reported willingness to opt into instructional coaching for classroom management. Non-female teachers and teachers from Spruce County Public Schools were found to report a statistically significant lower willingness to opt into coaching, while teachers who reported a higher acknowledgement of the existence of implicit bias were found, on average, to report a statistically higher willingness to opt into coaching. While subgroups were found to have statistically significant differences for reported self-efficacy in classroom management and reported willingness to opt into coaching, there was no statistically significant overall relationship between reported self-efficacy in classroom management and reported willingness to opt into instructional coaching to improve classroom management skills.

Quantitative data analysis showed that there was a relationship between being shown data on the impact of instructional coaching on teacher effectiveness in the classroom and reported willingness to opt into coaching. Participants who were shown the effectiveness data prior to answering questions on their likelihood to opt into coaching were found, on average, to report a statistically significant higher willingness to opt into coaching compared to participants who were not shown effectiveness data.

CHAPTER 5

Chapter Introduction

Chapter 5 presents a discussion of the findings outlined in Chapter 4. The purpose of the study is summarized, followed by a discussion of the findings, the limitations of the study, and implications for policy and practice. Chapter 5 concludes with recommendations for future research.

Purpose of the Study

The purpose of this study was to determine if there are relationships among teachers' perceptions of their self-efficacy in managing student behaviors in the classroom. The study further examined their openness to receive instructional coaching to improve their classroom management skills in order to reduce or eliminate instances of teachers feeling overwhelmed or vulnerable in the classroom. In this study, I collected survey responses from teachers in reference to their perceived level of self-efficacy in managing classroom behaviors, their willingness to opt into coaching for classroom management, their acknowledgement of the existence of implicit bias, and their reported value in understanding implicit bias. The goal of collecting these data, along with teacher personal and professional background characteristics and school level characteristics, was to determine if trends emerged and relationships existed between different subgroups of teachers, to assess their mindsets toward opting into coaching for classroom management, and examine their perceived self-efficacy in managing behaviors in the classroom. Finally, the study included an experimental component to see if the willingness to participate in coaching differed between teachers who were presented data on the impact of coaching for classroom management on teacher effectiveness and teachers who were not presented such data.

This study was framed around the vulnerable decisions points model and Vygotsky's

Zone of Proximal Development Theory. The vulnerable decisions points models proposes that when people are in a vulnerable mental state (e.g., tired, hungry, or in the case of teachers – feel like they are losing control of the classroom) they are more likely to rely on implicit biases when making decisions (Smolkowski et al., 2016; Vavrus & Cole, 2002). The vulnerable decisions points model, coupled with Vygotsky's Zone of Proximal Development Theory that proposed that people reach their greater effectiveness through the support of a coach, guided the research questions for this study. Likert scale questions were used to determine teacher perceived self-efficacy in managing student behaviors in the classroom, as well as teacher willingness to opt into coaching for classroom management.

The quantitative survey was administered to middle and high school teachers in three public school districts in northeastern North Carolina that fall in the bottom quartile of the Public School Forum of North Carolina's *Road Map of Need* (Public School Forum of North Carolina, 2020b). The goal of this study was to better understand teacher self-efficacy in managing behaviors in the classroom and willingness to opt into coaching for classroom management and the relationships that exist between among these two variables, as well as various teacher and school background characteristics. By better understanding these relationships, practitioners and policymakers can make informed decisions on how to implement instructional coaching for classroom management as a means to address disparities in discipline practices.

Summary of Findings

This study was conducted with middle and high school teachers in three districts in northeastern North Carolina. I analyzed findings from a survey that included Likert scale questions to determine teacher perceived self-efficacy in managing classroom behaviors, willingness to opt into coaching for classroom management, and implicit bias measures.

Questions related to teacher background and school background characteristics were also analyzed, in addition to the experiment or control group status for the experimental portion of the survey. The instrument was designed to provide data to answer the following research questions:

1. What are teachers' perceptions of their self-efficacy in managing selected student behaviors?
2. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to selected teacher demographic characteristics (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, implicit bias awareness, value of understanding implicit bias and average use of referrals)?
3. To what extent is the openness of teachers to participating in coaching for classroom management related to selected teacher demographic (e.g., age, race or ethnicity, gender) and background characteristics (e.g., years of experience, grade-span taught, urban or rural school setting, teacher preparation pathway, school size, content taught, implicit bias awareness, value of understanding implicit bias, and average use of referrals)?
4. To what extent are teachers' perceptions of their self-efficacy in managing student behaviors related to their openness to participating in coaching for classroom management?
5. What is the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the

effectiveness of such coaching models and teachers who have not been presented such data?

6. To what extent does the openness of teachers to participating in coaching for classroom management differ between middle and high school level teachers?

The first part of my data analysis consisted of calculating the descriptive statistics for participant demographics. Participants were secondary teachers (6^{th}-12^{th} grade) in three districts in northeastern North Carolina. There were 227 teachers who opened the survey and agreed to participate; however, 40 of those participants did not progress beyond the consent page. A total of 151 participants completed the full survey, for a full survey completion rate of 34%. Of the participants who completed the survey, 57.5% responded that they were White, 37.3% were Black, and all other subgroups had an n less than 10. When answering the question regarding age, 14.2% of participants said that they were between 20 and 29 years old, 21.3% were between 30 and 39 years old, 32.3% were between 40 and 49 years old, 22.6% were between 50 and 59 years old, and 9.7% were 60 years old or older. There were more females who participated in the survey than males, with 68.4% of participants identifying their gender as female and 27.1% identifying as male.

Next in the data analysis process, I examined the professional background characteristics of participants using descriptive statistics. When asked about how they entered the teaching profession, 22.6% of respondents indicated that they entered through a traditional undergraduate education program, 20% entered through a Masters education program, 38.1% entered through the lateral entry pathway, 5.2% entered teaching through Teach for America, and 14.2% entered education through another avenue. When asked about which content they taught, 18.1% of participants responded that they taught English, 13.5% taught math, 11.0% taught science, 8.4%

taught history, 3.2% taught art, 5.8% taught an elective course (art, music, or physical education), 14.2% taught a Career Technical Education (CTE) course, and 29.0% selected the response option “Other” to designate their content subject. Of the teachers who completed the survey, 39% were middle school teachers and 61% were high school teachers. When asked about their years of experience, 18.3% of respondents indicated that they were beginning teachers with one to three years of experience, 15.6% of respondents indicated they had four to six years of experience, 9.5% of respondents had seven to nine years of experience and 57.1% of respondents had ten or more years of experience. Respondents also shared the frequency with which they write a referral for a student to be disciplined for misconduct. Less than one percent (0.7%) of respondents reported writing a referral daily, 18.1% of respondents reported writing a referral weekly, 17.4% of respondents reported writing a referral monthly, and 63.9% of respondents reported writing a referral rarely.

Finally, descriptive statistics were used to analyze characteristics of the schools at which participants taught. Of the respondents who answered survey questions, 12.9% worked in schools with 0 to 200 students, 26.5% worked in schools with 201 to 400 students, 20.0% worked in schools with 401 to 700 students, 24.5% worked in schools with 701 to 1,000 students, and 16.3% worked in schools with 1,001 to 1,600 students. When asked about their school setting, 70.1% of respondents reported working in a rural setting, 13.0% of respondents reported working in a suburban school setting, and 16.9% of respondents reported working in an urban school setting. Teachers who worked in Spruce County Public Schools were the largest group to participate in the survey, with 49.7% of participants who completed the survey indicating they worked in this district. Of the remaining participants, 34.8% worked in Oak County Public Schools, and 15.5% worked in Pine County Public Schools.

In order to address the research questions, I calculated overall mean measures for perceived self-efficacy in managing behaviors in the classroom, willingness to opt into coaching for classroom management, acknowledgement of the existence of implicit bias, and value in understanding implicit bias. In order to determine teacher perceived self-efficacy in managing behaviors in the classroom, the first 11 questions of the survey asked participants to rate how capable or how effective they felt they are at addressing common student behaviors in the classroom. The ratings were assigned a corresponding number to indicate the level of self-efficacy in managing behaviors in the classroom as follows: Not effective/capable = 1, a little effective/capable = 2, mostly effective/capable = 3, and effective/capable = 4. Responses to all self-efficacy in managing behaviors in the classroom questions were combined into an overall mean measure of self-efficacy in managing behaviors in the classroom. In order to determine teacher willingness to opt into coaching for classroom management, the survey asked participants to indicate how likely they would be to opt into coaching for classroom management: Not likely = 1, a little likely = 2, likely = 3, and very likely = 4. Responses to the willingness to opt into coaching questions were combined into an overall mean measure of willingness to opt into coaching for classroom management. To create the overall acknowledgement of implicit bias variable and overall value of understanding implicit bias variable, the following values were assigned to the responses for each subset of questions: strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4. The responses for all four questions addressing teachers' acknowledgement of the existence of implicit bias were combined into one overall acknowledgement of implicit bias rating for each participant. The three questions addressing the degree to which teachers value understanding of implicit bias were combined into one overall value of understanding implicit bias rating for each participant.

Research Question 1 addressed teacher perceptions of their self-efficacy in managing student behaviors in the classroom. The mean overall self-efficacy in managing behaviors in the classroom rating for all teachers who participated in the survey was 3.15, with a standard deviation of 0.48. Responses ranged from 2 to 4 on a scale of 1-4. This mean rating suggests that participants generally believed that they were mostly effective/capable relative to their efficacy in managing student behaviors, as the midpoint rating for this measure was 2.5. The subgroup means for teacher background characteristics were: White (m=3.06), non-White (m=3.2), young adult (m=2.91), adult (3.16), female (m=3.10), non-female (m=3.15), education degree pathway to teaching (m=3.07), non-traditional pathway to teaching (m=3.15), English teachers (m=3.10), math teachers (m=2.84), history, science, art, music, P.E., CTE, and other teachers (m=3.18), 6th-8th teachers (m=3.09), 9th-12th grade teachers (m=3.14), beginning teachers (m=2.92), established teachers (m=3.17), teachers who frequently write referrals (m=2.92), and teachers who infrequently write referrals (m=3.17). The subgroup means for school background characteristics were small school (m=2.97), medium school (m=3.14), large school (m=3.14), rural school (m=3.13), non-rural school (m=3.11), Oak County Public schools (m=3.03), Pine County Public schools (m=3.04), and Spruce County Public schools (m=3.21).

When comparing subgroup means to other subgroups for each teacher personal and professional background characteristic and school level characteristics, I noted several statistically significant differences in means. Young teachers (20-29 years old) reported a 0.25 lower mean rating for their perceived self-efficacy in managing behaviors in the classroom compared to older teachers (30+ years). Math teachers reported a 0.32 lower mean rating for their perceived self-efficacy in managing behaviors in the classroom compared to all other content teachers. Beginning teachers (0-3 years of experience) reported a 0.24 lower rating for

their perceived self-efficacy in managing behaviors in the classroom compared to more experienced teachers (4+ years of experience). Teachers who frequently write referrals (daily or weekly) reported a 0.24 lower rating for their perceived self-efficacy in managing behaviors in the classroom compared to teachers who infrequently write referrals (monthly or rarely). Finally, teachers who worked in Spruce County Public Schools reported a 0.18 higher rating for their perceived self-efficacy in managing behaviors in the classroom compared to teachers from the other two districts.

Research Question 2 addressed the relationship between teacher's perceived self-efficacy in managing behaviors in the classroom ratings and teacher personal and professional background characteristics and school level characteristics. After running an OLS regression analysis, I found that identifying as a non-White teacher was associated with a 0.26 SD higher perceived self-efficacy in managing behaviors in the classroom rating when holding all teacher and school background characteristics constant. Teaching math, while holding all teacher and school background characteristics constant was associated with a 0.37 SD lower perceived self-efficacy in managing behaviors in the classroom rating. The infrequent writing of referrals, while holding all other variables constant, was, on average, associated with 0.32 SD higher overall self-efficacy in managing behaviors in the classroom rating. Finally, teaching in Spruce County Public Schools, while holding all other variables constant was, on average, associated with 0.41 SD higher overall self-efficacy in managing behaviors in the classroom rating.

Research Question 3 addressed the relationship of openness of teachers to participating in coaching for classroom management to teacher personal and professional background characteristics and school level characteristics. The mean overall willingness to opt into coaching rating for all teachers who participated in the survey was 2.41, with a standard deviation of 0.80.

Responses ranged from 1 to 4 on a scale of 1-4. An overall mean rating of 2.41 suggests that participants generally were between “a little likely” and “likely” in their willingness to opt into coaching for classroom management rating, skewing closer toward the “a little likely” side of the scale.

After running an OLS regression analysis, I noted several statistically significant results in three of the four regression models. The status of being a non-female teachers, while holding all other teacher background characteristics constant, was found to be, on average, associated with a 0.31 SD lower overall willingness to opt into coaching rating. Teaching in Spruce County Public Schools, while holding all other school background characteristics constant was found to be, on average, associated with a 0.45 SD lower overall willingness to opt into coaching for classroom management rating. On average, a one-standard deviation increase in a teachers’ reported acknowledgement of implicit bias rating was associated with a 0.29 SD increase in teachers’ reported willingness to opt into coaching for classroom management. Although statistically significant results were observed for various regression models, no statistically significant results were observed when all collected variables (teacher personal and professional background characteristics, school background characteristics, and implicit bias mindset variables) were held constant.

Research Question 4 addressed the extent to which teachers’ perceptions of their self-efficacy in managing student behaviors were related to their openness to participating in coaching for classroom management. After running an OLS regression analysis, I found that there was no statistically significant relationship found between teachers’ perceptions of their self-efficacy in managing student behaviors and their openness to participating in coaching for classroom management.

Research Question 5 addressed the relationship between the openness of teachers to participating in coaching for classroom management for teachers who have been presented data supporting the effectiveness of such coaching models and teachers who have not been presented such data. Participants were randomly assigned to a treatment or a control group. Prior to answering the questions related to their willingness to opt into coaching for classroom management, treatment group participants were shown data in the form of a bar chart that depicted the positive impact instructional coaching for classroom management can have on teacher effectiveness. Control group participants did not see the impact of coaching for classroom management data prior to answering the willingness to opt into coaching questions. After random assignment, 73 participants were assigned to the control group and 78 participants were assigned to the treatment group. After running an OLS regression, I found that being assigned to the treatment group was, on average, associated with a 0.4 SD higher reported willingness to opt into coaching for classroom management, with a standard error of 0.15.

Research Question 6 addressed the extent to which the openness of teachers to participating in coaching for classroom management differ between middle and high school level teachers. Of the 154 participants who answered all willingness to opt into coaching questions and indicated which grade level they taught, 60 indicated that they were middle school teachers and 94 indicated that they were high school teachers. After running an OLS regression, I found that being a middle school teacher was, on average, associated with a 0.34 SD higher willingness to opt into coaching for classroom management, with a standard error of 0.16, however this result was not consistent when the regression was rerun to include only those survey responses with full completion (a difference of three responses) and in the regression analysis performed in Research Question 3, when all collected variables were held constant.

In analyzing the data for each research question, I also compared subgroup means for their average reported acknowledgement of the existence of implicit bias and the average reported value of understanding implicit bias in ancillary findings. After running a *t*-test for independent samples with equal variance, I found five statistically significance differences in means among subgroup ratings of acknowledgement of the existence of implicit bias. There was a statistically significant difference in means between the ratings of young teachers (20-29 years old) and those of older teachers (30+ years old), with younger teachers reporting, on average, a 0.23 point higher rating of their acknowledgement of the existence of implicit bias. There was a statistically significant difference in means between female identifying teachers and non-female identifying teachers with female identifying teachers reporting, on average, a 0.19 point higher rating of their acknowledgement of implicit bias. There was also a statistically significant difference in means between teachers who entered education through a traditional education degree program (undergraduate or masters) and teachers who entered the profession through a non-traditional pathway (lateral entry, Teach for America, or other), with non-traditionally prepared teachers reporting, on average, a 0.39 higher rating of their acknowledgement of implicit bias. Teachers in Oak County Public Schools reported, on average, a 0.25 point higher rating for their acknowledgement of implicit bias compared to teachers from the other two school districts. Teachers in Spruce County Public Schools reported, on average, a 0.27 point lower rating for their acknowledgement of implicit bias compared to teachers from the other two school districts.

Using a *t*-test, I found four statistically significant differences in means for subgroup ratings of perspectives on the value of understanding implicit bias. There was a statistically significant difference in between the means of female and non-female teachers, with female

teachers reporting, on average, a 0.27 point higher rating of value of understanding implicit bias. There was a statistically significant difference in between the means of teachers who entered education through a traditional degree (undergraduate or masters) and those of teachers who entered through non-traditional pathways (lateral entry, Teacher for America, or other), with non-traditional pathway teachers reporting, on average, a 0.28 point higher rating of their value of understanding implicit bias. Finally, there were statistically significant differences in means for value of understanding implicit bias between two of the districts surveyed. Teachers in Oak County Public Schools reported, on average, a 0.32 point higher rating for their value of understanding implicit bias compared to teachers from the other two school districts. Teachers in Spruce County Public Schools reported, on average, a 0.24 point lower rating for their value of value of understanding implicit bias compared to teachers from the other two school districts.

Discussion of Study Findings

In this study, I sought to determine if a relationship exists between teachers' perceived level of self-efficacy in managing student behaviors in the classroom and their willingness to opt into coaching for classroom management. In addition to this overarching question, I also sought to determine if any relationships exist among perceived self-efficacy in managing behaviors in the classroom and various teacher and school background characteristics and among teacher willingness to opt into coaching and various teacher and school background characteristics. Finally, I wanted to see if a relationship exists between teacher willingness to opt into coaching for classroom management and participant access to data on the effectiveness of coaching for behavior management programs and teachers.

This study was guided by two different conceptual and theoretical frameworks. The vulnerable decision points model was used to guide the development of the research questions

and survey protocol for this study. The vulnerable decision points models proposes that people unknowingly are influenced by implicit biases, mainly in moments when they are mentally vulnerable, such as being tired or hungry, or in the case of teachers, when they feel like their authority is being questioned or they are losing control of the classroom (McIntosh et al., 2014; Smolkowski et al., 2016; Vavrus & Cole, 2002). In order address the disparities that exist in current exclusionary discipline practices in schools, schools and policymakers need to find solutions that will minimize these vulnerable moments in the classroom for teachers to ensure they are using objective reasoning when making discipline decisions. Coaching for behavior management has been one of the few interventions that have been effective at not only reducing the use of putative discipline overall, but also closing the gap between White and Black students (Bradshaw et al., 2018; Gregory et al., 2016; McIntosh et al., 2021; Pas et al., 2016). This observation is effectively explained by Vygotsky's Zone of Proximal Development Theory, which explains that individuals are more likely to reach their potential with the assistance of a coach (Vygotsky, 1978). Understanding teacher perceptions of their self-efficacy in managing behaviors in the classroom, which groups of teachers are more or less likely to feel confident in the classroom, and how open various groups of teachers are to participating in coaching to improve classroom management skills will be an important understanding to guide school, district, and policy level decisions.

Research Question 1 addressed the overall reported perceived self-efficacy in managing behaviors in the classroom ratings from teachers. Study results showed an overall mean rating of 3.15 on a scale of 1-4, indicating that overall, teachers are generally confident in their ability to manage student behaviors in the classroom. This finding was consistent with other studies measuring teacher self-efficacy in managing behaviors in the classroom (Baker, 2005). For

example, in a study by Baker (2005), teachers were given a survey to measure their self-efficacy regarding classroom management skills and their willingness to implement specific behavior-management techniques. In this study, teachers reported a self-efficacy rating of 3.37 on a scale of 1-5, a finding that is consistent with the positively skewed mean self-efficacy rating that was observed in this study.

When analyzing that data for Research Question 1, I observed several statistically significant differences in means between subgroups for perceived self-efficacy in managing behaviors in the classroom ratings. There was no statistically significant difference in means observed between female and male teachers, a result that is not consistent in the literature. In a 2010 study by Klassen, female teachers reported more stress as a result of teaching a difficult class, maintaining classroom discipline, and students' impolite behavior or rudeness. Another study on teacher self-efficacy in managing behaviors in the classroom also found that male teachers reported higher ratings of perceived self-efficacy in the classroom (Klassen & Chiu, 2010).

My study found a statistically significant difference in means for perceived self-efficacy in managing behaviors in the classroom ratings between beginning teachers (1-3 years of teaching experience) and young years (20-29 years). In the studies examined in the literature, there were not disaggregation of data by teacher age, but other studies have examined teacher self-efficacy by years of experience. Although not all beginning teachers who participated in this study fall into the young teacher category (20-29 years), it can be assumed that many of the teachers who fall into the young teacher category are also beginning teachers. The observation that young and beginning teachers reported lower levels of self-efficacy in managing behaviors in the classroom was inconsistently supported by other studies on this topic. A study by Klassen

and Chiu (2010), supported the findings in this study when they also observed that higher levels of teacher experience were associated with higher ratings of self-efficacy in managing behaviors in the classroom. However, Gibbs and Powell (2012) found no significant difference in reported self-efficacy in managing behaviors in the classroom due to years of experience. A study by Fives and Buehl (2009) ran an ANOVA analysis for different years of experience and only found a statistically significant difference of self-efficacy in managing behaviors in the classroom means between preservice teachers and teachers with 10+ years of experience. They observed no other statistically significant difference of mean among experience level subgroups (Fives & Buehl, 2009).

The finding in my study that frequency of writing referrals by teachers is associated with a lower mean self-efficacy in managing behaviors in the classroom rating is an observation that seemed easy to anticipate. It's readily arguable that teachers who feel less confident in their classroom management self-efficacy would also be teachers who more regularly need to rely on outside assistance through the use of referrals to address student behaviors. This conclusion is consistently reached in the literature. A study that examined teacher efficacy in managing behaviors in the classroom, burnout, and office referral rates found that teachers with higher burnout and lower efficacy were more likely to have higher office referral rates (Eddy et al., 2020).

In analyzing the final statistically significant data outcome for Research Question 1, I found that teachers from Spruce County Public Schools reported higher perceived self-efficacy in managing behaviors in the classroom ratings compared to teachers from the other two counties. There are no other data in the literature to support this specific subgroup difference; however, there may be school district differences that can account for this observation. The

Public School Forum's 2020 Roadmap of Need ranked all 100 counties in North Carolina on various metrics of need including, health, youth behavior and safety, education, and economic development. On their ranking scale, top rankings (lower numerical rank) indicate counties with less need compared to lower rankings (higher numerical rank). In sections addressed specifically to the youth behavior and safety rankings, Spruce County Public Schools ranked in the top half of counties for this measure, indicating they have less overall need in this category, while Oak and Pine County Public Schools rank in the bottom quartile. The youth behavior and safety overall category was calculated from several subcategory ratings, including ratings for juvenile delinquency, juvenile detention admission, children in DSS, child abuse and neglect, and short term suspensions (Public School Forum of North Carolina, 2020b). When looking specifically at the short-term suspension subcategory rating, I noted that Spruce County fell in the bottom quartile of counties, along with Pine and Oak Counties. This indicates that while Spruce County is a higher need county when looking at the number of short-term suspensions, it is overall not a high need county for youth behavior and safety when looking at the other factors (juvenile delinquency, juvenile detention admission, children in DSS, and child abuse and neglect). While my study could not determine the causes for the higher perceived self-efficacy in managing behaviors in the classroom ratings between teachers from Spruce County and teachers from Oak and Pine counties, perhaps the student behaviors or classroom climates in Spruce County differed from those in Oak and Pine based on the factors that influenced the higher overall rating for youth behavior on the Roadmap of Need.

Research Question 2 addressed the extent to which teachers' perceptions of their self-efficacy in managing student behaviors is related to selected teacher personal and professional background characteristics and school level characteristics. There were several subcategories of

teacher background and school background characteristics for which there were no statistically significant relationships between the subgroups and teacher self-efficacy in managing behaviors in the classroom ratings. This finding is consistent in the literature, as several other studies have found no significant relationships for subgroups such as school setting and grade level taught (Fives & Buehl, 2009; Gibbs & Powell, 2012).

When comparing subgroup means for Research Question 1 and using an OLS regression analysis for Research Question 2 to determine if a relationship exists between the subgroup and the self-efficacy in managing behaviors in the classroom score, I found that teaching math was associated with a statistically significant lower self-efficacy in managing behaviors in the classroom score, when compared to teaching other contents, and when holding both teacher professional background characteristics constant, and when all variables were held constant. This finding was not consistent in the literature. Another study found math teacher self-efficacy in managing behaviors in the classroom to be overall "quite efficient" with a mean of 7.07 on a scale of 1-10 (Peker et al., 2018). In the present study, the mean self-efficacy in managing behaviors in the classroom rating for math teachers was observed to be 2.84 on a scale of 1-4, which is a lower overall rating compared to the quite efficient rating in the comparison study. Another study completed an ANOVA analysis comparing English and math teacher self-efficacy in managing behaviors in the classroom scores for teachers of various grade levels. That study found a statistically significant positive correlation between self-efficacy and 7th grade made teachers compared to teachers of English and other grade levels, but no statistically significant correlation between 9th grade math teachers and teachers of English and other grade levels (Guillory, 2012). I was surprised to see that math teachers rated themselves lower on self-efficacy in managing behaviors in the classroom in my study. One potential explanation for this

result may be the nature of mathematical content. Students may experience math anxiety and therefore, may engage in different behaviors in the classroom to avoid or hide their fears about the content. The lower participant ratings for self-efficacy in classroom management could also be due to the types of teachers who become math teachers. As math anxiety is a common practice, math teachers may be individuals who have a high level of expertise in their content but less pedagogical knowledge of how to make math accessible and engaging for students. This observation could also be related to the analytical nature of mathematics and by extension, the analytical nature of math teachers. It may be that math teachers were better able to provide an unbiased perspective of their abilities to management behaviors in the classroom, uninfluenced by social desirability influences, due to their association with content that is highly disciplined.

Research Question 3 addressed the extent to which the openness of teachers to participating in coaching for classroom management was related to teacher and school background characteristics. While there is significant research into the impacts of various coaching models on improving teacher practice and student outcomes, as well as studies of teacher perceptions of the impact of coaching programs, there is not significant research found in the literature to examine the willingness of teachers to participate in coaching programs for professional development prior to starting a coaching program. While there are limited data on this topic, it is important to understand teacher willingness to participate in coaching, as prior research has shown coaching programs to be more effective when there is increased buy-in and investment from the teachers participating in the program (Shaha & Ellsworth, 2013).

It is interesting to note that there were statistically significant differences in means for several subgroups of participants that did not persist in an OLS regression. The *t*-test for difference in means found that status as non-White teachers, female teachers, lateral entry

teachers, math and English teachers, middle school teachers, and teaching in Oak City were associated with higher mean willingness to opt into coaching ratings compared to other teachers in that subgroup, while teachers from Spruce County Public Schools were associated with lower mean willingness to opt into coaching. After running the OLS regression, only non-female teachers and teachers from Spruce County Public Schools were associated with a statistically significant relationship in willingness to opt into coaching for classroom management. Teachers from Spruce County Public Schools and non-female teachers were associated with an overall lower willingness to opt into coaching when holding school or teacher background characteristics constant. Additionally, when all collected variables were held constant, in the final regression model, no statistically significant results were found. This indicates that some of the overall subgroup mean differences did not also show up as a statistically significant relationship; this may be due to other parts of the teachers' identity that were controlled for in the OLS regressions.

There are two points of consideration for each of these observations. First, it is important to note that only 31.6% of the study participants did not identify as female. While there were still 49 participants in this subgroup, this number was quite a bit smaller than the 106 female participants and may have skewed the data for this subgroup of participants. While the data may have been skewed by the sample size of male participants, this observation may also be due to societal expectation differences for males and females. In society, males are stereotypically associated with being the more dominant gender and have historically been more often expected to take the lead than has been the case with females. This societal influence may influence the willingness of males to be interested in having a coach help them grow in the classroom, as they may view this assistance as a sign of weakness.

In addition to the observations about gender, I think that it is useful to discuss the fact that I personally know the general details of the school districts that participated in this study. Spruce County Public Schools implemented a coaching program in some of its schools for the first time the year this study took place, whereas Oak and Pine County Public Schools started their coaching programs over five years prior to the study. This is now a districtwide program in Oak County Public Schools. Teachers from Oak County Public Schools and Spruce County Public Schools made up 84.5% of study participants. The lack of exposure to any such coaching programs for Spruce County teachers, or the experience with success with a coaching program in Oak County Public Schools may have influenced the willingness to opt into coaching ratings for each respective school district. It is unclear from the data if the lack of statistically significant results in the final regression model were due to the limited size of the sample or if there was truly no relationship between any teacher and school background characteristics and willingness to opt into coaching.

Research Question 4 addressed the extent to which teachers' perceptions of their self-efficacy in managing student behaviors in the classroom are related to their willingness to participate in coaching for classroom management. No statistically significant relationship was observed in this study. This finding is inconsistent with the results of a similar, though somewhat different, study. Baker (2005) examined the relationship between teacher perceived self-efficacy in managing behaviors in the classroom and teacher willingness to implement different behavioral strategies to address behaviors in the classroom. This study found that as teachers perceived self-efficacy in managing behaviors in the classroom increases, so does the teacher's willingness to implement different behavioral strategies (Baker, 2005). While my study did not measure teacher willingness to implement behavioral strategies, indirectly this is what coaches

do, they provide teachers feedback on different techniques for teachers to implement to improve instruction or class management. From this lens of how a coach functions, the Baker is just eliminating the coach from the equation but is looking at the same overall impact. This is an interesting observation, as it sheds light on the need to increase teacher self-efficacy in managing behaviors in the classroom to get teachers to feel more confident and willing to implement behavior management strategies in the classroom that will lead to greater self-efficacy in behavior management. This is where, according to Vygotsky's Zone of Proximal Development Theory, a coach is key to helping teachers increase their skills and, therefore, self-efficacy in managing behaviors in the classroom.

Research Question 5 addressed the relationship between the openness of teachers to participating in coaching for classroom management for teachers whether or not they had not been presented with data about the effectiveness of such coaching models. There were no data in the literature that I could find that examined this specific data point. It is significant to note that being presented research on the effectiveness of coaching for classroom management does have an influence on teacher reported willingness to opt into coaching for classroom management, as this can be a mechanism to help increase teacher interest in participating in coaching.

Finally, Research Question 6 addressed the extent to which the openness of teachers to participating in coaching for classroom management differed between middle and high school level teachers. My study's results were inconsistent in various models run for this relationship, indicating that there is not a statistically significant difference in willingness to opt into coaching between middle and high school teachers. In reference to this finding, there is limited research into the willingness of teachers to participate in instructional coaching for classroom management, let alone research into the breakdown by grade level.

In summary, there were several observations from the data in my study that were supported in literature, some observations that were inconsistent in previous studies, and some novel data points that I did not find in the extant literature. My study supported existing data in the finding that status as beginning teachers and young teachers and the frequent writing of referrals were associated with reporting lower self-efficacy ratings for classroom management. My study also supported existing data that suggest that teachers have a generally positive rating of their self-efficacy in classroom management. My study results did not support existing research when I examined the data in which math teachers reported self-efficacy in classroom management, nor did my study concur with past research regarding comparisons between male and female teachers' mean perceived self-efficacy in managing behaviors in the classroom ratings. I found that teaching math was associated with self-efficacy in managing behaviors in the classroom ratings that were lower in comparison to these ratings among other teachers. I also found no statistical difference between self-efficacy in managing behaviors in the classroom ratings for males and females. Each other these data points are in contrast to the results found in other studies. Finally, several observations were made that are not currently reported in the literature. Status as a middle school teacher and as a female teacher were associated with a higher willingness to opt into coaching for classroom managing, when controlling for teacher or school level background characteristics, a finding that has not been broken down by these demographics in the data sets for other studies. Finally, the observation that teachers who were provided data on the effectiveness of instructional coaching for classroom management were more willing to opt into coaching than teachers who were not presented data is a novel finding to contribute to the literature in this area of study.

Discussion of Limitations

The limitations of the study are related to participant demographics, generalizability, and accuracy of participant self-efficacy in managing behaviors in the classroom ratings. Characteristics such as gender, years of experience, race, and percentage of teachers responding to the survey were disproportionate among the participating districts.

I compared the overall proportion of potential teachers who could participate in the survey to actual participation from teachers. I examined data from the National Center for Education Statistics (2022) to determine the number of secondary teachers in Oak, Pine, and Spruce County Public Schools. These data allowed me to determine that the proportions of my potential sample pool broke down among the three districts as follows: Oak County Public School teachers comprised 26% of the potential pool, Pine County Public School teachers comprised 11% of the potential pool, and Spruce County Public School teachers comprised 62% of the potential participant pool. The percentages of the sample of teachers in the districts who actually participated in the study were not consistent with the above-mentioned proportions in the districts. In the actual study, 34.8% of teachers reported working in Oak County Public Schools, 15.5% of teachers reported working in Pine County Public Schools, and 49.7% of teachers reported working in Oak County Public Schools. Oak and Pine County Public Schools participants were overrepresented compared to the actual number of teachers in each district.

There were two additional demographic limitations. Of the total respondents who participated, 68.4% of participants identified as female and 27.1% identified as male. According to the North Carolina Public Schools Statistical Profile (2023), female teachers make up 59% of secondary teachers in the three counties included in this survey. This overrepresentation of female teacher responses may have provided a slightly skewed data set for this study. Finally,

57.1% of respondents reported that they had 10 or more years of teaching experience. As teachers tend to grow more confident as they gain experience in the classroom, this weighted the sample in the direction of more experience; this may have impacted the results observed in the data. Teachers who choose not to participate in the study, including less experienced teachers, may represent a key subgroup of teachers who may be too overwhelmed by the day-to-day stressors of teaching to have time to respond to the survey. The skewed representation of specific subgroups of respondents may, therefore, have imposed a limitation on the data collected in this study.

Finally, it is useful to speculate about the degree to which participants concluded that it was socially desirable to rate themselves higher on their ability to handle discipline issues in the classroom than is actually the case. To the extent that this occurred, this may have influenced participant responses and as a result inflated some of the participants' self-efficacy in managing behaviors in the classroom ratings for classroom management. If this did indeed influence participant responses, this would impact the results observed for Research Question 4 about the relationship between self-efficacy in managing behaviors in the classroom and willingness to opt into coaching for classroom management. There is no way in the present study to determine the accuracy at which participants rated their ability to handle classroom management situations in the present study but is an area to consider in future research.

It should also be noted that while 151 teachers completed the full survey, 227 teachers opened the survey and consented to participate. While my sample size was sufficient for the study goals, an increased sample size would allow for the data to be more generalizable and allow for more data points to be included in the regression model when all variables were held constant. Finally, number of *t*-tests run in the analysis for Research Question 1 presents a

limitation of the study, as the chance of Type 1 errors increases with the number of *t*-tests that are performed. If Type 1 error occurred, then some of the significant results observed may not have actually been significant.

Implications of the Study for Policy and Practice

The current study found that there is a relationship among status in several subgroups of teachers and their perceived self-efficacy in managing behaviors in the classroom and their willingness to opt into coaching for classroom management. Additionally, there was also a relationship found between the openness of teachers to participating in coaching for classroom management and whether or not they had been presented data supporting the effectiveness of such coaching models. In order for coaching for classroom management programs to be effective, teachers who need support in managing student behaviors in the classroom need to be willing and open to receive coaching in this area. When teachers develop the skills to avoid feeling tired, overwhelmed, or otherwise stressed in classroom through better classroom management skills, they will be better able to avoid vulnerable decision points and prevent inadvertently making discipline decisions based on implicit biases that result in disparities in discipline practices.

Implications for Policy

In order to provide all students equal access to quality educational experiences, the P-12 system of education needs policies that support school discipline practices that do not disproportionately impact students of color. In order to address disparities in discipline practice, teachers need to experience effective interventions to support their skill development to equitably respond to discipline issues in the classroom. In order for teachers to experience effective

interventions, they should be open and willing to actively engage in these interventions. State and local policymakers should consider the following funding and policy recommendations.

First, state and local policymakers should determine avenues to increase teacher willingness to opt into coaching to improve classroom management skills. In this study, a higher acknowledgement of the existence of implicit bias rating was associated, at least when comparing like variables, with a higher willingness to opt into coaching. Studies have shown that implicit bias awareness can increase through explicit interventions (Okonofua et al., 2016; Yang et al., 2018). Additional funding into research to improve teacher acknowledgement and awareness of implicit bias is one area for policymakers to invest resources that may increase teacher willingness to be coached to improve their classroom management skills. Additionally, subsequent funding to implement effective programs to increase implicit bias awareness for teachers is also an area to target to increase teacher willingness to opt into coaching for classroom management.

This study also found that the process of showing teachers research behind the effectiveness of coaching for classroom management interventions is associated with teachers' willingness to opt into coaching for classroom management. Policymakers should invest funding for research on the impact of coaching for classroom management programs and fund future studies on effective ways to disseminate information regarding the effect that coaching can have on teacher skill to influence teachers to be interested in participating in coaching for classroom management. Finally, policymakers should invest in coaching programs to target improving teacher classroom management capacity. Policymakers can target funding for coaching for classroom management programs to both the school level and educator training programs at the university level. By providing teachers additional coaching support, specifically for classroom

management, at both the pre-service level and during teaching, policymakers can better ensure that teachers are better able to develop the skills to avoid vulnerable decision points when making discipline decisions.

Given the limited sample size of this study, it is important to be cautious when generalizing conclusions across all districts in North Carolina. However, based on the data collected in this study, I offer the following recommendations for local school boards and districts to address disparities in discipline practices through coaching programs to improve teacher management of student behaviors in the classroom:

- Develop staffing models and funding support that will allow schools to more flexibility create coaching for classroom management positions within schools.
- Require that all schools have a coaching for classroom management program.
- Collect and publicize data on the impact of coaching for classroom management programs that already exist or are being considered within districts to increase teacher interest in engaging in coaching for classroom management programs.
- Utilize funds to support implementation of districtwide interventions to increase teacher of awareness of implicit bias and the potential impact of such biases on decision making in the classroom.
- Support principals in developing effective coaching programs specifically for developing teachers' classroom management skillset.
- Establish recommendations that teacher preparation programs include classroom simulations in which teachers need to address and respond to various classroom behaviors as part of regular coursework and final examination requirements.

- Revise the teacher evaluation tool to include a metric that rates teachers' ability to effectively manage or deescalate student behaviors in the classroom.

Implications for Practice

In order for coaching for classroom management programs to be effective, teachers need to be open and willing to participate in coaching to improve their classroom management skills. Principals should be strategic in recruiting teachers to participate in coaching for classroom management; this can be done by targeting both high needs teachers (teachers who have lower self-efficacy in managing student behaviors and teachers who frequently write referrals) and groups of teachers who are potentially open and interested in participating in coaching for classroom management to help build momentum around teacher coaching for classroom management across the building.

In this study, the teaching of math was associated with lower self-efficacy in managing behaviors in the classroom ratings for managing student behaviors in the classroom and also associated with an increased willingness to opt into receiving coaching to improve classroom management when holding teacher background characteristics constant. This subgroup of teachers may be useful to target first in coaching programs as they report being lower in classroom management self-efficacy and they are potentially more willing and interested in receiving coaching for classroom management. Principals and school leaders should also look for ways to interest teachers who frequently write referrals in participating in coaching for classroom management. Status in this subgroup of teachers was associated with a lower willingness to participate in coaching for classroom management despite their being a high needs group for participation. Finally, principals may look to target female teachers first, as a means to build investment and collect success stories from a coaching for classroom management

program, as they are another subgroup of teachers who reported higher ratings of willingness to participate in coaching when holding other teacher background characteristics constant. In addition to targeting specific groups of teachers for coaching programs, I recommend the following to school leaders:

- Create a culture of coaching for classroom management within the building that posits that all teachers are learners to minimize any stigma a teacher may feel toward receiving feedback.
- Highlight data and share successes of coaching for classroom management interventions to increase teacher interest in participation in coaching for classroom management.
- Regularly analyze discipline data for student referral disparities and high frequency referrals from teachers. Target coaching for classroom management interventions to high needs teachers.
- Recruit and train coaches on both effective classroom management coaching cycles and leaderships skills to ensure that they are building investment in coaching from teachers as well as implementing effective coaching strategies.

Recommendations for Future Research

The study protocol and data for this study can help inform future research on this topic. First, this study can be expanded to include teachers in other districts across the state and country to provide additional insights, increase the generalizability of the data to other regions, and include a more robust data set to be run through the full regression model when all variables collected were held constant. In addition, it would be interesting to collect data specifically in districts that have and have not implemented comprehensive coaching programs. One hypothesis

that emerged from my data analysis for this study was that the willingness to participate in coaching for classroom management is likely to be higher in districts that have already implemented, and found success with, coaching programs. I believe this may have been the reason for a greater willingness to participate in coaching in one of the districts in this study, as they have implemented a comprehensive innovative staffing coaching program for over seven years. In North Carolina, innovative staffing to create coaching positions model has received a lot of traction in several districts across the state in recent years. The innovative staffing coaching model was implemented in all three of the districts included in this study; it had been in place for several years in two districts and was in its pilot year in a second district. It would be interesting to see how willingness to opt into coaching varies by years of participation (or no participation) that each district has had with this model. This finding could help shed light onto additional avenues for increasing teacher interest in coaching.

One of the observations of this study was that math teachers were more likely than teachers in other disciplines to give themselves a lower rating for self-efficacy in managing classroom behaviors. As this was a surprising subgroup to have an association with a lower rating, it would be interesting to conduct further research into the accuracy of self-efficacy in managing behaviors in the classroom ratings; this was also a limitation of my study. One of my hypotheses about the math teacher result was that math teachers have a more analytical nature and might therefore be more likely to accurately rate their ability to manage classroom behaviors without bias. Future research could seek more accurate ways to measure self-efficacy in managing behaviors in the classroom; this would also address the study limitation of the impact of social desirability in the selection of self-efficacy ratings. More accurate self-efficacy in managing behaviors in the classroom ratings could include adding classroom observations to the

protocol, including supervisor ratings or interviews for this dimension of teacher performance, or analyzing data on teacher referral frequency compared to other teachers in the school. Improved accuracy of measurements of teachers' ability to manage student behaviors in the classroom may reveal the presence of a relationship between management ability and willingness to opt into coaching for classroom management.

It was observed in this study that presenting teachers with data on the effectiveness of coaching for classroom management programs was associated with greater teacher willingness to opt into coaching for classroom management. In order for coaching models to be highly effective, it will be important to determine additional strategies to increase teachers' interest and investment in receiving instructional coaching to improve their classroom management skills. Conducting additional research into other ways to influence teacher willingness is another area to be considered for future research.

The final response rate for the survey was 34% of potential teachers. Future researchers could look for ways to increase the response rate, such as providing an incentive for those who complete the survey. Entrance into a gift certificate drawing or a small monetary reward for completion are potential strategies that future researchers could use to improve the response rate of those who are sampled in the survey.

Conclusion

Black students are suspended or expelled from school at much higher rates compared to their White peers, despite not engaging in more disruptive behaviors. McIntosh, Girvan, Horner, and Smolkowski's Vulnerable Decision Points model suggests that when people are not operating in their prime mental state, they are more likely to rely on implicit bias when making in-the-moment decisions. Teachers also cite student behaviors as a major cause of stress in the

classroom. Coaching teachers to develop effective classroom management skills is one intervention that has been shown to not only effectively reduce the use of disproportionate discipline practices but has also been found to be successful in reducing or eliminating the disparities in discipline practices for White and Black students. The purpose of the current study was to examine whether there is a relationship between teachers' perceived self-efficacy in managing student behaviors in the classroom and their openness to participating in coaching to improve their classroom management skills that would help them become more confident in responding to behavior issues.

The data collected showed that status as a math teacher is associated with lower ratings for perceived self-efficacy in managing classroom behaviors. Consistent with the literature, the data from this study showed that the frequent writing of referrals is associated with lower ratings for perceived self-efficacy in managing classroom behaviors. One limitation to the study may have influenced the accuracy of the metric used in this study to determine teacher ability to manage a classroom; this metric is important to ensure that teachers who are most in need of coaching related to behavior management are actually willing to participate in the coaching. In this study that metric was the mean perceived self-efficacy rating in managing classroom behaviors, and a statistically significant relationship was not observed between teachers' perceived self-efficacy in managing behaviors in the classroom ratings and their willingness to opt into coaching. The perceived self-efficacy is a rating that may have been influenced by the social desirability of inflating self-efficacy in managing behaviors in the classroom ratings. Future study of this topic should examine alternative metrics for classroom management ability by pairing classroom observations and referral data analysis to further examine this relationship between intervention need (classroom management ability) and willingness to participate in

coaching.

Finally, the presentation of data on the effectiveness of instructional coaching for classroom management was associated with a statistically significant higher rating of willingness to opt into instructional coaching. This is a promising result as it provides an avenue to increase teacher interest in coaching, even if those teachers most in need of the intervention are less willing to participate. The data collected in this study can be used to inform efforts to justify and design coaching programs to optimally engage teachers to be willing to participate in such professional development. Such learning can help to ensure the successful implementation of instructional coaching as an intervention to address disparities in school discipline practices.

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APPENDICES

Appendix A: Teachers' Sense of Efficacy Scale (long form)

Teachers' Sense of Efficacy Scale[1] (long form)

Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	How much can you do? Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students ?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge student comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
17. How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students form ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Appendix B: Permission Letter for Using Teachers' Sense of Efficacy Scale

THE OHIO STATE UNIVERSITY COLLEGE OF EDUCATION AND HUMAN ECOLOGY

ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy the scoring instructions can be found at:

http://u.osu.edu/hoy.17/research/instruments/

Best wishes in your work,

Anita Woolfolk Hoy

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Appendix C: Electronic Survey Protocol

Topic:
Teacher perceptions of their ability to manage student behaviors and their interest in participating in instructional coaching.

Teacher Self Efficacy Survey

Introduction

You have been selected to respond to this survey. The research project focuses on teacher self-efficacy regarding ability to manage student behaviors in the classroom and their perceptions regarding coaching on classroom management. The researcher has a particular interest in understanding how confident teachers feel they are to manage student behavior in the classroom. The researcher is trying to learn more about strategies to support teachers in their work in the classroom. Your participation is voluntary, and you may decline the survey or withdraw at any time.

Self-Efficacy

1. How effective do you believe you are at building relationships with students who regularly disrupt instruction in your classroom?
   - Not effective
   - A little effective
   - Mostly effective
   - Effective

2. How capable do you believe you are at redirecting disruptive behavior into on-task behavior in your classroom?
   - Not capable
   - A little capable
   - Mostly capable
   - Capable

3. How effective do you believe you are at redirecting and refocusing a student who is frequently disruptive or noisy in your classroom?
   - Not effective
   - A little effective
   - Mostly effective
   - Effective

4. How capable do you believe you are at getting students to follow your classroom rules?
   - Not capable
   - A little capable

- Mostly capable
- Capable

5. How effective do you believe you are at redirecting students who argue back or refuse to comply with a direction or expectation?
   - Not effective
   - A little effective
   - Mostly effective
   - Effective

6. How capable do you believe you are at getting through to the most difficult students?
   - Not capable
   - A little capable
   - Mostly capable
   - Capable

7. How effective do you believe you are at making your expectations clear about student behavior?
   - Not effective
   - A little effective
   - Mostly effective
   - Effective

8. How effective do you believe you are at establishing routines to keep activities running smoothly (i.e. group work, passing our papers, discussion circles, etc)?
   - Not effective
   - A little effective
   - Mostly effective
   - Effective

9. How capable do you believe you are at establishing a classroom management system with each block of students you teach?
   - Not capable
   - A little capable
   - Mostly capable
   - Capable

10. How effective do you believe you are at keeping students who regularly disrupt your class from ruining an entire lesson?
    - Not effective
    - A little effective
    - Mostly effective
    - Effective

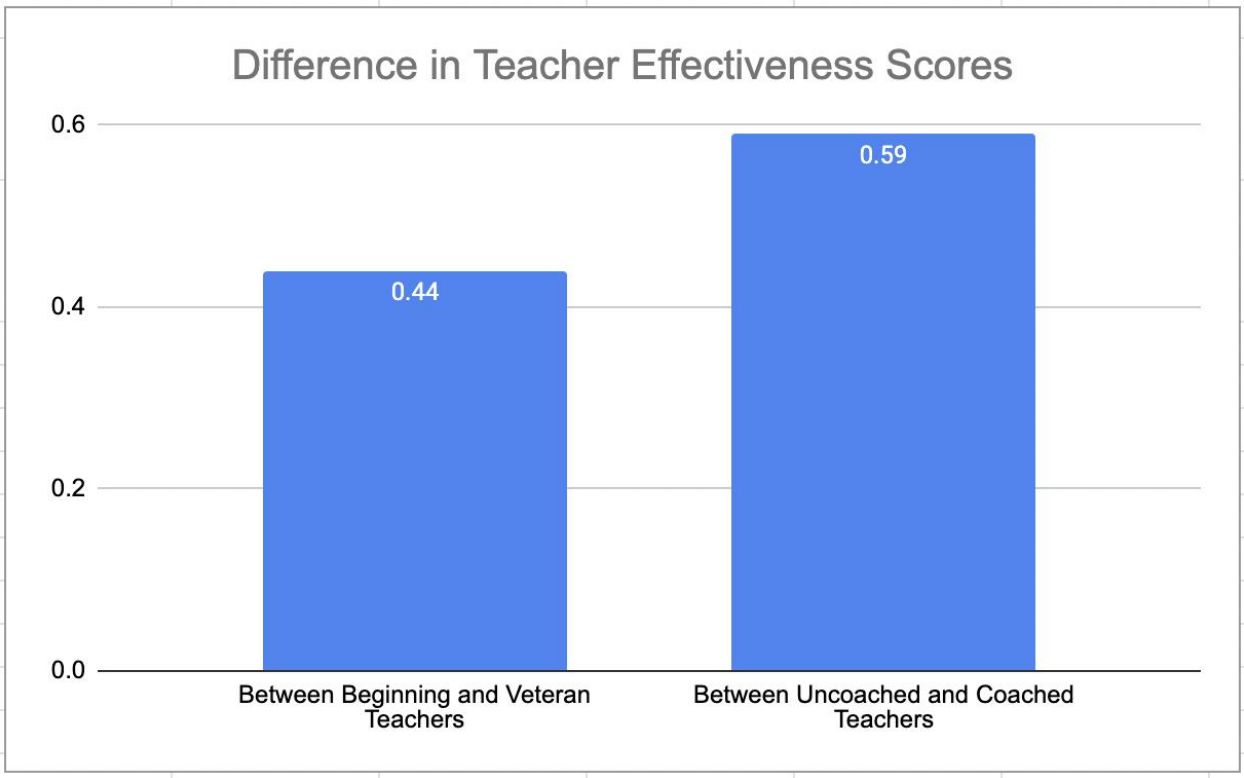
11. On average, how emotionally tired do you feel at the end of a typical school day?

- Very emotionally tired
- Mostly emotionally tired
- A little emotionally tired
- Not emotionally tired

Openness to Coaching

Experimental Question: Treatment group participants saw the information in the box below and then proceeded to the next question. The control group participants just saw the next question.

Studies have shown that teacher coaching is an effective means to improve teacher classroom management skills. In a study of a classroom management coaching program, coached teachers scored higher on a Teacher Effectiveness Rubric, which included observational scores, principal evaluations, and student surveys compared to non-coached teachers. The difference in their scores was almost 50% greater than the difference in scores between beginning and veteran teachers, indicating the coaching can improve instructional skills quicker than experience alone (Kraft & Blazar, 2017).



- **Source**: Parameter Estimates of the Effect of MATCH Teacher Coaching on Measures of Teacher Effectiveness. Taken from Kraft, M., & Blazar, D. (2017).

12. How likely are you to opt into coaching to support the development of classroom management skills?
    - Not likely
    - A little likely
    - Likely
    - Very likely

13. How many hours a month would you be willing to meet with a coach to work on strategies to improve classroom culture and management?
    a. 0 hours
    b. 1 hour
    c. 2 hours
    d. 3+ hours

14. How likely would you be to opt into observations of and feedback about your classroom management and classroom culture, by an instructional coach, as part of a coaching model?
    a. Not likely
    b. A little likely
    c. Likely
    d. Very likely

Implicit Bias

15. Individuals carry assumptions and opinions in their subconscious (in the form of implicit bias) that they are not aware of.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

16. Racial and ethnic minority groups are often treated in subtly disrespectful ways.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

17. It is important to me to learn how to recognize when one of my own implicit biases is activated.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

18. The personal implicit biases that other teachers hold about racial and/or ethnic minorities may affect the quality of education they provide to students.
    a. Strongly disagree

b. Disagree
c. Agree
d. Strongly agree

19. It is important to me to learn how to minimize the effects my implicit biases may have on my classroom management decision-making.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

20. An individual's implicit bias can affect her/his/their behavior.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

21. It is important to discuss race, ethnicity, and culture in schools.
    a. Strongly disagree
    b. Disagree
    c. Agree
    d. Strongly agree

Demographic Information

22. Which grade level(s) do you teach?
- 6-8
- 9-12

23. What content do you teach?
- English
- Math
- Science
- History
- Art
- Physical Education
- Music (Band/Chorus)
- CTE
- Other

24. How would you describe yourself?
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander

- Hispanic or Latino
- White

25. How old are you?
    - 20-29
    - 30-39
    - 40-49
    - 50-59
    - 60+

26. How often do you write a referral for student behavior in your classroom?
    - Daily
    - Weekly
    - Monthly
    - Rarely

27. Which best describes your school setting?
    - Rural
    - Suburban
    - Urban

28. Which best describes your school size?
    - 0-200 students
    - 201-400 students
    - 401-700 students
    - 701-1,000 students
    - 1,001-1,600 students
    - Over 1,600

29. Which district do you currently work in?
    - Oak County Public Schools
    - Pine County Public Schools
    - Spruce County Public Schools

30. Which best describes your teacher preparation pathway?
    - Lateral entry
    - Lateral entry with Teach for America
    - Masters education program
    - Traditional undergraduate teacher education program
    - Other: _____

31. How long have you been a teacher?
    - 1-3 years
    - 4-6 years
    - 7-9 years

- 10+ years

32. How do you identify?
    - Male
    - Female
    - Transgender
    - Non-binary
    - Genderqueer
    - Other – please describe
    - I do not wish to disclose

Appendix D: Expert Panel Review Protocol

Teacher Efficacy and Classroom Management: A Quantitative Study of North Carolina Teachers' Openness to Receive Coaching as a Means to Reduce Reliance on Exclusionary Discipline

Thank you for volunteering to serve on the expert panel for evaluating the survey tool designed for this study. The purpose of this study is to investigate the relationship between teachers' perceptions of their ability to manage student behaviors in the classroom and their openness to participating in instructional coaching to improve classroom management skills. As part of my study, teachers will complete a study containing survey items measuring their perceptions of their ability to manage student behaviors and their openness to participating in instructional coaching. The study will further research whether teacher ratings of their openness to receiving coaching is influenced by receiving data on the impact coaching can have on student and classroom outcomes.

Your time, expertise, and assistance are needed to evaluate the content validity of the survey instrument. The attached survey is designed to measure teachers' perceptions of their ability to manage student behaviors in the classroom and their openness to participating in instructional coaching to improve classroom management skills.

Your input and feedback are extremely important, greatly appreciated, and will provide useful information about the clarity, appropriateness, and relevance of the survey questions. Your knowledge and experience in education qualifies you to serve as an expert panel member. Your input and feedback will provide valuable insight for possible adjustments or revisions to the survey tool.

Please take your time and critique the attached survey tool by answering either "Yes" or "No" to the questions below, as well as providing your reasoning behind any responses that receive a "No" on the lines that follow.

Questions	**Yes**	**No**	**If you selected No, please write why, and provide any feedback and/or suggestions that you feel would correct this aspect of the survey. *This section of feedback will be most helpful.***
1. Are the instructions to participants clear?			

2. Are the survey questions direct and specific?			
3. Are the questions designed in such a way that participants can understand them? *Please note that for the survey to be successful, the language needs to be understood by an early career teacher.*			
4. Do you feel additional information is needed in order for participants to answer these questions regarding their perception of their ability to manage classroom behaviors or their openness to participating in instructional coaching? If so, please indicate the type of additional information that is needed in the box to the right.			
5. Does the survey adequately address factors that will allow the researcher to obtain sufficient information regarding teacher perceptions of their ability to manage student behaviors in the classroom?			
6. Does the survey adequately address factors that will allow the researcher to obtain sufficient information regarding teacher openness to participating in instructional coaching for classroom management?			
7. Are there any particular items within the survey instrument that you would modify?			**Please specify the item number(s) with your response if you selected "Yes".*

8. Are there any items within the survey that you believe should be excluded from the survey?			**Please specify the item number(s) with your response if you selected "Yes".*
9. Are there any survey items that you feel should be included that are **not** currently included on the questionnaire attached?			**If you selected "Yes" please write your suggested statement(s) below:*
10. Do you have any suggestions related to the 'readability' of the survey questions (i.e.: wording of the questions, the layout of the questions, etc.)? If so, please write them in the box to the right.			

Appendix E: Superintendent Gatekeeper Permission Letter and Study Consent Form

XX, 2023

Dear Superintendent,

My name is Melissa Altemose and I am a doctoral candidate at North Carolina State University. I am examining teacher perceptions on their ability to manage classroom behaviors and their opening to receive instructional coaching focused on classroom management, with the hope that the findings benefit district and school leaders involved in policy and programmatic decision-making. I am collecting this data through online survey and am writing to request your permission to provide a survey to the middle and high school teachers in your district.

If you grant permission, I will send a recruitment email to as many middle and high school teachers as possible inviting them to participate in my survey. I will ask them to complete the survey at home. I will not tell you who, if anyone, from your district participated. When the results are published, the participants, their schools, and the district will not be directly identified in the research findings.

If you agree to give me permission to send out the recruitment email, could you please respond to this email? A simple "Yes" would suffice. If you say no or do not respond to this email, then I will assume that you do not give your permission.

Please feel free to contact me if you have any questions or concerns at (252) 377-7835 or via email at maaltemo@ncsu.edu. This study has been approved by the Institutional Review Board of North Carolina State University. My dissertation co-chair is Dr. Mike Ward. He can be contacted at meward@ncsu.edu.

Thank you so much for your consideration. I am excited about the opportunity to learn about teacher perceptions in your district.

Thank you in advance,

Melissa Altemose

Appendix F: Consent and Directions Email to Teachers

Greetings,

This is Melissa—I'm an educational leadership doctoral student at NC State University. My research explores teacher perceptions regarding classroom management and instructional coaching with the goal of learning how to better support teachers in the classroom. I'd love if you choose to participate in my study. This study had been approved by your district, Halifax County Public Schools, to send the request to teachers to participate.

If you choose to participate, you will take an online survey that will take you about 15 minutes and ask you multiple choice questions about yourself and your teaching practice. I will keep your survey responses confidential and secure. I will not seek to re-identify you from the survey data submitted. Taking the survey is not an expectation or requirement of your job or of any relationship that you may have with me. **I will not provide any survey data or responses to your principal.**

There are minimal risks associated with participation in this research. There is no direct benefit or compensation for you if you participate, but you will help provide data that will assist the development of policies and best practices to develop effective interventions to address disparities of discipline practices in schools.

By clicking the link below, you will be taken to the consent form and survey on the Qualtrics platform. I suggest that you take this survey using a private device, in a private location, using a web browser set to private/incognito mode so that your responses remain confidential. The survey will remain open for two weeks.

Link to survey will be added here.

Your input is very important. Thanks so much for your time,

Melissa